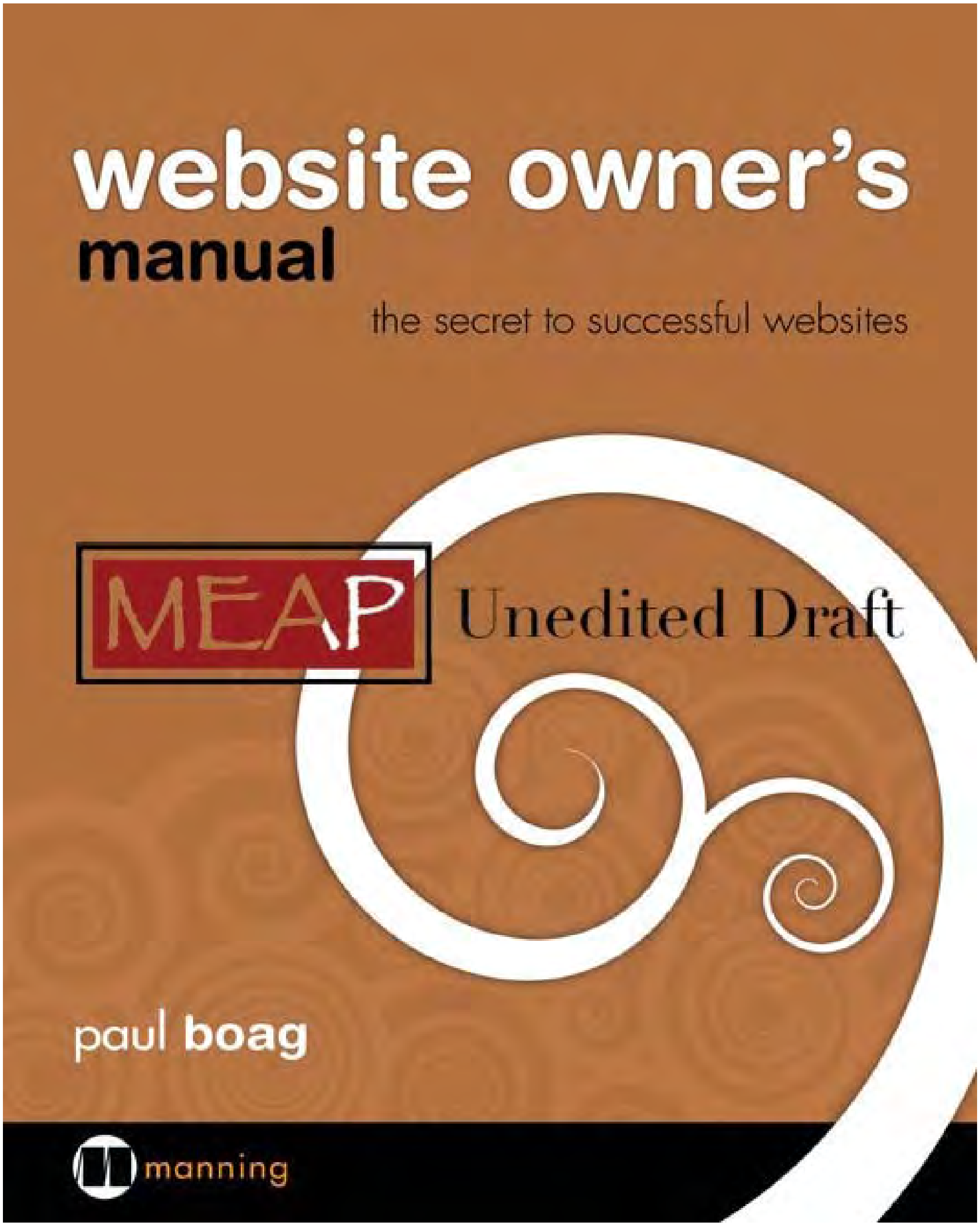
website owner's
manual
the secret to successful websites
MEAP
Unedited Draft
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1 The secret to a successful website

Here's the million-dollar question:

"What is the secret to a successful website?"

I'n not foolish enough to suggest a single answer. However in my decade of working on client websites I have noticed a recurring pattern. The sites that succeed are those that have a well informed, passionate website owner at the helm. No single thing makes a site successful, but a good website owner will put into place the elements that give a site a fighting chance.

The question should not be "What is the secret to a successful website?" but "How do I become a great website owner?"

No definitive manual exists explaining how to do the job. What does it mean to be a website owner and how can it be done successfully?

Your Missing Manual

The lack of a manual defining the role of website owner is only part of the problem. There is also a lack of training specific to being a website owner. There are already courses for web designers and developers, so it seems only natural that website owners will be next. Meanwhile, this book endeavors to be your missing manual.

This book isn't the only available resource on being a website owner. Knowing how to handle the plethora of information available both in print and on the web is crucial to the success of your role.

Battling information overload

When it comes to learning how to run a successful website, the problem of information overload is particularly acute. There are millions of web pages dedicated to every conceivable aspect of website management, from usability testing to search engine placement.

With so much information available from books, websites, magazines, conferences and even podcasts there is simply too much to learn.

The offline world is no better. There are hundreds of books covering the various facets of web design. Add to these conferences, magazines, seminars, and workshops, and it become impossible to identify what you need to know.

The problem is made worse because sources can often be out-of-date due to the rapid development of the web. This leaves the reader confused as to current best practice. With so many evolving and often conflicting sources, how can you begin to know what is important?

By focusing on the wrong thing it is easier to miss the larger picture. Maintain a broad overview and let experts deal with specifics.

Seeing the bigger picture

A good starting point is to recognize that a website owner is a generalist rather than a specialist. Think of yourself as a family doctor rather than a brain surgeon.

A family doctor deals with a huge variety of illnesses from the common cold to complex neurological problem. However, he doesn't necessarily treat every illness he sees. In the same way a good website owner will have enough knowledge to identify an issue and recognize that a specialist is required to deal with it.

In short, you should focus on the big picture of web design and know enough to 'manage' the specialists that are occasionally required.

Having a "need to know" mentality

A good website owner should be able to identify what he "needs to know" rather than trying to understand every aspect of the whole. Becoming a great website owner is not just about understanding a web technology or knowing specific pieces of information. It is about grasping the role and approaching it with a certain mentality.

There are three principles of website management that encapsulate this mentality:

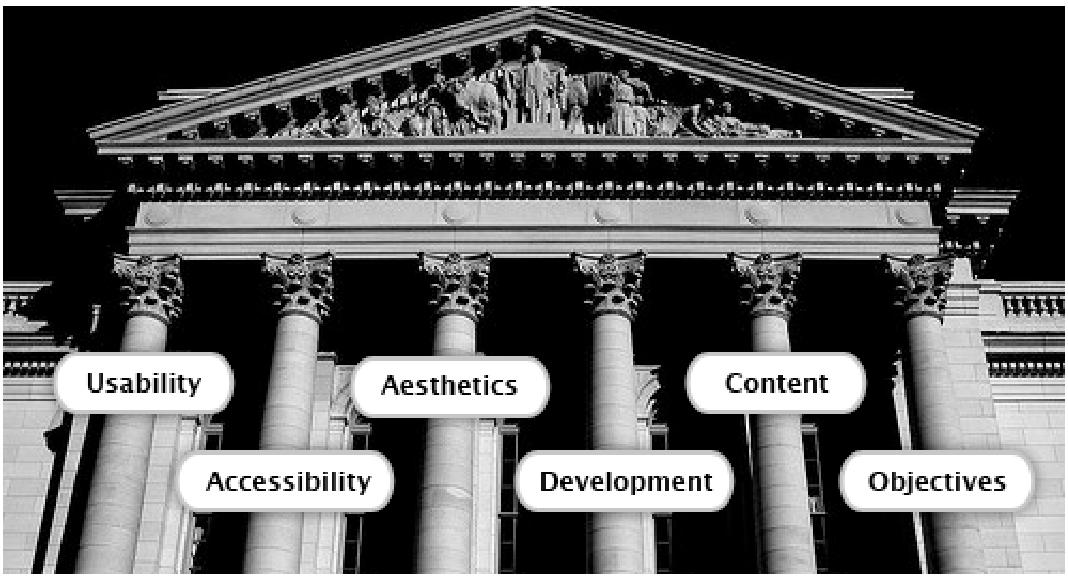
- Balancing conflicting priorities
- Defining your role
- Planning for the future

None of these principles are more important than the need to maintain a balance between conflicting priorities.

Balance conflicting priorities

Balancing the various conflicting priorities in web design is like constructing a building. A building is made up of a series of pillars. If one pillar is shorter than the others or missing entirely then the building is in danger of collapsing.

As in construction it is vital that the pillars of web design have equal priority and that you ensures a balance between them all. There are six pillars of web design:



Every site is built using six disciplines that are vital to its success.

Making your site easy to use

Difficult sites can alienate visitors, causing them to give up entirely. Later we will investigate ways to make your site more usable through card sorting and user testing.

For now it is important to stress that as with any pillar, too much emphasis on usability can be damaging. If you are obsessed with usability you can undermine business objectives, fail to engage with users emotionally (aesthetics) and even create accessibility problems.

Providing access for all

Accessibility is easy to ignore as a marginal concern. However, there are many good reasons for emphasizing it: commercial incentives, legal commitments, and moral obligations.

Many reject accessibility because they believe it is too expensive, difficult to implement or will negatively affect the sites aesthetics. In fact, it is perfectly possible for good accessibility to exist comfortably alongside our next pillar.

More information

Many of the pillars of web design are covered in more depth later in this book. For more information see the following chapters...

- Chapter 2: Objectives
- Chapter 4: Aesthetics
- Chapter 5: Content
- Chapter 6: Usability
- Chapter 7: Accessibility
- Chapter 9: Development

Producing aesthetic appeal

Aesthetics refer to the elements that make up the look and feel of your site. These include color, imagery, typography, and layout. Historically many viewed aesthetics as the most important pillar of web design. This bias towards design was prevalent in the late 1990s and early 2000s and led to the proliferation of splash screens and a gratuitous use of flash.

A heavy bias towards aesthetics not only damages usability but almost all pillars of web design. Fortunately, we are beginning to see less emphasis on design. We are also seeing a closer working relationship with the other pillars, especially development.

aceofcakestv.com is so concerned with aesthetics that it is impossible to access without the flash plugin. Even if you have the plugin, it is incredibly difficult to navigate.

Facilitating development

Development refers to the technical aspects of a project. Many website owners find this pillar intimidating and so they choose to ignore it. They want the functionality but are not necessarily concerned with how it is delivered.

One of the problems faced by website owners is being able to interpret the seemingly foreign language spoken by many developers. In chapter 9 we explore some of the "technobabble" and discuss ways of improving communication.

Although you cannot be expected to understand the complexities of technical development, there is a danger that the constraints and challenges faced by technical developers are ignored. Technical development is evolving at a staggering rate and if you do not engage with technical specialists, you will miss opportunities to enhance your site.

Of course, technical development cannot be left to grow unchecked. As some sites built entirely by "techies" show, unfettered technical development can damage usability, accessibility, design and of course content.

Creating killer content

Although content creation is one of your principle roles, it is often neglected. Perhaps this is because it is not as 'sexy' like design or it could be because creating content is hard work. It is easier to copy and paste content from an existing brochure or out-of-date website than write content from scratch. Of course, the reluctance to write content could be to do with website owners having no experience in writing web copy, let alone having any training.

Your site objectives are the goal that the other areas of web design allow you to reach.

Focusing on objectives

A site's "objectives" should occupy most of your attention as the website owner. Objectives refers to the "business rational" behind a site. Why does it exist? What is it trying to achieve? How is success measured?

You could argue that objectives are not a pillar. You write good copy, design an attractive site, and make it usable in an attempt to fulfill your site objectives. Site objectives are the target you are trying to reach, not the method by which you reach it. I have found that thinking of objectives alongside usability, accessibility, aesthetic and the rest creates a more rounded approach that should be encouraged.

The aim is to create a balance among all six pillars. If you can achieve this, you have built a good foundation upon which to construct a successful site.

Define your role

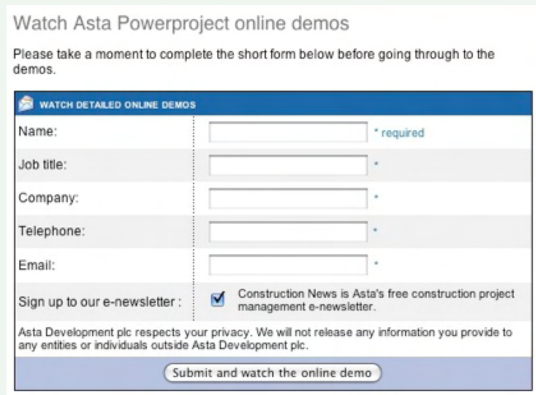
The second principle of good website management is to have a clear vision for your role. Being a website owner is one of the most multi-facetted jobs within the web development process. It is because of this diversity that the role is often poorly defined. Failing to give the role boundaries can create two problems.

- **A lack of definition leads to a lack of focus.** Without a job description, you can find yourself drawn into unrelated work. Worse still, others can presume something is your responsibility it is not.

- **A lack of definition causes anxiety.** There is always a vague feeling that you are not fulfilling your role or are perceived in that way. By defining the role clearly you allay your fears and establish others expectations.

The dangers of focusing on objectives in isolation

I once worked with a client whose objective was to generate sales leads. They became obsessed with that objective. They insisted that a user must register before they were allowed to view their product. Each registrant then became a sales' lead. Although they saw a slight increase in leads, ultimately they damaged their business.



Users actively wanted to view their product, but the barrier to entry was enough to drive them away. These visitors never matured into quality sales leads. Although some users did complete the form, most were not ready for a sales call. They only registered to access the demo and so the quality of the leads were low. The work involved in following up these leads put a greater burden on the sales team without generating more sales.

By considering user needs, not just site objectives, my client might have produced fewer leads but the quality of those leads would have been higher.

I recommend defining broad principles of responsibility that you can measure specific tasks against. Here are six roles a good website owner should be fulfilling:

- Visionary
- Advocate
- Evangelist

- Content guardian
- Project coordinator
- Referee

Having a vision

A good website owner should have a clear vision and be capable of developing it over the long term. This vision will evolve through discussions among the site's stakeholders.

It is important to define the role of site owner and provide the time and resources to fulfill it.

When a site is being developed alongside a web design agency, it is good practice to include them in shaping the vision. Unfortunately, web design agencies are often brought on board after the vision has been formed and so their input is missed. This can cause problems further down the line, but we will cover that in more detail later.

You need to have a clear picture of what role the site plays within your organization and how that role could be expanded later. The vision for your site should fall into two categories.

First, there is **the core vision**, which is the unshakable objective for the site. Consider a website that sells luxury holidays. Their objective might be to "make planning and booking your dream holiday a pleasurable and intuitive experience, so increasing online sales."

This core vision for the site is unlikely to change over time and acts as a measure against which site developments can be compared. Each time they consider a new piece of functionality they can ask themselves "will this increase sales by making planning and booking easier and more pleasurable?"

The second category is **the roadmap**. This is a vision of how your site will develop over the coming months and even years. What kind of new functionality are you planning to add and how is the user base expected to change?

In the case of our example, roadmap items might include adding an itinerary planner or allowing email subscription to the latest offers. It could include details on how to cater to a new market or support upcoming marketing campaigns.

Without a good understanding of the overall vision and roadmap ahead, a site can easily wander off track and lose its focus.

Who are your stakeholders?

Stakeholders are the people and organisations both internally and externally who have some interest in your site. The most important stakeholder should always be the end user.

Be an advocate

Establishing a vision is one thing, maintaining it is quite another. The vision needs an advocate, somebody willing to defend the site against others within the organization that would seek to undermine its focus.

The problem is particularly acute in larger organizations where people have a departmental rather than corporate perspective. This outlook leads to sites becoming victim to internal politics and to individual departments pushing their own agendas.

Earlier in this chapter I mentioned a website where users were forced to register before viewing a product demonstration. The problem arose because nobody was defending the vision to generate ***high quality*** sales opportunities. Instead, the marketing department ran the show and their agenda overruled the site's vision. They didn't care about the quality of the leads because that was "sales' problem." All they cared about was meeting their quota.

Although the above example is an extreme case, I have seen similar things happen when departments fight over home page space and top-level navigation. It falls to you to keep in mind the bigger picture and avoid this kind of provincial thinking.

The website owner should defend the site against varying agendas from different departments within an organisation.

Evangelize your site

The danger of being a site's advocate is that you are on the defensive, constantly battling internal stakeholders. This can lead to the site becoming isolated from the rest of your organization and therefore adding little value.

It is important that your role is not just defensive but offensive too. Continually seek out ways the website can support operations within the company through a dialogue with the various departments and individuals.

A good website owner seeks to understand the challenges faced by others within the company and look for ways that the web could help with those issues. They also evangelize the benefits of the web and keep colleagues informed about the latest innovation that might apply to their situation.

Managing your content

Although roles such as visionary, advocate, and evangelist are important they can be somewhat conceptual in nature. The more practical, demanding and time-consuming role is your responsibility for the content of the site.

This falls into three categories:

- Initial content population
- Keeping content fresh
- Ensuring a consistent message

By talking to other departmental heads you will quickly identify areas where the website could help meet organizational objective.

Populating initial content

If content responsibilities are the most time-consuming aspect of a website owner's role, then content population in the initial build phase is the most demanding element of that. Writing and collating content for a website is a huge undertaking and the biggest reason that web projects fall behind schedule.

It is easy to underestimate the time involved in pulling together content from different sources and re-purposing it in a format suitable for the web.

Keeping content fresh

Even after the initial site has been launched your responsibility towards content does not end. There is also a need to keep the content fresh and up-to-date.

A website owner needs to continually source new content, review existing copy and update as necessary. New content such as news stories are required to keep users coming back for more.

Without a website owner ensuring consistent tone, a website can appear to have a split personality with different sections written in different ways.

Ensuring a consistent message and tone

The job of generating content can become too big for a single person. You may choose to solve this problem by reuse existing content or turning to others for help. These approaches are perfectly valid. However, they do present the danger of inconsistency in both tone and content. You must ensure that the site speaks with a single unified voice.

You will need to review each new piece of content added to a your site. Does it use the same tone of voice used elsewhere on the site? Is the writing style the same? Are the facts quoted in line with what is already being shown?

In chapter 5 (*Creating killer content*) we will talk more about generating content but for now all you need is a clear picture of the owner's role in the process. That role involves coordinating, generating, and standardizing content.

Coordinating your projects

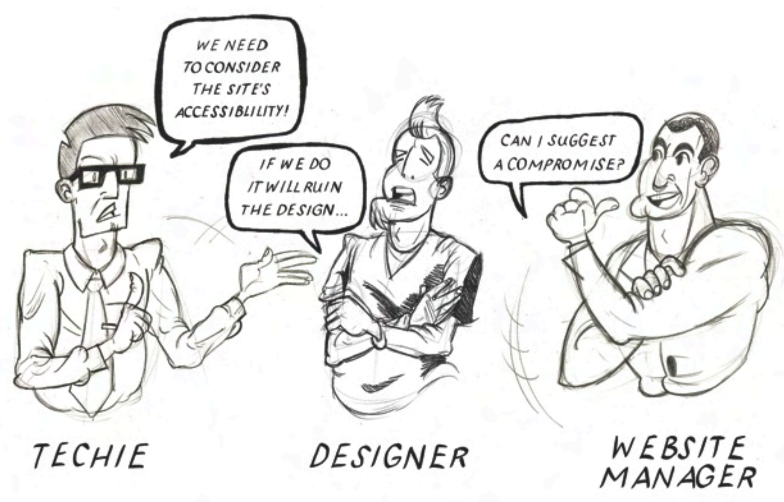
Content contributors are not the only people who need managing in a web design project. There are designers, developers, usability experts, hosting companies, and many more.

Although frequently you will turn to a web design agency to handle the management of these roles, it is inevitable that some management will be required internally. For example, internal sign-off is often required for project components such as budget, design, and content.

Unfortunately the final role most website owners have to fulfill is unofficial referee.

Resolving disagreements

Running a website is all about compromise. There are compromises in content and which sections of the organization get the highest priority. There are compromises between the different pillars of web design and there are compromises over budget and time scales.



It is your job as website owner to resolve disagreements over priorities.

The various stakeholders have different perspectives on what is important. It is your responsibility to break any stalemates that occur by finding the middle ground. You have to be the decision-maker.

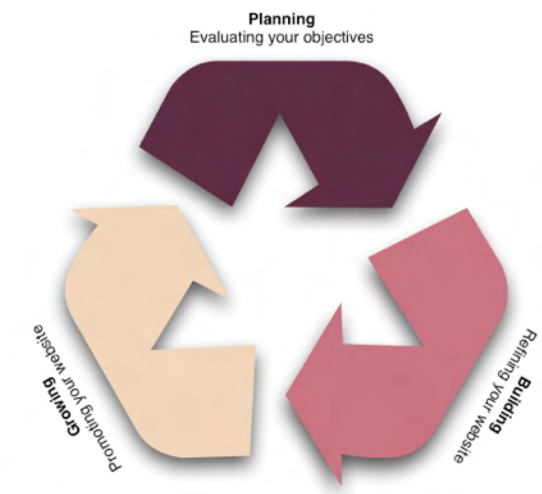
Recognizing your role is an important step in being a great website owner, but it is not the end of the journey. It is also important to realize that the role is an ongoing one and that the work of a website owner is never done.

Planning for the future

Many organizations underestimate the enormity of the job faced by website owners, because they fail to grasp that it is a long-term commitment. This explains why so few organizations have full-time website owners despite their website being considered an important asset. A website owner is needed through the entire life cycle of a website to ensure that it evolves and remains successful.

Evaluating your objectives

You should be constantly evaluating the websites objectives and asking if its overall vision and direction need changing. This does not need to happen on a daily basis but should be done every few months.



Website management is a cycle of planning, building, and growing your site. You should be constantly evaluating, and making changes based on what you learn to keep your site fresh.

When reviewing your site it is important to consider questions such as:

- Have the underlying objectives of the website changed?
- How is the site performing against its success criteria and are they still relevant?
- What is the competition doing and how are you performing against them?
- How has the target audience changed and what do they say about your site?

In the next chapter, we will look in detail at this subject. For now, remember that your objectives need to be reviewed regularly and that you should be refining the site based on changes that arise.

Refining your website

Responding to changes in site objectives can manifest itself in various forms. For example, if the success criteria for the site are not being met, then that needs to be addressed.

Equally, if the competition is luring away your visitors then the site needs to be altered to encourage them back. This continual "tweaking" of your site happens in three ways:

- Changes to the design,
- The introduction of new functionality,
- The addition, deletion and editing of content.

Constantly evaluate your site looking for ways the design, content or functionality can be improved.

For example, the luxury holiday service I mentioned earlier might respond to increased competition by adding a flight price comparison tool (new functionality). This would be appealing to users and will draw them away from the competition. Alternatively, they might add reviews of existing destinations (new content) to encourage repeat visitors.

Finally, they could refine the design based on user opinion to make it easier to navigate (changes to design).

Responding to user comments is often the best way of refining your website. Later we will address how to gather user feedback and use it to inform the changes you make. However, first we need to address the last of a website owner's ongoing roles, site promotion.

Promoting your site

Budget is rarely assigned to employ a specialist in site promotion and so it often falls to the website owner to fulfill this role. The visitors coming to your website will decline if you do not actively and regularly promote it.

There are lots of ways to effectively promote your site, including:

Type	Description
Offline promotion	Offline promotion includes letterheads, business cards, signage, phone systems and other marketing collateral.
Email marketing	Email can be a powerful marketing tool to drive new traffic and a good way of encouraging existing users to return to your site.
Search mechanisms	Search mechanisms are more than good placement on Google. It also includes pay per click campaigns and social networking tools.
Guerilla marketing	Guerilla marketing is a catchall term for lost cost marketing methods. It includes techniques like forum speeding, viral marketing, blogging and even podcasting.

You can promote a website in a number of different ways. The table above gives you a basic outline of the key methods we will be exploring in more depth later in this book.

Later we will explore how you might begin to promote his site using these and other techniques. For now it is important to understand that site promotion requires a regular commitment (either internally or externally). It is important to decide right from the outset who will be responsible for this work.

Next Actions

We have looked at the role of website owner and its associated responsibilities. I would like to end this chapter by proposing three tangible actions you can take to embrace the role.

- **Action one: Formalize the role** – The best way to formalize the role is for it to be written into your job description. Your responsibilities should be clearly defined and time should be allocated to the role. Go to your boss and discuss what is expected.
- **Action two: Set aside regular time** – Just because the role has theoretical time allocated to it does not mean your website will get the attention it deserves. Try to ring fence a certain amount of time every week that will be dedicated to the website. Don't allow more pressing responsibilities to push that time out. This will allow you to review the progress of your site and ensure it is updated and promoted.
- **Action three: Review and plan before proceeding** – Even if you believe you have a clear picture of what needs doing on your website, set aside a block of time to review the current state of your online presence. With deadlines imminent and management keen to see results, it is tempting to focus on site build or promotion. Resist the temptation to rush in. Plan your next step.

Planning is crucial to the success of a website. It is where you understand the background to your web project, define its objectives and decide how its success will be measured. Planning allows opportunity to assess the competition, review your existing site, and better understand your target audience. It should not be a surprise that the next chapter addresses planning.

In this chapter

- **Keep your planning lightweight**
- **Do not plan in a bubble**
  - The context of your web project
  - Gain context through consultation
    - *How to run a successful stakeholder interview*
- **Measure success**
  - Avoiding unrealistic goals
  - Avoiding the blame game
- **Look back to move forward**
  - Asking for feed back
  - Collecting cold hard facts
    - *Weblog analyzers*
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- **Know your enemy**
  - Reviewing the competition
  - Testing the competition
- **Empathize with your users**
  - Who to target first
  - Personalizing your audience
    - *Sample persona*

2 Stress free planning

When it comes to self-assembly furniture, I am a disaster. I am so bad that my wife has banned me from trying and now does it herself. I start off enthusiastic but within a few minutes I am swearing like a trooper and repeatedly hitting planks of wood with whatever implement is near.

Catherine, on the other hand, is always composed and in control. She plans what needs to be done. She carefully reads through all the instructions before she begins and collects the tools she will require.

By contrast, I believe instructions are for dummies and that I intuitively know where all the pieces fit. The result is that I find myself taking three times as long and become infinitely more stressed.

As with assembling flat pack furniture, if you plan your website development process up front, you will have a considerably less stressful experience. What is more, the result will be better.

Keep your planning lightweight

We all know how important it is to plan a project, but knowing something and doing it are different things. I know I should think before assembling furniture, but I am so keen to "get started" and "not waste time" that planning goes out the window.

Effective planning for a web project should be lightweight and flexible.

The same can be true of running a website. Saving time by shortcutting planning is a false economy. Before long problems will arise and without upfront planning they will lead to slippages in the project. Unless a project is clearly defined from the outset, people will have very different expectations of the result and their own responsibilities. This inevitably leads to conflict and more stress for the website owner.

Planning is often perceived as time-consuming and heavyweight. When I talk about planning a web project, I am talking about a lightweight process focused on developing a clearly defined vision and ensuring that everybody is consulted. This approach can be applied equally to a single new piece of functionality or a major overhaul of your entire web presence. This lightweight approach consists of the following stages:

- Understanding the broader context of your project
- Deciding how to judge the success of your project
- Assessing the project against your existing site
- Comparing the project to the competition
- Ensuring you understand the audience for the project

Let's begin by understanding the broader context of your project.

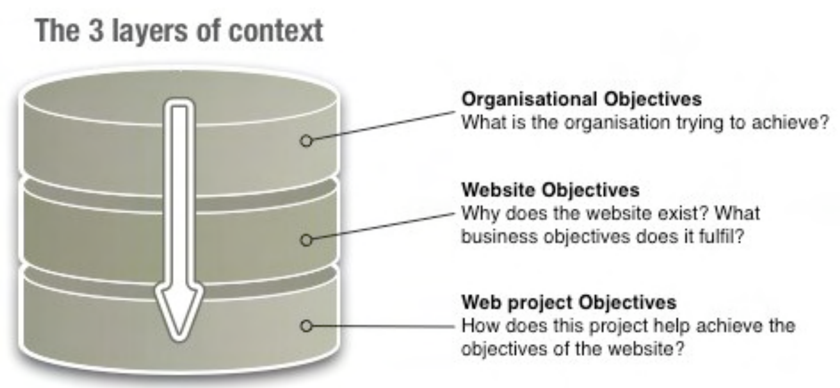
[3]

Do not plan in a bubble

A vision for your site cannot be developed in isolation. It must be developed within a broader context. But what is that broader context and how do you understand it?

The context of your web project

Whether you are developing an entire site or a single piece of functionality there is always a context. New functionality exists within the context of its parent site. The site itself exists within the broader context of your organization and its strategies. This essentially forms three layers of context that need to be considered:



Each layer affects the one below with organizational context affecting website objectives. This in turn influences individual web projects. Understanding each layer helps inform decisions you make regarding functionality and priorities in any individual project.

The detail you should collate largely depends on the complexity of the project and the time available for planning. In an ideal world, you would want to give significant thought to this broader context. However, even the most basic consideration is better than none.

Let's look at a very basic example of how broader context can be formed by referring to our fictional holiday company Dream Destination.

Dream Destination Strategy

Like many businesses Dream Destination has a strategy document that outlines the short and long term objectives of their company. It also contains a mission statement. From this strategy document, the website owner learns that Dream Destination aims to "provide luxury custom designed dream holidays using its team of expert travel specialists." Their current objective is to "break into the affluent over 60s market."

A real strategy document would say a lot more. However, even this basic information helps the website owner define the role of the website. Look how key phrases from the strategy document can influence the website.

Quotes from strategy	Consequences for website
" luxury... dream holiday"	The site design needs to convey a sense of quality and clearly distinguish itself from budget operators.
"Expert travel specialists"	The site should not allow users to book directly. Instead it should refer them to a specialist who will design a custom holiday itinerary.
"Affluent over 60s market"	This market has specific usability and accessibility requirements that will need to be accommodated.

The Dream Destination strategy document helps form a vision for the website. However, it should also be informed by speaking with the site's stakeholders.

Gain context through consultation

We established in chapter 1 that a stakeholder is anybody with a vested interest in the site. At Dream Destination, one stakeholder would be the "expert travel specialists."

Talking to stakeholders while planning a web project is an invaluable way of understanding the broader context of the project. Website owners sometimes dismiss stakeholders because they "don't know anything about the web." However, the role of the website is to help these stakeholders achieve their business objectives. Their input will help shape the website's vision.

Take our "expert travel specialists." They deal with end users everyday and can provide a valuable insight into the target audience. They are also aware of problems that the website could fix. For example:

Stakeholder comments	Action generated
 *"Users give up because the enquiry form is too complicated"*	Review the enquiry form and look for ways to simplify the process by removing steps.
 *"We have to call the user with additional questions"*	Make sure the enquiry form contains all the questions a specialist needs answering to provide a quote.
 *"Some of the enquiries seem to go missing"*	Analyze what is causing enquiries to go missing and develop an improved management system.

By repeating this process with other stakeholders across the organization, you can build up a picture of how the website can help achieve business objectives.

Spending time with your stakeholders also has a political benefit. One of the primary reasons web projects stall is objections from stakeholders. If the CEO or Head of Sales has a problem with the project, it simply cannot progress. One reason they often object is because they are not consulted.

By speaking with stakeholders at the planning stage, you achieve two things. First, you identify any objections they might have upfront so giving yourself opportunity to tackle them before they become an issue. Second, you give the stakeholder the opportunity to express their concerns and requirements. This makes them feel engaged in the process. If somebody has been consulted, they are much less likely to object further down the line.

How to run a successful stakeholder interview

Arrange one-to-one meetings of between forty-five minutes and an hour with each of your stakeholders. Be sure to leave some time between sessions in case you find somebody particularly enthusiastic. It is important that a stakeholder covers all the subjects of concern to them.

By learning about the role of others within your organization you will identify areas in which the website can help.

What you cover in a session is largely dependent on how well you know the person and what role they have. However, some suggestions might be:

Questions	Reason for asking
"Tell me about your role & that of your department"	This provides a context for the discussion. It helps you identify areas worth discussing in more depth.
"Talk to me about the processes you use in your average work day to get things done"	This builds up a picture of their working practices and identify areas where the website could aid or hinder that process.
"What are the most time consuming and challenging parts of your job?"	By asking about challenges you may discover ways that web technologies could enable those challenges to be overcome more efficiently.
"What company data or applications do you work with regularly in your job?"	Asking about data and applications can lead to valuable information and resources that can be used on the web.
"Tell me what you think of the company website and how you think it could be improved?"	Getting the stakeholders' feedback on the website is invaluable and has obvious direct application. It also makes the stakeholders feel their opinions are valued.

Ultimately, the objective of a stakeholder interview is to identify areas where the website can aid stakeholders in fulfilling their role of meeting company objectives. Once we have gathered background context and completed stakeholder interviews the next step is to distill your vision into measurable goals. These are called "success criteria."

Measuring success

Having a vision provides context from which to build, but you also need a clearly defined set of success criteria. Success criteria provide three distinct benefits:

- **Measurable objectives.** Whereas the broad vision for a site talks about a desire to "boost sales" or "increase dwell time" success criteria set specific goals.
- **Justification for investment.** When you cannot categorically state that your objectives have been met, it is hard to justify further investment. Success criteria provide that justification.
- **Improved communication.** I have witnessed projects where the developer's expectations have been wildly different from managements. Discovering these differences at the end of a project leads to conflict. Working together to define realistic goals avoids recrimination later.

Although success criteria can be beneficial they do carry risks.

Multiple criteria

Most web projects have multiple success criteria associated with them. If multiple goals are assigned it is important that you prioritize these goals. When success criteria are not prioritized they end up conflicting and causing confusion rather than clarity.

Avoiding unrealistic goals

Setting success criteria should be a collaborative process between all those involved. Everybody should have a sense of ownership and be committed to achieving the agreed criteria.

The issue of unrealistic goals is more common than you might expect. The most common is unrealistic time-scales and budget. Imposing these kinds of criteria without consultation can be a dangerous road, especially when dealing with external agencies desperate to win your work and willing to say whatever it takes. Externally imposed success criteria inevitably lead to recriminations further down the line.

Goals should be agreed by all parties, not imposed by management.

Avoiding the blame game

Assigning blame can be very damaging to the morale of the web team involved. It is also unrealistic to attribute blame to any individual. Web projects are complex, with each person's contribution being dependent on many others. If you start blaming developers for late delivery, they are just as likely to blame you for a poorly defined scope of work. Nobody wins.

A better approach is to discuss, when the project is over, whether it fulfilled the success criteria. Usually, this cannot happen immediately as success criteria only get fulfilled over time. When that meeting does take place, however, it should always look forward rather than focusing on the past mistakes.

Look at why the project didn't meet expectations. Was it because the expectations were unrealistic? Did a problem arise that could not have been anticipated in advance? Ask these questions to ensure these problems can be overcome in the future. For example, concluding that the success criteria were unrealistic enables you to revise them going forward. Identifying that a project was delayed due to unforeseen problems tells you to build in contingency next time.

Attributing blame for a failing website is ultimately counterproductive as no one individual is ever responsible.

This principle of looking back to plan for the future can also be used to analyze your existing site, helping to decide on future development.

Know your site

Start planning the future of your website by analyzing what you already have. A more formal approach helps to better inform your decision-making throughout the web project. Qualitative and quantitative feedback are two ways to better understand your current website.

Qualitative feedback is received by requesting comment from stakeholders and users. This is traditionally gathered using the following techniques:

Techniques	Description
Stakeholder interviews	These interviews provide stakeholders the opportunity to comment on the existing website. These comments should be collated for later analysis.
Feedback mechanisms	Allow visitors the opportunity to comment on your site using contact us forms, polls, and surveys.
User testing	Watching visitors use your existing site can be very enlightening. It is a powerful way to identify problems in the usability of your site.

The above table suggest ways of collecting feedback on your existing website.

Quantitative analysis on the other hand draws upon various automated analytical tools that provide information on different aspects of your sites performance. These include:

Tools	Description
Web logs analyzers	Every time a user interacts with your website information about that interaction is stored. Analysis of these logs can help identify areas of improvement.
Automated performance checkers	Automated checkers assess things like accessibility, download times and browser support. These help maximize your audience.
Online visibility trackers	Having a great site is important, but if nobody knows it exists then it has failed. There are a number of ways to gain a understanding of how visible your site is online.

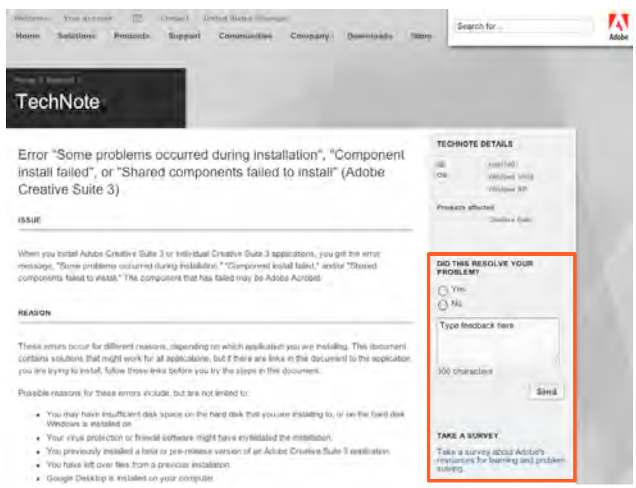
The above table suggests ways of compiling quantitative data on how well your site is performing.

Lets look in more detail at these two approaches and better understand the role of each.

Qualitative feedback

I have already written about stakeholder interviews and will be covering user testing in chapter 6 (*User centric design*). So let's focus on other feedback mechanisms.

Most websites provide some method by which users can submit feedback. This is normally a contact page, but something more proactive is needed if you want consistent user feedback. Most users will not think to send in comments unless they are frustrated with your site. The problem is that in such situations they tend to simply leave rather than complain.



Adobe support provides a simple and yet unobtrusive feedback mechanism. The side column asks users if they found the support document useful.

[11]

If you want feedback on your site then specifically ask for it. This can be done with a simple feedback form or a more comprehensive survey. However, a word of warning if you are considering a full-blown survey. Few users take the time to complete a long survey, so keep your questions to a minimum. Also avoid making your requests for feedback too intrusive. They should not hinder a user from completing his or her goals.

If you are considering making changes to an existing site, it is well worth implementing a basic feedback mechanism to canvas opinion before you begin. Whether you are getting feedback from your site, through user testing or via stakeholder interviews it is necessary to assess the value of the comments made. When analyzing negative comments about your site, use these four criteria to judge how seriously those comments need to be taken:

> For advice on running online surveys read Jakob Nielsen's research: www.useit.com/alertbox/20040202.html

- How often the comment is being made?
- Who makes the comment?
- What affect the problem has on the user and your objectives for the site?
- How easy the problem is to fix?

The more often you are hearing the same negative comment the more likely it is that the comment is justified and needs addressing. However, you cannot rely on numbers alone. If your biggest customer has a problem then you had better address that concern fast!

There is also a need to ascertain the seriousness of a problem. Does it stop the user from completing a task or is it simply a mild inconvenience? Does it in someway hamper a business objective? If it does then it will need addressing.

Finally, establish how difficult the problem is to fix. Even a minor problem is worth fixing if it is easy to do. Conversely, fixing a major problem might be unjustifiable if the expense is prohibitive. In such situations look for a workaround that lessens the seriousness of the

Free survey service

Providing a method that allows user feedback does not have to be expensive or complicated. There are a number services such as: questionform.com that allow you to create free surveys in minutes.

issue. Ultimately these decisions are about return on investment. Does the seriousness of the problem justify the cost of fixing it?

Although nothing is better than feedback from your users, it can be a battle. Stakeholder interviews and user testing are time consuming, while site feedback mechanisms are often ignored. Quantitative analysis is much less work, but it should be used to support, not replace qualitative feedback.

Quantitative Analysis

At the beginning of the chapter I talked about how bad I was at assembling flat pack furniture. Part of my problem is that I never have the right tools. Fortunately when it comes to analyzing the strengths and weaknesses of your site, there is no shortage of tools. Let's look at the three types of analytical tools I mentioned earlier, starting with web logs.

Web logs analyzers

The most well known form of analysis is carried out on a site's log files. Log files track where a user has come from, what pages they have visited, how long they have spent on each page and other data on users interaction with your site. The problem is that log files are hard to understand. There are many tools available to help with this, from free open source software to expensive enterprise level products.

It is probably best to start with something cheap. In my experience the majority of website owners won't use the advanced features offered by high end tools. You can always upgrade later.

Google Analytics gather a wealth of information about your users and how they navigate your site.

Another option is to use a statistics collector that doesn't rely on log files. One such tool is Google Analytics. This collects considerably more data than web logs and has an easy to use interface for analyzing that results. It is free of charge and only requires a small piece of code on each page to work.

How do you judge if an existing site is performing? There are three basic things you can look at.

- **The number of unique users and where they are coming from.** If many sites are linking to you, it is a good indication that you are doing something right. Traffic levels also indicate the performance of existing marketing campaigns.
- **The percentage of repeat visitors compared to first time users.** If users are returning to your site regularly it is normally a sign of satisfaction.
- **How users are moving around your site.** How long are they spending on individual pages? How many pages are they viewing? Which page are they leaving the site from?

The final test is trickier to interpret. A user might visit many pages, which could appear to be a sign of interest in the site. It could also mean they cannot find the information they require. Compare the time on site to the number of pages viewed. If they are looking at a good number of pages for a reasonable time then you know things are going well.

It is easy to misinterpret website statistics. For example a large number of page views may mean people cannot find the information they are looking for.

By looking at where a user leaves, you can get an indication of potential problems. Are users just looking at your homepage? If they are leaving without viewing other pages then you have a problem with your homepage. Are users getting to checkout on your e-commerce website and then giving up? Perhaps its time to user test your checkout process.

There is a lot more you can do with web stats, but that should be enough for you to analysis your existing site. Let's now turn our attention to automated checkers.

Automated performance checkers

When analyzing your web stats you may notice a significant number of users who leave your site without viewing a single page. This can be happen for a variety of reasons. They may have simply come to the wrong site. However, it could also mean they have met technical difficulties accessing your site.

There are three tests you can easily perform to identify any potential problems.

- **Check your site on as many different browsers as possible.** I recommend you look at your site in at least the last two versions of Internet Explorer, Firefox, Opera and Safari. If you do not have access to all of these browsers, then try out an online service such as browsershots.org.
- **Check your site's accessibility using an online accessibility checker.** These tools provide a report outlining the various accessibility problems with your site. A word of warning: these automated accessibility reports can be both misleading and confusing, as we will discover in chapter 7. Nevertheless, they can help you identify

possible accessibility problem with your site.

- **Carry out is a speed test on your site.** You should be looking for download times of less than 10 seconds on a 56k modem. However, up to 20 seconds is acceptable.

Automated performance tools

To see what your site looks like in different browsers try:
http://www.browsershots.org

To check accessibility go to:
http://webxact.watchfire.com

For monitoring download times I would recommend:
http://www.websiteoptimization.com/services/analyze/

Automated checkers have a broader role than monitoring site performance. They can also be used to track the online visibility of your site.

Online visibility trackers

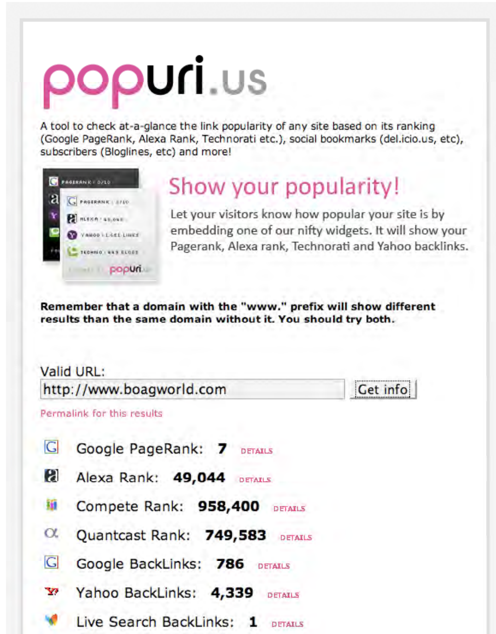
Web stats and performance checkers provide information on site usability and accessibility, but they don't tell you how easy your site is to find. Fortunately there are tools that do exactly that.

Start with a site like http://www.popuri.us. This site check various sources to ascertain your online visibility.

If you want information about your site's ranking for specific search terms, then a tool like http://www.googlerankings.com will help. Despite the name, this free application checks all major search engines reporting your rankings for whatever terms you specify.

There are also a number of desktop tools that bring all of this functionality (and more) together. For the purposes of assessing an existing site, the free online tools will be adequate. In chapter 10 (*Driving Traffic*) we discuss the need to monitor your sites visibility on an ongoing basis, especially when tracking marketing campaigns. In this situation a desktop application may be more convenient.

Of course, knowing that your site ranks 4653 on Alexa or that 364 people link to it from del.icio.us, isn't in itself that useful. The real power of online visibility trackers is that you can check on your competition as well.



Popuri.us is a free web application that checks your site's ranking on search engines, blog listings and social networking applications.

Checking out the competition

To assess the strengths and weaknesses of your existing site, you need to judge it within context. The best way to achieve this is to compare it with your competition.

Most organizations have a clear picture of who their competition is. Depending on your sector, this list can be quite long. Doing a detailed competitive analysis of everyone is not cost efficient. I recommend keeping the analysis lightweight and selecting a small number of sites to look at (between 4 and 6). Be careful: the tendency when narrowing the field is to focus on the largest competitors, which can be a mistake. The smaller competitors, or those new to the marketplace, are more likely to be doing something innovative, which you might be able to learn from. Try to ensure a mix of both larger and smaller sites.

Review your competition

Try to review your competitor's website in a similar way to your own. Some adaptation will be required when you do not have access to information.

For example, it is not going to be possible to interview their internal stakeholders. You are also not going to be able to survey existing visitors through contact forms or online polls. Instead you will need to deploy alternative methods like user testing. Testing the competition gives you an opportunity to test out responses to design, content, site structure and functionality. You can learn from what they have done right and improve on what they have done badly. It is the perfect training ground.

Take the time to look at your competition's websites and identify what works and what doesn't.

Although user testing is very useful it should not replace some basic analysis on your part. Take time to look at your competition and ask yourself:

- What is the message and tone of voice being used on this site?
- What content and functionality is highlighted on the home page and in the navigation?
- What image are they trying to project through the design?
- What functionality and content do they have compared to your website?
- What labeling are they applying to the content areas and site sections?

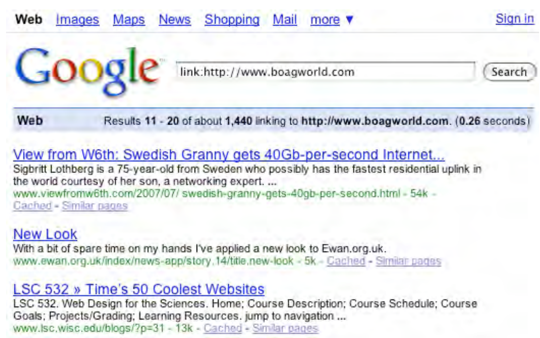
The aim is to better understand your competition's online strategy. Why have they chosen to approach a problem in a different way to you? Does that alternative approach give them an advantage?

It is not necessary to limit your analysis of the competition to qualitative methods (such as user testing). You can also do quantitative analysis too.

Test your competition

As with reviewing the competition, some adaptation is required when doing quantitative analysis. This is because you do not have access to their log files. There is however, a lot to learn from checking the online visibility of your competition.

Do your competitor's websites rank higher than your own? Do more people link to them? Is there more talk about your competitor's brands? Who links to your competition and can you persuade them to link to you?



To quickly find out who is linking to your competition you can type the following into Google: "link:http://www.yourCompetition.com"

Finding the answer to all of these questions is very simple. Use the same popuri.us service I mentioned earlier in the chapter and enter your competition's web address. You can also use other tools to test your competition, like using the automated checkers to see how well built their websites are.

All of these techniques should give you a clear understanding of your competition. However, more important is the need to understand your users.

Picturing your users

Many website owners feel they have a clear picture of their users, but often they do not. When asked, their answers are often vague and ill defined. The "general public" or even "women over 50" is not clearly enough defined to be useful.

It is important that everybody on the web team has a clear understanding of the target audience. It has to be more than a vague idea in your head. The designer needs to

All members of the web team need to clearly understand the target audience.

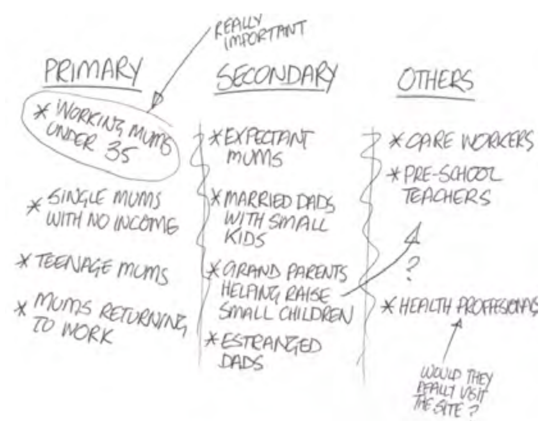
understand the audience so he can create a look and feel that resonates with those users. The content providers have to know, so they can write at an appropriate reading level and use terminology the reader familiar with. The list goes on.

Fortunately the process of refining and communicating your target audience only consists of two painless steps. First, list and prioritize your audience. Second, create personas for each of the target groups. Let's begin by prioritizing our users.

Prioritizing your users

Make a list of users who might be interested in your site. Be specific and include as many types as you can. You will probably end up with a long list. It is the length of this list that often spells disaster for many web projects. By targeting such a large number of diverse audiences you inevitably end up appealing to nobody. Where you could have had a focused, engaging website, you end up with a bland solution.

It isn't wrong to have a broad audience, but the list of target users needs additional work before it aids, rather than harms, the development process. I recommend prioritizing your audience into three groups:



This is an initial draft of a target audience list I wrote for a health care site. The site provided advice about health issues of pre-school children. The list was further refined before being given to the entire project team.

Audiences	Description
Primary audience	The primary audience is the group you focus design, content and functionality around. The aim is to maximize their user experience.
Secondary audience	Although the site is not specifically tailored to the secondary audience it will still have sections specifically designed for their needs. These appear as "micro sites" or "landing pages"
Others	Although other audiences are catered for by the content of the site, the design and usability isn't focused specifically on them. That said, nothing in the site should create unnecessary difficulties.

Organize your audience into three groups; primary, secondary and others.

Whether you're redesigning a whole website or simply producing a new piece of functionality for an existing site, list and prioritize your audience. The audience for a specific piece of functionality may be different to that of the website as a whole. For example the primary audience for a specific application might be only a secondary audience for the site itself. Make sure everybody involved in the project gets a copy of the final prioritized list. Designers and copywriters in particular will find it invaluable.

However, defining your users does not need to stop there. You can also look at creating personas.

Creating personas

A persona is a description of a fictional individual. They are used to bring more life to the audiences on your list and help you better engage with them as real individuals. A persona helps those involved in a web project to really understand the needs and motivation of your target audience. As with the audience list they should be distributed to all members of your team and will be key in design, copywriting and user testing.

However, probably the most valuable role that personas fulfill is to act as a reference point. Once you have personified the target audience and given them a name, you can use them as a sanity check for development decisions. For example you can ask yourself "what would Ben think of this piece of functionality? Would he find it useful?" This helps the team to always remain focused on user needs.

How does one go about creating a persona and what information should it include? Let's explore an example.

A persona is a mini biography, normally confined to a single sheet of paper. Each persona relates to a user group from your target audience list. You can create as many of these personas as you wish. I recommend creating at least one for each of your primary audiences. For our example we will create a single persona based on a fictional primary audience for a health spa website.

Personas help you to focus on the needs to your users.

Sample Persona: "mum with young kids"

Persona	Reason for asking
Name: Jane Smith Marital status: Married Age: 27 	"Mums with young kids" doesn't help us to connect with the person. The first step in creating this connection is to give our fictional person a name: Jane Smith. Giving her a name also provides us with a handy way of referring to that persona. Next we need to establish some basic information about Jane. She is female and aged between 20 and 35. Let's say 27. We also need to decide if she is in a relationship or not. This probably isn't vital to the persona but it helps flesh out the character. We will say she is married. Now let's add a picture. Again this isn't entirely necessary but helps to bring the persona to life.

Persona	Reason for asking
Occupation: Midwife Children: 2 (aged 18 months and 4 years)	Occupation will range hugely across our audience, but we need to pick something. Let's say she works part time as a midwife. This job fits nicely around her childcare requirements. It also supplements her husband's income and gives them a bit more disposable cash. Let's say she has 2 children aged 18 months and 4 years. You would not always need to specify this information but as children are a defining characteristic for this persona, it is worth mentioning.

Even with just this basic demographic information we are starting to build up a picture of her life. We know she is busy, rushing from the school to her job and back again. She has little free time and probably craves peace and quiet. Being a midwife we know she is intelligent and well educated. She is also relatively affluent due to their dual incomes.

In short, she is an ideal candidate for the health spa. It would provide a welcome break from the kids and her hectic lifestyle. We know she has the income to afford a "treat" like this occasionally. The next step is to understand how Jane interacts with the web.

Persona	Reason for asking
Jane has very little time to surf the web. Because she always has children "underfoot," using the internet rarely receives her full attention.	How much does this persona use the web and what does she use it for? In the case of Jane, she probably doesn't us the web that much. She is not required to use it as part of her job and she hardly has much time at home to surf! Unless she is giving up her precious quiet time after the kids have gone to bed, she will probably be looking at the web with children running around. The chances are she will not be able to give the site her full attention.
Jane uses the web occasionally to find childcare information, buy clothing, and order food. She is not uncomfortable using computers when required.	Jane is well educated, so she uses the computer occasionally to look at childcare information or as a research tool for work. She may also make purchases of clothing and groceries online, because she doesn't have the time to go shopping. Beyond that her usage will be limited.

Our final step is to see what Jane will be looking for in our health spa website.

Persona	Reason for asking
If Jane visits the spa site, she probably will have already decided in principle that go. She will not take much persuasion.	We know that Jane doesn't surf the web. When she does go online she doesn't hang around. As a result, she is unlikely to just stumble across the site. More likely she came across the site through something like a brochure. She probably already knows she wants to go to a spa by this stage. It is just a matter of which spa is right for her.
The first information Jane requires when arriving on the site is price and availability. Only then will she look at what exactly is on offer.	So what will make Jane choose this spa? Her primary motivations will probably be price and availability. Price because with two kids she will feel that the trip is an extravagance. Availability because she will have to arrange childcare. Only then will she allow herself to explore the site and find out how she can be pampered.
Jane needs the website to be easy to use and provide her quick access to the key information she requires.	We know that she is busy and cannot not give any website her full attention. It is therefore important that the site is easy to use and quickly tells her what she needs to know. If it does not she is likely to go to a competitors site.

Even a basic persona can provide an in-depth understanding of your audience. Personas are a great tool whose power extend well beyond the website and can even affect overall business strategy. For example, wouldn't it be helpful if the spa provided childcare, so that Jane did not need to arrange a babysitter?

Next Actions

In this chapter we have brought together the background information required to run a stress free web project. However, this information needs to be refined into something tangible. Only then can it be turned into a brief that the web developers can work from. Before moving on to the next chapter take a moment to complete the following actions.

- **Action One: Collate your research** - In this chapter you have researched organizational and site objectives, developed success criteria and better understood your target audience. You have also analyzed your own website and that of the competition. Take some time to condense this information into a short, digestible form. Take the ideas that have come out of stakeholder interviews, competitive analysis and site review, and record them as a list that can be refined.
- **Action Two: Refine by objectives** - Start refining your wish-list based on your site objectives and success criteria. Does that great idea suggested in the stakeholder interviews line up with your site objectives? Will that functionality on your competition's website help you meet your success criteria? If not, remove it to a "maybe later" list.
- **Action Three: Refine by persona needs** - Take your newly trimmed list and look at it from your persona's point of view. Would Jane (our fictional persona) find the idea useful? Would it help her within her day-to-day constraints? If the answer is yes, keep the item on the list. If not, remove it but keep it safe for the future.

You should now have a definitive list that can be implemented as a web project. Combined with your personas, list of target groups, success criteria and website objectives, you have everything you need to write a brief and assemble your team.

In this chapter

- **Choosing when to outsource**
- **Clearly define your project**
- **How to write an effective brief**
    - Provide context
    - Clearly state your requirements
    - Define your deliverables
    - Learn about the supplier
- **Avoiding disasters**
    - Never request speculative design
    - Avoid writing a wish list
- **Selecting the perfect team**
    - How to narrow the field
    - Reading between the lines
    - Making the final selection
        - *Assessing the proposals*
        - *Interviewing the shortlist*
        - *Taking up references*

3 The perfect team

I am a huge fan of the 'Mission Impossible' TV show. I loved that each week Ethan Hunt would assemble the perfect team to complete his mission. People were carefully selected based on their skills and each person would get their moment of glory when their specialty saved the team. From the prosthetics artist to the explosives expert, every person played their part.

Of course the heroes in these stories were only trying to complete an impossible mission. They certainly weren't doing anything as challenging as building a website! They instinctively knew the plan for success and who they needed to complete it. Unfortunately, in the real world things are much tougher.

In chapter two we established an outline of what needed to be done to complete our project. Now that outline must be turned into an actionable plan. You need to assemble your team and brief them properly. How do you find the right people? How do you ensure that your team knows exactly what is expected of them?

In this chapter we look at how to write a brief (also known as the scope of work) and select your team. However, first you need to make one vital decision. Are you going to develop your web project in-house or outsource it to an external web agency?

Choosing when to outsource

In many situations the decision to develop in-house or outsource is not down to you. Either an internal team already exists, or you are forced to outsource because you cannot fund in-house staff. What if you have that choice? How do you decide between developing your website in-house or outsourcing to an external agency?

Let's compare the choices.

Using an internal web team	Outsourcing to a web design agency
Internal teams are more cost effective for *long-term projects* and ongoing maintenance.	Outsourcing is more cost effective for *short projects* where the expenses of hiring, salary, training and equipment would be prohibitive for an in-house team.
In-house teams work within the business, so they can *understand organizational objectives* and target audience better than an external agency.	An external agency brings *a fresh perspective* that institutionalized in-house teams cannot offer.
An internal team is *committed to evolving the website* over time. They are constantly looking for ways to improve the site.	External agencies have a *broader perspective* of the whole industry, rather than what is happening within a single company.
An in-house team is able to *promote the website internally* and ensure it does not become neglected.	An external agency needs to constantly ensure it is *cutting-edge* to stay competitive. This ensures that the quality of work is consistently high.
Because an internal team is not juggling multiple clients they can (if well managed) be *more responsive* than an external agency.	Because external agencies tend to be larger than in house teams they have *more specialized and highly skilled staff*.

Your choice comes down to the length of the project and the funding available. If your website needs constant development and will evolve on an ongoing basis then an in-house team may be more appropriate. Of course, supporting an in-house team can be expensive. There are the initial costs of recruitment and equipment, and the ongoing expenses of salary and training. For shorter development projects the benefits and cost savings of outsourcing may outweigh the convenience of an in-house team.

In reality, there is no reason why you cannot combine both approaches. An external agency could be used for development work while ongoing maintenance could be handled by an internal web editor. Equally, you could do the bulk of development internally, but bring in external agencies for specialist work such as search engine optimization. This hybrid approach combines the strengths of both in-house and external.

Whatever your approach, you will need to provide a brief from which people can work.

Clearly define your project

Having a clearly written, well defined scope of work (or brief) is central to a successful web project, *especially* when engaging an external agency. The length of your brief should reflect the size and complexity of the project. It should also reflect the audience towards whom it is aimed. For example, a brief that is distributed to external agencies will need more background information than one aimed at in-house developers.

The desire to avoid writing a brief can be strong, especially on smaller project being developed internally. I encourage you to *always* write a brief, no matter what the circumstances, since a brief provides many benefits:

- **Limits scope creep.** Projects without a brief lack definition and allow new functionality to be added "on the fly." This results in slippages and loss of direction.

Although it is tempting not to write a brief for smaller projects it will cause problems further down the line. All projects should have some kind of brief.

- **Improve costing accuracy.** Whether developing in-house or outsourcing, a project needs to be costed. Costs can be expenditure on external agencies, or time and salary for in-house staff.
- **Clearly defines tasks.** A well written brief enables your development team to identify specifically what tasks need to be

completed and by whom.

- **Specifies delivery dates.** Once tasks are established it becomes easier to estimate how long the project will take. If this exceeds the specified deadline then additional resources will be required.
- **Provides context for the developers.** A good brief includes background research (see chapter 1), which will encourage intelligent suggestions.
- **Sets expectations.** A brief explains to the developers exactly what is expected and ensures internal stakeholders understand the scope of the project. This avoids disappointment and dispute further down the line.
- **Improves communication.** A good brief should stimulate discussion between yourself and the developer. Expect questions after your invitation to tender is sent out and encourage comments.

It is important to allow time for external agencies to ask questions when issuing an invitation to tender. Don't send out your brief and then go on vacation until after the deadline for responses!

We have established that a scope of work is important, but what goes into it?

[5]

How to write an effective brief

There is no single way to write a web design brief. It depends on who will be reading the brief and on the size of the project. A short email would suffice for a internal developer adding a contact form to a site. For a website redesign or new sub-site, a larger document would be required. Although the complexity of a brief varies, there are four broad categories of elements which should appear:

- Context
- Requirements
- Deliverables
- Information on the developer

Let us begin with context.

Provide context

An effective brief should provide background information about the project, drawn from the research we gathered in chapter 2. The amount of context required is dependent on the knowledge of the reader. If the document is being sent to external agencies then more context is required. Less is needed for an internal audience aware of this background information. Consider the needs of your reader. Information should be distributed on a "need to know" basis! No matter the size of the project, always include the following:

- **Target Audience** – For smaller projects list the target audience and what they want to achieve. On larger projects include the personas developed in the chapter 2.
- **About your organization** – When using an external agency for the first time, provide background information on who you are and what you do. Don't give them the company history. Instead, focus on your mission statement, organizational objectives and how you use the web to achieve your goals.
- **Aims and objectives** – The emphasis of any brief should be on the project

objectives. State what the project should achieve and how that goal is going to be measured. These are the success criteria we created in chapter 2.

- **Competition** – Provide information on your competitors, especially when they have similar functionality to what you are developing. On large projects also include the competitive reviews we completed in chapter 2.

On smaller projects cover the key areas of context but in less detail.

Clearly state your requirements

The majority of your brief should outline project requirements. This includes any limitations such as budget or time scales.

Let's look at an example that demonstratesthese requirements, a fictional e-commerce site called "The Joke Factory." They sell practical joke merchandise, but now also wish to offer electronic gift certificates. Here's a sample requirements section for this project:

Content of the brief	Explanation of the approach
The Joke Factory wants to enable its e-commerce site to support electronic gift certificates. Each certificate appears as a product and comes in three values (£5, £10, £20). Users can add these certificates to their basket. Once the order has been confirmed the user enters a personal message and email address. The message is sent to the email address along with a unique code that can be entered at checkout. This applies the discount. A confirmation of the emails delivery should also be sent to the purchaser. *This functionality is similar to that provided by amazon.com. Any suggestions on the specifics of how the functionality should work are welcome.*	**Outline the functionality required.** Explain how it works by outlining the user experience. What will the user see? What can they do? How will the site respond? Use examples if possible. Note the reference to amazon.com. This helps the developer visualize what is required. Encourage suggestions from the developers. It is good practice to allow the developer to suggest alternative approaches. A web project should be a collaborative process between website owner and developer.

Content of the brief	Explanation of the approach
The new gift certificate system should integrate with our existing website. This site is built using Classic ASP with a SQL Server 2007 database. The front end is built using the latest standards based techniques.	**Communicate any technical constraints.** This prevents the developer suggesting inappropriate solutions. Don't worry if the wording opposite sounds like gibberish. Many of the terms there will be explained later in the book. If in doubt ask your existing developer to outline any technical considerations that should be included.
The selection of gift certificates should reflect other products closely. The form field that allows users to redeem their vouchers should be clearly explained and consistent with the rest of the checkout process. Finally, the certificate emails should be visually attractive and conform to corporate guidelines (see attached).	**Describe any design specifications.** If you have a style guide, simply refer to that. Also mention other sites that convey the look you want. However, be specific about which elements you like and why.
Once this new service is launched we wish to promote it with our existing customers. We require the creation of a promotional email and distribution of that email to our mailing list. The list of email addresses can be provided in an Excel document and consists of just under 10,000 addresses.	**List requirements beyond design and build.** These can include things like email marketing, search engine optimization, and hosting. The requirements segment should outline these items to avoid unforeseen costs further down the line.
The Joke Factory's sales are seasonable with the peak at Christmas. We therefore want the new gift certificate functionality available by late October.	**Discuss deadlines.** Do not create artificial deadlines. It will limit the number of agencies tendering. Include legitimate deadlines and explain why they exist.
We have allocated $5000 for this project. However, we will accept higher bids if they can be justified. Although cost is an important factor in our decision, it is not the only consideration. The ability to meet deadlines and integrate into our existing site is also very important.	**Include an indication of budget.** Any web project can be approached in different ways and without an indication of budget the web developer will not know the most suitable. Finally, indicate how important the budget is in your decision. Will you consider responses to your brief that exceed your budget or will you accept the cheapest quote?

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Did the last section of the table make you uncomfortable? Many website owners feel that disclosing their budget encourages agencies to markup the value of the project.

If you disclose your budget, you will see many responses come in just under, but this is not because of overcharging. There are many ways to fulfill a brief and budget dictates the quality of approach taken. The more funds available, the better the solution that can be provided.

Many website owners are suspicious about revealing their budget, but talking about budget is an important part of the tendering process.

It is similar to buying a car. Both a Skoda and a Ferrari get you from A to B, but one is better quality than the other. Also, when buying a car you choose extras like air conditioning or GPS. Your budget constrains what you choose. In the same way if the web design agency knows your budget, this informs what extras they propose for your site and the quality of build. A higher budget allows more time to be spent on user testing and accessibility requirements.

As with cars, the quality of solution is dictated by the budget available.

Most website owners do not have the experience to know what a reasonable budget would be, but they *do* know a project's worth to their business. The Joke Factory should know how many gift certificates they anticipate selling. They know their profit on each sale and so can estimate the revenue they expect to generate. This should help inform a budget for the project. If the quotes that come back vastly exceed the budget, then the project cannot be justified. Not all projects are so easy to price, but the budget cannot be ignored. Set an approximate figure based on funds available, but encourage agencies not to be too constrained by this figure.

Requirements focus on functionality and design, but we also need to cover issues of quality and ownership by defining deliverables.

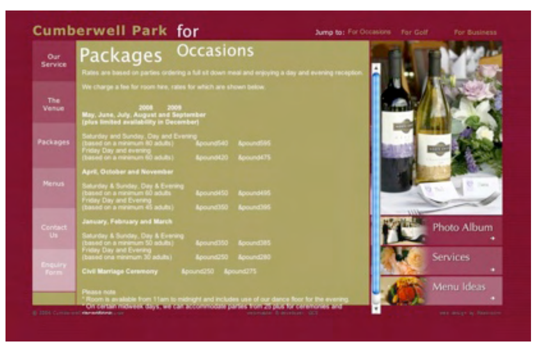
Define your deliverables

The quality of what is delivered can vary hugely depending on the available time and budget. Problems arise when the various parties have different perceptions of what the deliverables should be. The following three areas can cause particular conflict:

- **The standard of code.** Not all website code is created equal. To keep costs low some web design agencies take shortcuts. Others are unaware of web design best practice. Make sure you specify your requirements when writing the brief. In chapter 7 we explore what those requirements should be. However, not all projects need to conform to the latest standards. There are situations when a 'quick and dirty' approach is a necessary evil. The important thing is that everybody has the same expectations.
- **The accessibility of the deliverable.** The most contentious area of accessibility is browser testing. State upfront which browsers you want your site tested on. As a minimum, specify the last two versions of Internet Explorer and the latest versions of Safari, Firefox and Opera. Consider support for alternatives devices such as screen readers or mobile phones.

Internet Explorer

Safari



A badly built website can look fine on one browser and unusable in another.

[10]

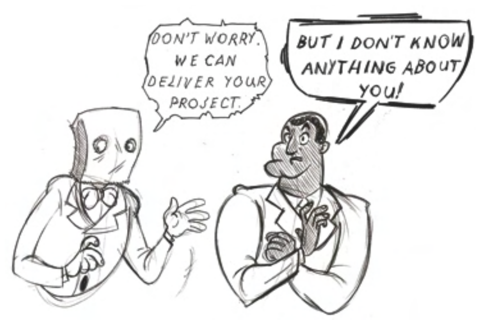
Remember, extensive browser testing will affect budget. It is therefore important to balance accessibility with return on investment. Finally, accessibility extends beyond browser issues but we will explore that in chapter 7.

- **The ownership of assets**. Two types of ownership need specifying. First there are assets created as part of the development process. Who owns the Photoshop files used to create the look and feel? What about the source files for any Flash applications created? Although it is not necessary to own these files, it can cause problems if you wish to use a different agency in the future. The second type of ownership is intellectual property. If the agency develops an animated character for use on your website, do you have the rights to use it in TV commercials or print work? Lay out your requirements in the brief. Many agencies charge more for ownership and so you need to know these costs ahead of time.

Once you have set the deliverables, requirements, and context for your brief, the developer has all he needs to provide a quote. If you are using an external agency, you should request background information on the agency itself.

Learn about the supplier

One advantage of an in-house team is that you know them. Even if you haven't worked with them before, you know about the organization they work for and can easily canvas opinion about their competence. However, with external agencies that kind of information is harder to acquire.



It is often hard to tell how trustworthy an external agency is.

Every proposal you receive will include information about the agency. Although this sales copy does have value, it cannot be relied upon. You must dig deeper by asking for specific information in your brief. Here are a few questions that will prove enlightening:

Question to ask	What the question reveals
How many years has your agency been trading?	Younger companies can suffer from problems in their workflow and delivery.
Can you please provide accounts for the last three years?	Viewing the financial accounts of an agency will indicate how likely the company is to be around for ongoing support.
How many staff members do you employ and what is the approximate makeup of responsibilities?	The size and makeup of an organization helps determine if they can successfully deliver your project. Even a large agency will struggle to deliver a technical project if the majority of their staff are designers.
Please provide resumes for key staff that may potentially be involved on our project.	Don't expect an agency to be able to tell you the final project team, but ask for resumes anyway.
What liability insurance does your company hold, which maybe relevant to this project?	An agency could fail to deliver or work could be lost for some reason. Having a financial recompense available is a reassuring safety net.

Along with the questions above, always ask for references. References are an invaluable way of learning more about the agency as we will discover later in this chapter.

Finally, ask for examples of relevant work. This shows the quality of their work and experience on similar projects. Website owners often fail to do this when engaging an agency to do design work. Instead they ask the agency to produce a number of design mockups, which is a flawed approach.

If you are seeking a long term partnership with an external agency, be sure of their financial security.

Avoiding brief disaster

What should you avoid doing when writing a brief? There are many mistakes I could mention, but I want to focus on just two: requesting speculative design and writing a wish list rather than a brief.

Never request speculative design

no-spec.com campaigns against speculative design claiming that it "ultimately does a disservice to the client"

Speculative design is when a client asks an agency to provide initial design mockups to support their tender. Requesting design work up front seems like a good idea. It provides an opportunity to assess an agency's design skills, and has become "common practice." By association therefore it must be "best practice."

Unfortunately the supposed benefits are misleading and there are good reasons for avoiding it entirely.

- **Speculative design favors superficiality.** Good design is a collaborative process between agency and client. The agency needs to have a full grasp of brand, business drivers, and user requirements. The design emerges after numerous iterations and multiple rounds of user testing. Speculative design does not allow for this, instead relying solely on which agency can "draw the prettiest picture."
- **Speculative design focuses on the client, not the user.** Good design is about facilitating the user and enabling them to complete tasks easily. A good agency will challenge a client's perception of design, focusing them on user needs. Speculative design exists only to impress the client. It encourages agencies to focus on winning your work, not making tough design decisions.
- **Successful agencies won't do speculative design.** Speculative design is very expensive for agencies. It is perceived as a sign that the client wants "something for

nothing." If an agency is successful and has no trouble generating work, they tend not to response to briefs that include speculative design. A willingness to produce speculative design can be a sign of a new or struggling agency.

- **You pay for speculative design.** The perception that there is no cost associated with requesting speculative design is false. The agency has to cover its cost of sale by adding it onto the projects they win. In the end clients not only pays for the speculative designs produced for their project, but also for other projects that the agency failed to win.

Would you have hired the designer who created this web page? Probably not because although it is usable it lacks the "wow" factor.

Later in this chapter we cover alternative ways of assessing the design skills of an agency. For now it is enough to put a requirement in your brief to see examples of related work.

Speculative design is not the only mistake that is made when writing a brief.

Avoid writing a wish list

The second mistake is that a brief can turn into a wish list of functionality rather than immediate requirements. Even after refining your ideas according to users' needs and business requirements, you could still have an extensive list of work that needs to be done.

The best approach is to break requirements down into smaller mini-projects (or modules) that can be rolled out over time. This phased development provides a number of benefits.

- **Phased development increases speed of delivery** by launching new modules independently. Some modules can be launched while others are in development. This prevents a single module stalling the entire rollout.
- **Phased development leads to more accurate estimates.** Bigger project are harder to estimate. Breaking them down makes it easier for suppliers to quote accurately.

- **Phased development improves cash flow** by spreading the cost of a project. Instead of having two or three large payments, you have a number of smaller payments associated with the delivery of each micro-project.
- **Phased development provides PR opportunities**. Whenever a new feature is launched there is an opportunity to publicize the site. New features can motivate users into taking another look. A single large project only provides a single opportunity to grab people's attention.

It is hard to provide accurate quotes for price and timescales on large projects.

- **Phased development limits the risks of working with a new supplier.** Choosing an agency is always a risk. Until you work with somebody, it is hard to gauge how good they are. Reduce this risk by limiting the size of project they are commissioned to build. If the agency fails to perform, you can look elsewhere when commissioning subsequent work.

Unfortunately, it is not always possible to break projects down. Sometimes you have to take the decision to commission an agency for the entire project. In such situations it becomes important that you select the right team.

Selecting the perfect team

Selecting a web design agency is a crucial step in the web development process. The wrong decision can have devastating consequences on your project leading to considerable stress and delays.

Not that every website owner has to face this challenge. Many work with existing in-house teams. However, there are number of reasons why a website owner with an in-house team might still choose to outsource.

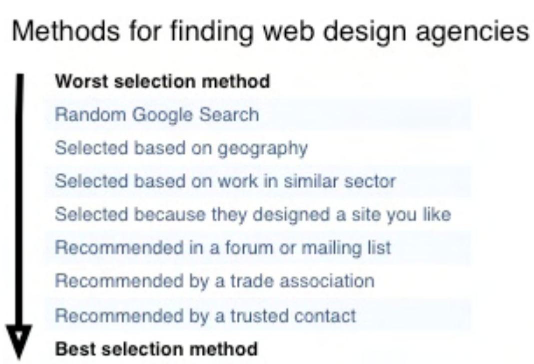
Who then do you invite to tender? How do you evaluate their proposals and presentations?

How to narrow the field

After days of research, refinement and crafting, you finally have the perfect web design brief. With millions of web design companies worldwide, who do you send it to?

One option is to filter by geography. There are valid reasons for selecting a web design agency within country. Issues such as currency, time zones and company law can make working with international agencies challenging. However, beyond that, geography has little effect. An agency is just as capable of developing your project whether they are next door or a thousand miles away.

The best approach is word of mouth recommendation, especially from somebody you know and respect. Start by talking to your suppliers or other business partners. Who did they use to build their site? What was their experience like? If you are part of a trade association, see if they have any recommendations. Also, ask for recommendations in any forums or mailing lists related to your sector.



Some methods for finding web design agencies are more successful than others.

Finally, look at websites that you like or consider successful. Most sites will have a link to the agency that developed them. If they don't, then a search on Google often reveals the agency's name. Be careful if adopting this approach. Just looking at a website does not tell the whole story. The underlying technology could be in shambles, the management may have been appalling and the project might have exceeded its budget and missed specified deadlines. Call the website owner first and get their opinion of the agency.

By combining the approaches above you should have a considerable list of agencies. How many you choose to send the brief to depends on the size of project and time available. Invite too many, and you have lots of proposals to read and presentations to sit through. Invite too few, and you may not receive enough responses to do a fair comparison. For an "average" website redesign (if there is such a thing) anywhere between five and ten is a good number. How then do you refine your list to this reasonable range?

Reading between the lines

The most effective way of refining your list of agencies is by looking at their websites. An agency's website can tell you a lot about whether they are right for your project. The problem is that they are well aware of this, and put considerable effort into projecting the right image. Your challenge is to look beyond the superficial gloss meant to impress. It is easy to get seduced by alluring graphics and exciting animation. However, you should be focusing on four questions.

- **Do they have capacity?** Is their team big enough and does it have the right skill to deliver your project? To help you make that judgment, a good agency will ensure that information on the size and makeup of their company is available.
- **Do they have experience?** Agencies with experience of working on similar projects or in the same sector, are invaluable. It will dramatically reduce the learning curve and this affects costs and time scales.

The size if an organisation does not always equal adequate capacity.

- **Can they produce the right design style?** The chosen agency must be able to design an interface which reflects your brand identity and appeals to your users. Most agencies show examples of their work on their websites. Look for examples that are aimed at a similar target audience or mirror your branding. Failing that make sure they demonstrate a broad range of styles. If all their sites have a "house" style and that is not inline with your requirements, then look elsewhere.

- **Can they deliver your technical requirements?** Increasingly, web projects involve complex development work. An agency's site should demonstrate a capability to deliver these kinds of projects. Look for examples that are comparable to your site and use similar technologies.

This approach will allow you to create a definitive list of agencies you wish to invite to tender. Once the brief has been sent, expect agencies to call with various questions. Be sure to note down the calls you receive. Who asked intelligent questions and who had not read the brief thoroughly? These are all clues that help you build up a picture of the agency and informs your decision making process.

With the questions answered the agencies should now be able to produce a detailed proposal. The next step is to choose the winning agency.

Speak to the agencies

If a website does not provide the information you require, phone the agency directly. A five-minute phone call can be more enlightening than pouring over a site for hours.

Making the final selection

Choosing an agency is an intimidating decision. However, the final choice can be made using three simple steps:

- Assessing the proposals
- Interviewing the shortlist
- Taking up references

Let's start narrowing the field by looking at the proposals you have received.

Assessing the proposals

Proposals can vary dramatically in price, approach and technology. Without clear assessment criteria it can seem impossible to compare the different options. Before reading the proposals, write a list of criteria by which you are going to assess them. If appropriate add weighting to important criteria. However, be careful not to over-weight a single category. For example, it is dangerous to put too much emphasis on price as it can lead to a poor quality solution.

There are no set criteria by which you should judge a proposal. The particulars of your web project dictate the criteria. However, here are some you should consider.

Never dismiss a good proposal based on a single criteria. Speak to the agency and see if a compromise can be reached.

- **An understanding of the brief.** Have they understood your objectives in the solution they have proposed? Have they responded to the constraints of the brief?
- **A proven track record.** Has the agency shown examples similar to your project and using similar technologies?
- **Evidence of best practice.** Does the agency demonstrate experience in usability (see chapter 6), accessibility and web standards (see chapter 7)?
- **An understanding of the sector.** Has the agency worked with other clients in similar sectors? Do they understand the challenges of your sector?
- **Innovation.** Has the agency challenged the brief in places and offered alternative solutions that better meet your business needs?
- **Value for money.** Does the agency offer both "value for money" and quality?

Using this approach, narrow the number of agencies down to three or four. Next, arrange to meet with the remaining agencies.

Interviewing the shortlist

I recommend this step for all but the smallest projects. How many agencies you interview is subjective, but keep the number small. Interview too many, and they will blur together. Sitting through endless presentations is exhausting for you and unfair on the agency that gets the last slot of the day!

Inform the agencies of any requirements you have for their presentations, as well as the time available to them. One condition worth setting is who should attend. Often an agency will only send sales staff. However, it is not the sales person you will be working with, so ask that at least one member of the proposed development team attends. On large projects, ask for the project owner. On smaller ones, ask for a designer or developer. This allows you to see what the working relationship might be like.

Remember it is not the sales person you will be working with. Ask to meet the development team.

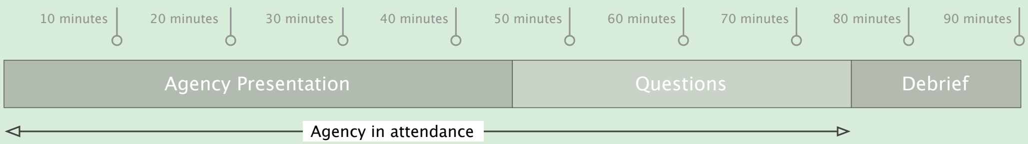
Although this is an effective approach, it can backfire. As with speculative design, some successful agencies will choose to turn away clients who ask development staff to attend presentations. These agencies are too busy to spare staff to attend sales meetings. Only use this approach if you are concerned about the working relationship with an agency.

Establishing if you can work with an agency is very important. Do they approach problems in the same way as you? Do they share your values and passions for the project? Do they speak your language or does what they say go over your head? Are they honest about the challenges in the project and even their own weaknesses?

Judging whether you can work with an agency is a personal decision. However, meeting the agencies will allow you to narrow the selection down to one or two agencies.

Running the interview

A typical format for the interview would be:



Always take 15 minutes to discuss impressions and make notes. Do this immediately otherwise you can get agencies confused.

Allow the agency to lead the presentation. Some will encourage questions throughout, while others will ask you to hold questions until the end. If the agency asks you to hold your questions, do not be afraid to interrupt if they use terminology you do not understand. Web design is full of jargon and may require clarification.

If you cannot choose between two agencies, follow up on the agencies' references. This will help make the final selection. Even if you have made your decision, still follow up on references, just in case.

Taking up references

If you know what to ask, speaking to existing clients is more informative than any presentation or proposal. Take the time to call references and cover the following topics:

- **The project manager.** Ask to speak with clients who have worked with the project manager assigned to you. Discuss what the working relationship was like and how smoothly the project ran.
- **The type of work undertaken.** Agencies often exaggerate their involvement in a project to appear experienced. Clarify their role, especially when multiple suppliers were involved.
- **The approach to design.** Was the design process collaborative? Was the client's opinion valued? Were there multiple designs and iterations? Did the agency respond positively to criticisms and user feedback? Was the agency overly protective or

inflexible about design.

- **Deadlines and budget.** Being confident that an agency can deliver on their promises is the cornerstone to a successful working relationship.
- **Weaknesses.** An agency will not refer you to a disgruntled client. To avoid an entirely glowing report, ask directly about negative characteristics.
- **The approach to projects.** Was the approach flexible enough to accommodate change? Did the client speak directly to development staff or where they confined to liaising with a project owner?
- **Ongoing support.** Did the agency respond quickly to bugs in their work? Were there hidden costs that emerged post-launch? Was the agency quick to respond to requests for additional functionality? Were they pro-active in suggesting future developments for the site? Are the agency and the client still talking?

When taking up references ask specifically about the project owner assigned to your project.

Covering these topics should provide the information and confidence to make a final selection. From there all you need to do is finalize details and begin the project in earnest.

Next Actions

In this chapter we looked at how to engage an external web design agency. We investigated the process of writing a brief and selecting an agency. Whether you are using an internal team or an external agency you should now be ready to start work. Before you leap into production make sure you do the following:

- **Action one: Produce a statement of work** – A statement of work outlines the deliverables for your project and forms the basis of the contract. It describes the final product and work required to produce it. Normally this is drawn up by the external agency, but if the work is being done in-house then it will fall to the website owner to write it.
- **Action two: Have a kickoff meeting** – Meet with your team to discuss the details of the project. This meeting should include developers, designers, website owner, project owner, copywriter and anybody else who will contribute to the final deliverables. If you have engaged an external agency this meeting will be run by them. However, if you are developing the project in-house you will need to call this meeting yourself. Use your brief as a rough agenda. Discuss exactly what needs to be produced and allow those attending to ask questions. The aim is to produce a list of deliverables that are agreed by everyone.

With the kickoff meeting over and statement of work produced, production can start. This book will not take you through every part of the production process because it varies too much depending on the work to be done. However, in the next few chapters I hope to highlight some of the areas where you as website owner are most engaged or where there is important information that you "need to know."

Let's start with the most contentious area of all, design.

In this chapter

- **Too many cooks: Subjective design**
    - Focus on your target audience
        - *Cultural considerations*
    - Test your design
        - *What is design testing?*
        - *How to run design testing*
    - Avoid design by committee
    - Maintain a broad overview
- **The fight for homepage real estate**
    - The changing role of the home page
    - Rushing into home page design
    - The importance of simplicity
- **Grappling with corporate branding**
    - Creating a personality for your brand
    - From print to the web
        - *Logo design*
        - *Corporate fonts*
        - *Color*
- **The challenges of layout**
    - Grappling with resolution
    - Understanding the fold
    - Constraining page width

[1]

4 Differences over design

Why does iPod dominate the MP3 player market? The technology is nothing special and it has fewer features than many of its competitors. What makes it stand out is the user experience. The physical design of the hardware is sleek, simple and attractive. The user interface on the device itself is intuitive and clean. Apple understands the power of design.

When it comes to the web, design is no less important. Nothing is more frustrating than a badly designed site.

Good design can be equally powerful. A well-designed interface guides us to the content we need, encourages a positive feeling towards a brand and seduces us into completing calls to action.

Get the user experience wrong and the project may fail, no matter how good the content or functionality. No wonder design is one of the most contentious and stressful parts of the development process.

Too many cooks: Subjective design

We all have different perceptions of what makes good design. More accurately, we all have different perceptions of what makes *bad* design. Good design is to some extent invisible.

Our different perceptions are shaped by many factors. Personality, culture, childhood experiences, emotional state, physical surroundings and even our own bodies dictate how we respond to design. Even the slightest change in a design can alter our perception of whether it is good or not.

Design tends to generate strong reactions, much more so than other aspects of web development. The role of design is to engage with us emotionally. The danger is that by tapping into our emotions it may generate the wrong type of response.

If design is both subjective and divisive, how do you successfully develop a good user experience? To a large extent this comes down to the expertise of your designer. However producing a design is a collaborative process between designer and website owner. You will be crucial in the decision-making process. There are four techniques to make the creation of a design less subjective and divisive:

- Focus on your target audience
- Test designs
- Avoid design by committee
- Maintain a broad overview

Let's address each in turn.

Design is both subjective and diverse. This makes the job of the designer extremely challenging.

Focus on your target audience

That crucial moment has come. The designer reveals his first design for your new web project. How will you react? Your first reaction will be personal. What do *you* think of the design? Do you like the colors, the layout, the imagery? It is impossible to react any other way, but the important thing is what you do next.

One response is to start asking for changes that meet your personal aesthetic. The other reaction is to start worrying about how others will perceive the design. For example, how will your boss react?

Both of these responses are valid. You are the person who is going to live and work with this design. If you aren't enthusiastic about it then how can you expect anybody else to be? Equally the opinion of other stakeholders are important. Getting buy-in from across the organization and making sure business objectives are reflected is a definite consideration. However, neither of these responses should be the primary gauge for the success of a design.

Assessing a design concept is not about your personal opinion or that of your colleagues. It is about meeting the needs of your users.

The most important question is what will your target audience think? The primary role of a design is to facilitate and enthuse users. It should enable them to quickly reach content, while drawing them deeper into the site and engaging them with your brand. Most of all you are endeavoring to create a positive emotional response.

One way to ascertain what your target audience thinks about a design is to refer back to the personas created in Chapter 2. How would the people in your personas react to the design? Would it enable them to quickly find the content they need? If they were elderly would they be able to read the text? If they were unfamiliar with computers would they understand the interface? Try to guess how they would respond emotionally to the design. You may be able to make an educated guess based on other sites you know your target audience likes.

The ideal approach is to ask users directly about a design. But how exactly should you do that? How can you test a design?

Test your design

There is a lot written about usability testing and we cover that in chapter 6 (*User centric design*). However, there is little written on design testing. Some in the design community feel it undermines their role as designers. I believe that putting a design in front of real users helps to make the process less subjective and helps aid the sign off process.

What is design testing?

Design testing is not like polling. It is not a matter of selecting the design that scored the highest. It is an interpretative process where observation and intuition are more important than statistical results.

The most common question I use in design testing is "Why?" By continually asking why, you dig deeper, encouraging people to express in more detail their

Cultural considerations

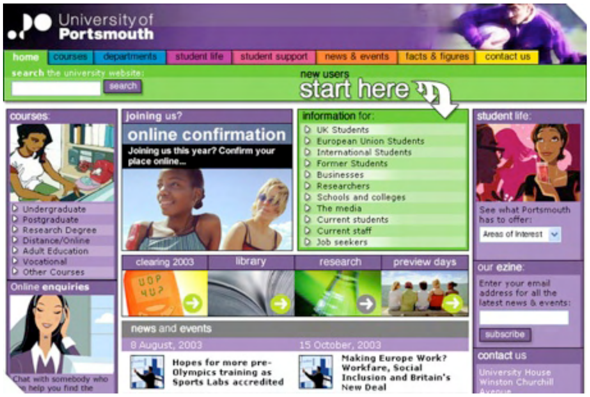
Do not dismiss culture when thinking about design just because your site has a local focus. We live in a multi-cultural society and cultural consideration apply as much to our neighbors as those around the world.

Our cultural background has an impact on how we perceive a design. Color in particular can be heavily influenced by culture. For example while red is perceived as dangerous and aggressive in the West it is seen as a symbol of good fortune in some eastern cultures.

Images of people need careful thought. If for example you wish to reach an islamic audience, then ensure models are not dressed inappropriately for that culture.

response to a design. By talking to them face-to-face you pick up their body language and emotional response.

Neither is design testing like a focus group. You must engage with users on a one to one basis. Group discussions lead to less confident members being influenced in their thoughts and this undermines the results. Interacting with a website is usually a solitary experience and so the design should be assessed in the same way.



When working on the University of Portsmouth website I was unsure about the design. It was too brash and busy. However, it tested well with the 16–18 year old target audience. I had to set aside my personal opinion.

So what happens in a design test session?

How to run design testing

Normally, users are asked to participate in two exercises:

- **Flash testing** is used to judge the hierarchy and emphasis of the design. Will the users notice key content or will they be distracted by less important elements? Users are shown the design for a few seconds and asked to recall as many items as they can. The tester notes both the items spotted and the order in which they are recalled. Screen elements that have the most impact are mentioned first.
- **Emotional evaluation** is an exercise where the user is asked to describe the site using non-design related words. Phrases like "too bright" or "too busy" are not acceptable but "overwhelming" or "funky" are. Because personal preference varies, asking people what they think of a design is pointless. These questions trigger comments like "I don't like the green." However, asking how a design makes them *feel* removes some of these distractions.

[6]

The emotional evaluation exercise takes practice to get right. One approach is to offer them extremes to choose between. For example is the design "conservative" or "progressive"? Is it "cold" or "friendly"? Although this is leading the user in their choice of words, it is still useful data and gets them thinking in the right way. They are often able to then continue unaided.

Although users will insist on expressing their likes and dislikes endeavor to focus them on what impression the design leaves.

Design testing gives you concrete user opinion to feed into the decision-making process. This is important when multiple people are involved in the sign-off of a design and you are in danger of designing by committee.

Avoid design by committee

Design by committee is the nail in the coffin of many good design concepts. Everybody has an opinion and so the design is tweaked to ensure everybody's concerns are addressed. This creates an unobtrusive design that offends nobody but fails to excite anybody.

A mediocre design can still be usable and meet the needs of your target audience. However, it will not create brand loyalty or generate a feeling of satisfaction.

Try to limit the number of people making design decisions. Ideally this should be just the designer and the website owner. In the real world of internal politics, there is often a requirement to consult with others. Yet there is a difference between consultation and design by committee.

Design by committee leads to uninspiring mediocre design.

The key to success is getting all parties to agree to a process before design begins. The following order of events works well.

Steps towards design sign off		People involved
1	Production of initial design concepts.	Designer
2	Refine initial concepts using business objectives and personas.	Designer and website owner

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	Steps towards design sign off	People involved
3	Present the refined design to stakeholders individually.	Designer, website owner, stakeholders
4	Collate responses from stakeholders and make amendments where appropriate	Designer and website owner
5	Present design concepts to real users	Designer, website owner, users
6	Collate responses from users and make final iteration of the design concept.	Designer and website owner
7	Present the final design to all stakeholders together with the results of user testing and stakeholder interviews.	Designer, website owner, stakeholders
8	Sign off design.	Website owner

The crucial step is the individual meetings with stakeholders. By meeting with them individually you prevent "design on the fly." This is when a group of people starts making changes to a design in an attempt to reach a consensus. By meeting with people one on one, no design decisions will be made in the room.

When presenting a design to stakeholders, provide them with the information to give educated feedback. Talk through the personas and objectives for the project. Ask how they believe the target audience would react to the design. Encourage them to think beyond personal preferences and focus on business and user requirements. By the time the stakeholders see the final design they will already feel invested in it. They have:

- Contributed to the process.
- Been given all the background information.
- Seen the design testing results.
- Been educated to think from the users perspective.

It is the website owners role to focus on business and user requirements. The designer should decide how that applies to design.

You will have done everything possible to ensure that the design is not produced by committee. The only danger remaining is that you personally lose objectivity.

Maintain a broad overview

It is important to understand the difference between your role and the designer's role in the development of a site's aesthetic. It is easy for the website owner to take on the role of designer, reducing the designer to a technician who manipulates pixels.

This happens when the website owner focuses on details rather than maintaining a broad overview. The website owner should champion the needs of his users and the business rather than deciding how the design should work. This may appear to be a meaningless distinction. After all, the design directly impacts the needs of the users and business. However, there is a difference:

Wrong type of feedback	**Right** type of feedback
"I hate the black and red colors. Use pink instead."	*"I am not sure our female users will like those masculine aggressive colors"*
"The layout is all wrong. Move the enquiries to the top of the page and make it bigger"	*"Our main business objective is to generate more enquiries. I think we need more emphasis on that"*
"Make the logo bigger"	*"We are a new company and we need people to remember us. Can you place more emphasis on branding us strongly"*

By explaining the underlying problem the website owner empowers the designer to make positive suggestions that improve the design.

It is the website manager's role to identify problems. The designer should propose the solution. If you solve the problem then the designer doesn't get to understand the underlying issues and cannot propose alternative solutions.

Failing to maintain this distinction undermines your relationship with the designer and wastes money. You should pay a designer for their knowledge of design principles, not just their ability to manipulate pixels. Most designers have an extensive knowledge of color theory, grid systems, visual hierarchy and many other aspects of design. By getting heavily involved in the detail of design you are paying them to do nothing!

The designer needs to recognize your superior understanding of the business requirements and sector. In turn you need to recognize the designer's skills in the principles of good design. Design should be a collaborative process and nowhere is this more important than when working on the design of the home page.

The fight for homepage real estate

Home pages are perceived as the most important part of a website. It is common to see factions within an organization fighting to ensure their interests are represented on the home page. In this fight for real estate, usability and design aesthetics are the first casualties. Home page designs quickly become cluttered and unattractive as various content elements vie for attention.

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Left unchecked competition for homepage space can completely destroy both usability and design.

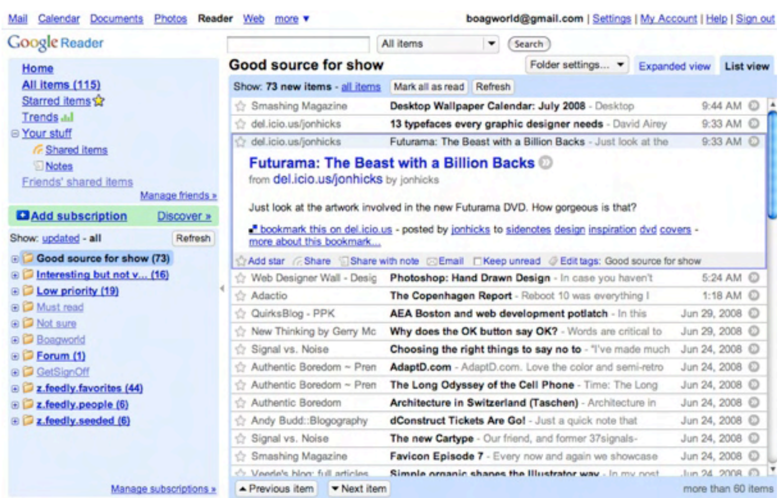
Competition for home page space causes projects to slip and disputes to erupt. However, it doesn't need to be this way. By implementing three simple techniques you can reduce (although admittedly not eliminate) the conflict over home page design:

- Explain the changing role of the home page
- Avoid rushing into home page design
- Communicate the importance of simplicity

Let us look in more detail at each of these in turn.

The changing role of the home page

Jakob Nielsen in his book "Prioritizing Web Usability" writes about a change in how users are interacting with the web. They used to visit a specific site to complete a task. For example, if they wanted the latest news on a specific crisis they would go directly to CNN or the BBC. However, more recently they are instead looking to search engines. The search engine takes the user directly to



Google reader is just one of many RSS readers which allow users to view new content from multiple websites at the same time, bypassing website home pages.

the information they require, bypassing the site's home page. This deep linking seriously reduces home page's prominence.

Another factor for the decline of home pages is the rise of RSS feeds. RSS gathers content from multiple websites together in a RSS reader. Users no longer have to check sites for updated content, because that content comes to them. This 'push' orientated approach is great because it doesn't rely on users checking your site. However, it does diminish number of visits to your home page as the RSS feed either contains your content or links deep within your website.

These two factors have shifted the focus of websites away from home pages and towards content. The home page is still important, but it is not as important as it once was. If you are struggling to convince people of the home page's decline, the next technique is to delay its design.

Rushing into home page design

Much of the conflict surrounding the home page focuses on what content it should include, rather than on its design. By starting with something less controversial, such as a text page, you can set the design for the site before the fight for real estate dilutes it.

A home page should reflect the content of a site at the highest level, and signpost key content deeper in the site. In many projects the content has not been finalized at the initial design stage. It is hard to create an effective home page without a full understanding of what content should be signposted. It is better to leave the home page alone until you have a clearer understanding of the site's content. When you do finally address the home page be sure to demonstrate the importance of simplicity to your stakeholders.

The importance of simplicity

S*implicity is important*. As the website owner you must fully embrace this idea. However you also must communicate it effectively to the project's stakeholders. In the context of home page design simplicity equate to a single principle: **The more elements added to your home page the less importance each has**.

John Maeda sums it up beautifully in his book "The Laws of Simplicity (Simplicity: Design, Technology, Business, Life)". He says:

The opportunity lost by increasing the amount of blank space is gained back with enhanced attention on what remains.

Compare these two well known search engine. Which better communicates its primary function? Which is more intuitive to use? Is it any wonder Google dominates search?

To help both yourself and your stakeholders grasp the power of simplicity I recommend the following exercise.

- **Write a list of all the elements you want on your home page.** Some items will be interface elements, such as the main navigation or search box. Others will be brand related, such as the logo. Still others will be content related, such as a latest news box or a list of quick links. The latter will probably be the longest list as different stakeholders push their own agendas.
- **Once the list is complete, assign yourself 15 points.** Each point represents a small amount of attention the user will give your home page. The underlying principle is that a user has a finite amount of attention.
- **Start assigning your points to elements from your list.** Any element that

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appears on a page must be assigned at least one point. However, the more points you assign it the more attention it will be given. This approach will demonstrate that the more you add to a page, the more likely important elements are going to get lost in the crowd.

Carry this exercise out with your stakeholders and (when possible) designers. It will help clarify what is important and bring some structure to the development of your home page. Although this exercise is effective at resolving content and prioritization it doesn't help with aesthetics such as branding.

Grappling with corporate branding

Branding guidelines range from the extensive to nothing at all. Both extremes present problems.

Brand identity varies from one organization to the next. In some businesses all that exists is an ill-defined logo, which is regularly altered to suit the whim of the designer. Elsewhere there is a weighty document that specifies every aspect of the brand identity, including the use of color, imagery, typography and logo. Whether your corporate guidelines are excessive or non existent, it can be challenging to bring a brand online.

Creating a personality for your brand

Designers need clearly established brand guidelines to produce an appropriate design. If that brand does not exist or is ill defined, they will be forced to develop it. The website owner will need to work with him.

It is unnecessary to produce a full corporate style guide. All you need is an idea of how the site should 'feel'. To do this ask yourself what type of personality your brand has. If the brand were a person what type of person would it be? Would it be friendly or formal, carefree or conservative, professional or personable? How old and what gender would it be? What car would it drive and what newspaper would it read? By giving your brand personality it gives the designer direction when selecting color, typography and layout.

How then do you go about establishing your brand's personality? Take a look at existing marketing and sales collateral. Are the colors somber and conservative? What about the copy? Is it written in the first or third person? Is it conversational or formal? How does the company projects itself to the outside world? Look at the business objectives of the company and speak to internal stakeholders about how they perceive the personality of the company. Establish a plum line against which design decisions can be made.

Find your brand's personality

Look to offline material for inspiration about your brand. The colors, text and design of this Lynx shower bottle say a lot about the personality of the brand. Lynx is obviously young, male and obsessed with girls. Their website (lynxeffect.com) reflects this perfectly.

In addition, existing sales and marketing material can be used more literally in determining the design of your web project. It can guide the look in terms of color, typography, imagery and layout. However, sticking to offline material too closely can cause problems.

From print to the web

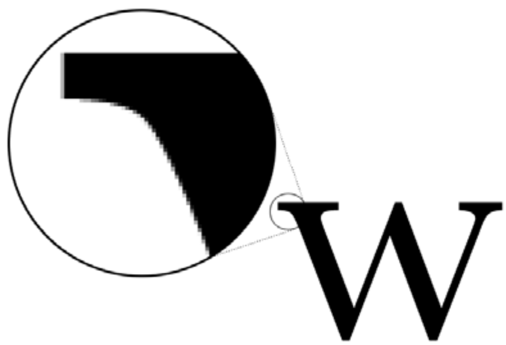
The problem with using existing marketing material as a guide for your web project is that it is usually print based. Also, most style guides are produced by traditional advertising agencies, many of whom have little or no experience developing for the web. These guidelines often make no reference to the web and do not always conform to best practice.

However, a style guide can be valuable if treated as guidelines rather than unbreakable rules. A degree of flexibility is required to make the transition to the web. There are three areas that can prove particularly problematic:

- Logo design
- Corporate fonts
- Color

Let's start with logo design.

Logo design



Because a computer screen can display less information than print, logos and type can often appear pixilated at smaller sizes. This problem can be so acute it effects legibility.

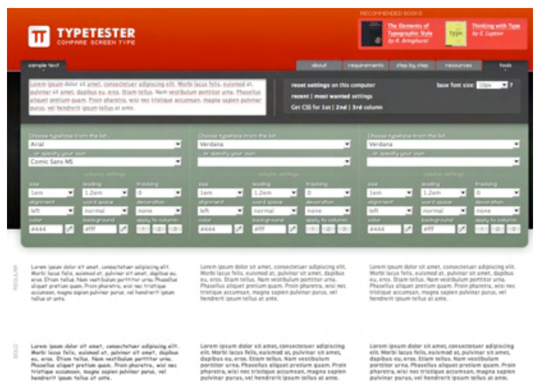
Brand guidelines focus heavily on logo usage. Specifications are supplied for size, color, position, background, and whitespace. However, sometimes these rules cannot be applied to the web. For example, when monitor size varies and screen resolutions can be set by users, defining measurements in millimeters and centimeters is useless. On other occasions it would be unwise to follow guidelines. This typically happens with specifications about the position of a logo. On the web the convention is that your logo is placed top left. Positioning the logo elsewhere makes it harder for users to identify the site and conflicts with their expectations. It is better to ignore guidelines in such situations and instead stick with web conventions.

A more serious problem is the logo itself. One of the most significant differences between the web and print is 'dots per inch'. DPI is a term that originated in print design. It refers to the detail at which a page is printed. A printed page is made up of a series of dots. The more dots in a single inch the more detailed and crisp the printed material appears. The same principle is used on the web but instead of printed dots there are pixels. Most logos are printed at between 300 and 600 dpi, but on the web they are rarely displayed higher than 72 dpi. This difference in quality means logos can appear pixilated and lack detail at smaller sizes.

Most of the time this difference in resolution is not a problem. However, when a logo is particularly complex and shown at a smaller size it can become illegible. In such situations the designer is left with two options. The first is to increase the size of the logo, taking valuable real estate away from content. The second is to consider a web version of the logo, which is simplified to support the lower resolution.

Dpi can also be a problem with corporate typefaces.

Corporate fonts

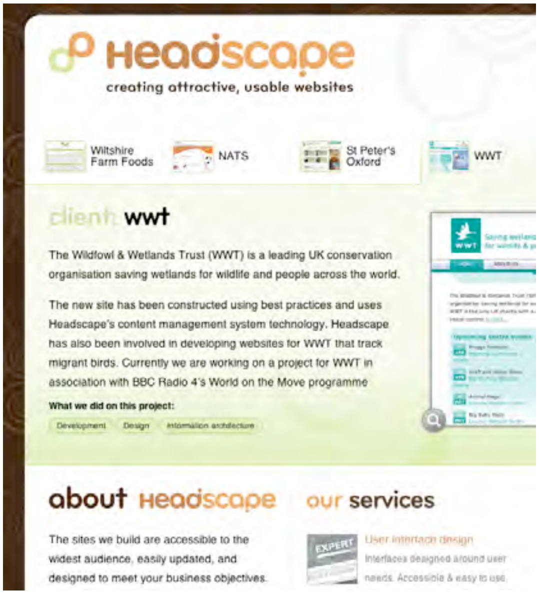


typetester.maratz.com compares different 'web safe' typefaces and displays all the default fonts available in different operating systems.

Typography is an important part of your brand identity, but it can be problematic on the web. Ornate and serif typefaces can render poorly, becoming illegible at smaller sizes.

Poor rendering is not the only problem with web typography. To display a font the users needs to have it installed on their PC, limiting the choice of fonts a designer has available. Furthermore, the web designer can only safely use fonts that come with the operating system. Because not all PCs run the same operating system this limits us to about nine typefaces to choose between.

Although this sounds depressing, things are not as bad as they first appear. For a start it is possible to create a hierarchy of fonts. In other words the designer can specify a primary font and if that is not available fall back on safer fonts. This does have some drawbacks but generally is a reliable approach.



The new Headscape site (unlike the old site shown in chapter 2) uses images to display headings in the corporate font. It uses Helvetica for body copy and falls back on Arial if Helvetica is not available.

It is also possible to use custom fonts in Adobe Flash or images. However, designers use this approach sparingly (normally only for headings) as it can create accessibility problems, confuses search engines and increase download time.

There is hope for the future. For some time it has been theoretically possible to use custom fonts that are downloaded along with the web page. This would allow a website to use any font, without it being installed. Unfortunately, until recently none of the major browsers have supported this.

Things are now beginning to change with support existing in both Safari and Opera. Unfortunately at the time of writing, neither Internet Explorer or Firefox have followed suit. This is because of copyright issues relating to the distribution of fonts over the web.

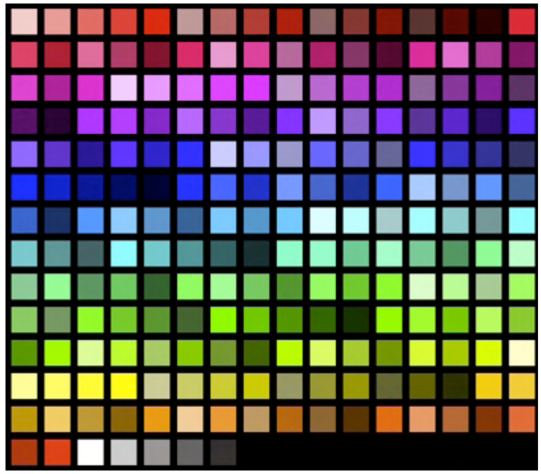
For now the best that you can expect is to use corporate fonts for headings, with the majority of typography being rendered in one of the web safe fonts. Talking of 'web safe' let's look at the much misunderstood area of color on the web.

Color

There was a time when designers had to work with 'web safe colors'. Some suffer from the misconception that this is still the case. Thankfully the vast majority of personal computers are now able to render millions of colors perfectly well.

That said colors on the web do not display the same as in print. In print, color is produced through the application of ink on paper. On the web mixing red, green and blue light creates the colors we see. Different monitors, computers and operating systems all display color slightly differently. These differences means it is not enough to take the pantone numbers found in most style guides and apply them to the web.

The problem becomes particularly acute when corporate palettes contain light or dark colors. Because of the way colors are shown on screen, light colors becomes lighter and dark colors get darker. On some screens dark colors can appear almost black, while a light color can appear almost white.



Once web designers were limited to only 216 colors. Thankfully that is no longer the case.

Ultimately the designer has to solve this problem. However, colors will vary from monitor to monitor. Try viewing designs on as many different computers as possible before commenting on the color. What looks great on your laptop may appear too dark or too light on your colleague's old home monitor.

It's easy to forget just how different the web is from print. However, those differences are not confined to style guides. They apply to layout as well.

The challenges of layout

Creating an effective layout for a website is a skilled area. A good designer can lead the user's eye around a page drawing attention to key elements using size, position and color. Designers use techniques such as white space, grid systems and web conventions to make a design easy to understand. Understanding how layout on the web works defines a good designer.

It is beyond the scope of this book to teach you the principles of good layout as this is not something you 'need to know'. You can assess the effectiveness of a layout by simply

The GetFirefox website does an excellent job of using color, position and size to draw the users attention to the large download button.

carrying out design or usability testing (usability testing is covered in chapter 6).

What you *do* need to know are three underlying concepts that dictate layout on the web:

- Screen resolution
- The fold
- Constraining page width

We will start with screen resolution as this directly impacts the other two.

Grappling with resolution

Screen resolution refers to the number of pixels being displayed on screen at any one time. Some computers can display 800 pixels across the width of the screen and 600 pixels in height. Others may be set at 1024 pixels wide and 768 pixels high. The more pixels there are, the smaller each pixel is.

The user can alter the number of pixels being displayed manually. People often choose to do so to make screen elements appear bigger or smaller. If somebody has poor vision, icons and text might appear too small at higher resolutions. By lowering the resolution, proportionally everything looks bigger because each individual pixel is bigger. Conversely some people want more space on their desktop and so they increase the resolution. Each pixel is reduced in size so everything looks smaller and sharper.

Screen resolution affects web design in two ways. First, if a website is built to a fixed width (let us say 780 pixels) it will almost fill the screen at a lower resolution like 800 by 600. However, at a higher resolution like 1024 by 768 there will be empty space around it. As the resolution increases even more, the site begins to look very small indeed. Of course the opposite is also true. If you build your website at a larger size then at a lower resolution you will get horizontal scrollbars. Horizontal scrolling has been proved in user testing to be one of the worst hazards to usability.

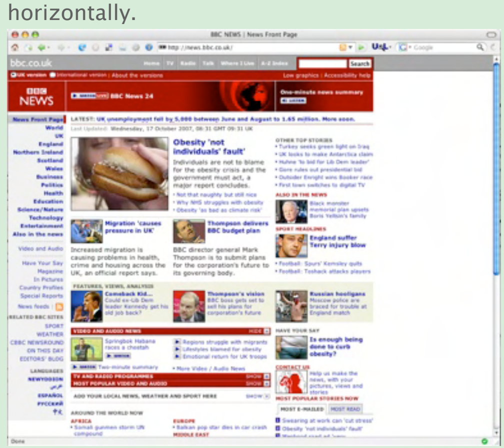
Problems with resolution also affect legibility. If a user is running at a high resolution everything appears smaller and this can cause difficulties when reading small text. In theory the user could lower their resolution to make everything more legible but that rarely happens. This is partly because users don't want to continually adjust their resolution based on each site they visit. Mainly it is because most users simply do not know how to change the resolution.

So what is the solution to the problem of resolution? The answer lies in something we have already discussed; web statistics. Tools like Google Analytics can tell you what screen resolution your visitors are using. This should help inform the width and font sizes of your site. Be careful: it is easy to dismiss the 10% of your users who are running at 800 by 600 when 90% are running at 1024 by 768 or higher. Horizontal scrolling is such a usability handicap that you are effectively turning 10% of your audience away. Can you really afford to do that?

The impact of resolution

Below are two screenshots of the BBC web site at different resolutions.

If the resolution is too low users have to scroll horizontally.

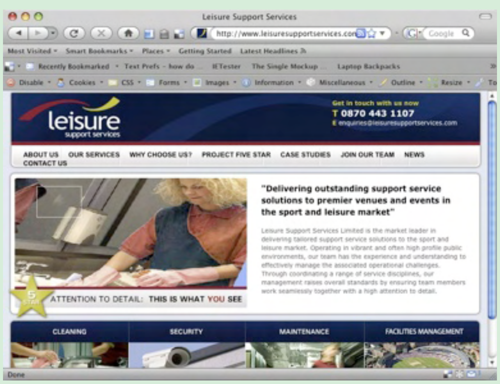


If the resolution is too high the design has empty white space to the right.

The mythical fold

The Leisure support services site fits perfectly on to a single screen at 800 x 600 without the need to scroll.

However, if the user has added toolbars the design no longer fits on a single screen and scrollbars appear.



The resolution does not just affect horizontal scrolling but also vertical scrolling and the point known as the fold.

Understanding the fold

This idea references the fold in newspapers when they are placed on a newsstand. Because people passing by only see the top half of the front page it became important that the lead story appeared 'above the fold' to catch people's attention.

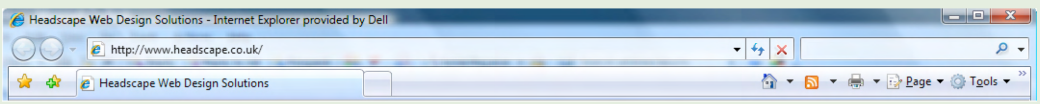
The idea has been transplanted to the web and refers to the point where people have to start scrolling. Much as with newspapers, the idea is that important content is placed above the fold to hook people and draw them in. Some believe that users are so bad at scrolling that all content should be kept above the fold especially on the home page.

Earlier in this chapter we looked at three techniques for improving homepage sign-off. I believe there is a fourth and that is accepting *the fold is a myth*. Too many people exasperate the problems of content overload by insisting all content sit above this mythical line called the fold.

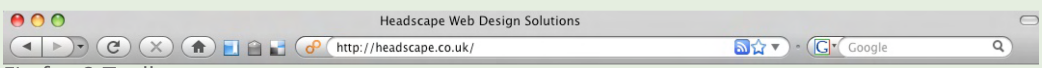
The fold does not exist. In the newspaper industry you could clearly define where the fold would fall. On the web any number of factors affect the point where users begin to scroll.

- **The resolution** – screen resolution affects the vertical space available and so affects the position of the fold.
- **The browser** – different browser use different amounts of space at the top of the page for buttons, bookmarks and the address bar.
- **Toolbars** – most browsers allow you to turn on and off various toolbars as well as install new ones. From the Google toolbar to social networking features it is possible to have several toolbars showing at once.

The position of the fold can vary depending on your choice of browsers. Users with Internet Explorer 7 have over 40 pixels less space for web content than Firefox 3 because of the larger toolbar in IE7.



Internet Explorer 7 Toolbar



Firefox 3 Toolbar

What about the perception that users do not scroll? Some of the early research by usability expert Jakob Nielsen indicated users did not scroll. However, as early as 1997 he wrote:

> *In more recent studies, we have seen that most users scroll when they visit a long home page or a long navigation screen. This change in behavior is probably due to users getting more experience with scrolling Web pages.*
>
> *...scrolling is no longer a usability disaster for navigation pages. Scrolling still reduces usability, but all design involves trade-offs, and the argument against scrolling is no longer as strong as it used to be.*

This belief that users are becoming increasingly comfortable with scrolling has been further reinforced by Clicktales, a software company whose product monitors user behavior. Research carried out in 2006 showed that 76% of pages with scrollbars were scrolled at least to some extent. This figure is probably even greater because it does not take into account users returning to a page. They would not need to scroll again because they would already know what content is available.

The idea of a fold is unhelpful and undermines usability when attempts are made to fit as much content as possible above it. It is still important that key content is given maximum visibility, which often means placing it high on the page.

Research carried out in 2006 showed that 76% of pages with scrollbars were scrolled at least to some extent.

The best approach is to ensure you view any design concepts on as many different computers as possible. That will enable you to see what the design looks like at different resolutions, in different browsers and with different toolbars.

The final area that can cause confusion concerning layout is the various techniques used to constrain page width.

Constraining page width

There are three basic approaches to setting the width of web pages:

- **Fixed** – These are sites that have a set pixel width. No matter what changes you make to the size of the browser window the site will not change.
- **Fluid** – These sites are designed to scale and fill the entire browser window. As the user alters the window size, the site will adapt to fill the available space.

Choosing between layout approaches can be a daunting task.

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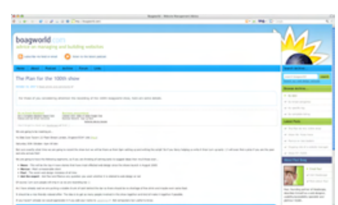
- **Elastic** – These sites determine their width based on the text size defined in the browser settings. If the user enlarges the text the entire width of the site increases.

It is often not clear from design mockups how the page is going to be constrained. Most design concepts are shown as image files rather than working web pages because it is quicker to mockup a design image than to build a functional web page. An image of a design will always be fixed width, making it hard to visualize how the site is going to work.

There is little that can be done to overcome this problem. However, you should discuss with the designer whether a design will be fixed width, fluid or elastic whenever you receive a mockup.

Which approach is the best? At its heart, the argument comes down to control. Should the designer dictate how the site appears or should the user be given control?

Description	Low resolution	High resolution
Fixed Layout At low resolutions the design fills the screen but at high resolutions there is white space showing.		
Fluid Layout The design fills the screen at both low and high resolutions but long line lengths can be a problem.		
Elastic Layout The design resizes as the user alters text size effectively zooming the design.		

A fixed width design gives the designer pixel perfect control. The design is entirely predictable with imagery appearing in exact position and content being displayed at a particular line length. If your highest priority is branding and designs then a fixed width site is preferable. This is particularly true if the vast majority of users are viewing at a certain resolution and you can design for that.

A fluid design lets the user dictate (to some extent) how the design looks. Users can resize the browser window to suit their needs and the design will adapt accordingly. This is generally considered the more accessible approach as it supports a broader range of screen resolutions and allows the design to adapt to individual user requirements. The downside is that you lose pixel perfect control. The design will not look exactly as it did when mocked up and it can take longer to build and test.

Elastic is in many ways a compromise. Although the design does not resize based on browser size it does support users that want to increase the size of text. It maintains some of the design control of fixed but allows some of the flexibility of fluid. Of course this means it also inherits the negative elements of both too. Elastic designs can suffer from horizontal scrolling like fixed and unpredictable layout like fluid.

As with all aspects of developing a design, the approach you choose should evolve from a discussion between yourself and the designer.

Next Actions

In this chapter we have looked at the challenges of design. We have addressed the divisive nature of design, including the difficulties of the home page and brand guidelines. We have also looked at the fold, screen resolutions and page constraint techniques. All of this should help inform and smooth the design process. The designer should now be able to propose a design solution.

However, that is not the end of the process. The designer now needs to roll the design out across the entire site. You can facilitate that process by completing three actions:

- **Action 1: Defining your content** – Before the designer can implement the new visual identify, he must know more about the content. Draw together a list of what the site should cover. What messages do you wish to communicate? What functionality are you going to provide?
- **Action 2: Compile the design assets** – The designer will need any visual content that has to appear on your site. This should include photography, illustrations, graphs and video. If there are visuals you would like to include but do not have, speak to your designer about using a stock library for images or video. It may even be appropriate to commission photography or video for the site.
- **Action 3: List the design templates** – Once you have a feel for the content on your site, work with the designer to identify any areas that might need special design attention. The majority of pages will be standard text templates but there are always special cases, such as search results or download pages, which need more consideration.

Identifying the content that you wish to include is only the tip of the iceberg. Next, you need to write and collate that content, as well as work with the web design agency to structure it in a logical fashion.

In this chapter

- **Learn the importance of context**
  - Don't make users read online
  - Provide context through links
  - Reduce the desire to leave
- **Reduce and remove**
  - Where to prune
  - How to prune
    - *Where planning pays off*
    - *Cold hard facts*
    - *From Macro to Micro*
- **User centric structure**
  - Structuring through card sorting
  - Going with the flow
  - Common mistakes in structuring sites
    - *Confusing naming*
    - *Overwhelming options*
- **Scannable and approachable**
  - Make it engaging
  - Make it clear
  - Make it scannable
    - *Be upfront*
    - *Breaking down the blocks*

[1]

5 Creating killer content

This is the first book I have written and the process has involved a steep learning curve. What has struck me most is how much consideration I give to my writing here compared to the content I publish on my website. Even though more people read my blog than will read this book, I have spent considerably longer agonizing over what I say in these pages.

I am not alone in this attitude. Only rarely have I come across a website owner with the budget to employee a professional copywriter or editor. It is unusual to find an organisation willing to dedicate resources to rewrite content for the web. Instead it is often acquired from other sources and dumped unceremoniously online.

In this chapter I describe how to create killer content for your site and explain why it is so important to give your content the same attention it would receive if you were writing a book. I would even argue that writing well for the web is more challenging than writing a book.

Learn the importance of context

On larger websites the role of managing content can become so demanding that it is sometimes assigned to a separate editor. However, with so few organisations willing to pay for a web editor the job often falls to the website owner. To effectively 'fill in' for the role of website editor you need to understand that *on the web context is king, not content.*

The power of context is not unique to the web. When writing a billboard ad copy has to be short and snappy. Drivers don't stop to read roadside advertisements.

The web has unique characteristics that affect what content you put online and the way that content is written. I wish to focus on three of those characteristics:

- Reading from a screen
- The impact of the link
- Easy access to other sites

Each of these characteristics profoundly affects the way users interact with your site.

Don't make users read online

Although emerging technologies such as electronic paper give me hope for the future, screen legibility is currently extremely poor for two reasons. First, the majority of monitors display text at a considerably lower resolution than print. Second, instead of ink printed on paper, monitors project light and over time this can cause eye strain.

The result is that users rarely choose to read online for any length of time. We need to accommodate this characteristic in our copy. In short, we need to keep our copy concise.

[3]

Provide context through links

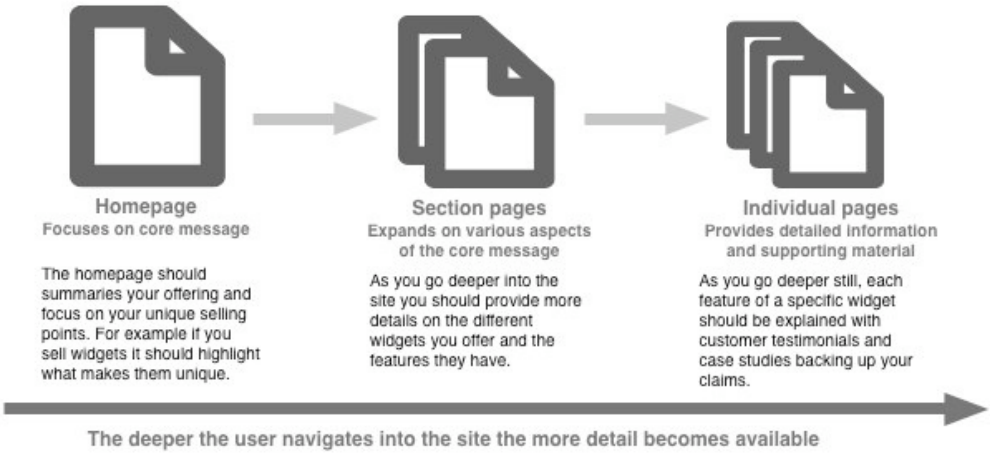
The power of the web lies in a very simple invention: the humble hypertext link. The ability to link pages and for these links to be followed in any order dramatically alters the way we write content.

With users coming to a web page from any number of different sources it is important that your content is understandable without context.

Although each page is part of a bigger whole it also needs to stand alone. A user could have arrived on a specific page directly from a search engine, bypassing the rest of your content. Content has to be written in a modular manner.

The link both creates and solves this problem. By adding links to related information in your copy you can provide context where it is lacking. Linking also allows you to provide more detail without diluting the core message. In some ways writing for the web is like writing newspaper headlines or billboard ads. You have to be short, snappy and engaging because users are not going to hang around to read things thoroughly. Pages at the highest level needs to focus on communicating your core message. However, an interested user will want more. Luckily the web allows us to link to pages deeper in the site so providing additional detail.

[4]



The danger with asking users to drill down for more detail is that it becomes hard to find the information they require. The key is to identify what users need and make sure that is accessible from the highest levels of the site. Later in this chapter we explore ways of doing this through card sorting.

Reduce the desire to leave

Web users will look elsewhere if they become frustrated. If the information is hard to find, badly written or full of jargon it is easy to hit the back button and try another site. Copy has to be clear, concise and engaging. It needs to be well organized allowing users to easily access information. This will give your site an edge over your competition.

How context informs content

Understanding the context of the web determines how we write content in four ways:

- Because reading on the web is difficult content needs to be concise.
- The hypertext link means we must carefully structure our content.
- With the competition a click away, copy has to be engaging and informative.
- We need to write content accepting the user may not know the context.

Copy has to be concise for the context of the web. You need to look at the content on your site and ask yourselves if it cannot be removed or reduced.

Reduce or remove

In chapter 4, you produced a list of content areas to include on your site to help brief the designer. It is also the starting point for defining the final content of your site.

The list you have drawn up is probably considerable. However, although there is much you *could* add to your site, that doesn't mean you *should*. It is easy to put every available piece of information you have online.

There is certainly no shortage of sources from which you can draw content for your new site. The question is what to leave out?

In reality it is necessary to be ruthless, ascertaining whether each piece of content is really needed. The biggest part of creating website content is deciding what to leave out.

Where to prune

You need to reduce content on two distinct levels. On a macro level, remove unnecessary pages and sections. On a micro level, each page should be assessed and individual sentences or paragraphs removed or reduced.

In his book "*The Elements of Style*," (1979) E.B. White addresses the need to reduce your content on the micro level:

> *Vigorous writing is concise. A sentence should contain no unnecessary words, a paragraph no unnecessary sentence, for the same reason that a drawing should have no unnecessary lines and a machine no unnecessary parts.*

[6]

Steve Krug in his book "*Don't make me think*" (2006) suggests that you should:

> *Get rid of half the words on each page, then get rid of half of what is left.*

This harsh reduction in content must apply not only to individual paragraphs and sentences but also to the pages and sections. This approach does provide tangible benefits:

- It reduces the chance of a user becoming lost
- It makes useful content more prominent
- It prevents users from becoming overwhelmed
- Content can be found quicker

The old adage of "less is more" is as true on the web as in any other part of life. Once you have accepted the need to reduce content the next question becomes how do you decide what to keep in and what to reject?

How to prune

The best way to start pruning is to look at how easily information can be sourced. I worked with a charity who promoted the conservation of butterflies and moths. They had the great idea of building an application that helped users identify moths and butterflies.

Although they had the expertise necessary to identify species, the information was contained solely in people's heads. There was no database or identification book. With over 2600 species of moths it would have been prohibitively time consuming to get these experts to record their knowledge in a

Writing content can be time consuming. If you need others to contribute ensure they have been allocated time to work on it.

usable form. They had simply failed to consider the practicalities.

This is a common problem. It is easy to come up with great ideas for content, but it is much harder to source that content. Is the benefit of this content going to justify the effort involved in getting it onto the site?

Many web projects are delayed because key content needs to be generated by somebody who is simply too busy. Before committing to using a particular piece of content ask yourself who will produce it and ensure they have the time. If they don't, work with that person and his or her manager to see if the website content can be prioritized.

Dismissing content because it is to hard to source probably won't reduce your content sufficiently. To reduce beyond that a judgment call has to be made. The question is - what do you use to make that decision?

Where planning pays off

The best method of judging contents value is to refer to the background material that you produced in chapter 2. Business objectives, success criteria and user personas not only inform the brief and design process, but are instrumental in deciding what content should go into the site. I recommend a three step approach in reducing content:

Step 1: Does the content help meet your business objectives?
For example how does a page on company history help sell more widgets on your e-commerce site? If the answer is "it doesn't" then it shouldn't appear.

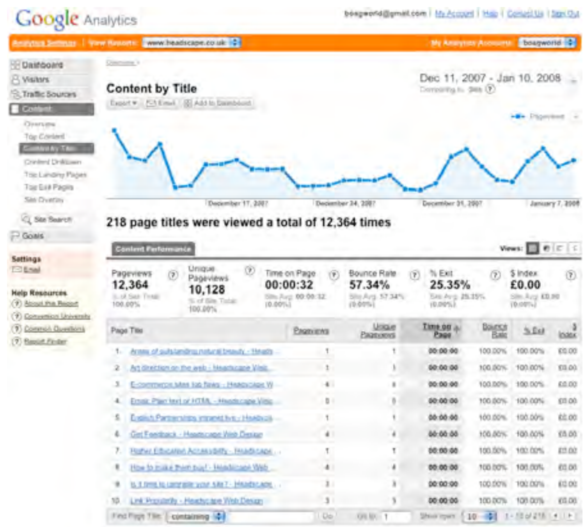
Step 2: Does the content contribute towards your success criteria?
If your goal is to increase enquiries by 25% will a specific piece of content help or hinder that? Too much information on your site and users might not feel the need to call with questions. However, too little information and they become frustrated.

Step 3: What would your user personas think of your content?
Will your users read the content? Will it help them complete their goals? If not, remove it.

Step 3 is probably the most effective method of judging the value of a piece of content. However, it can be hard to tell what your users will think. Sometimes it can be useful to have hard evidence to back up your decision.

Cold hard facts

Web logs are a useful way of gauging how popular a piece of content is. If the content is already online and monitored by a tracking package such as *Google Analytics* it is easy to view that content by popularity. You can look at how many people visited a particular page and how long they spent on that page. The latter is important because if the user visits a page and then immediately leaves, it is an indication the content is not of value.



Google Analytics allows you to view content sorted by either page views or time spent on page. Both provides a valuable indication of a page's value to users.

Where statistical information is not available the best course of action is to put the content online for a trial period and monitor its popularity. If the page fails to perform remove it. Continually evaluate the success of individual pages.

This techniques should help you trim down your content significantly, but how do you go that extra mile? How do you "half it again" as Steve Krug would say?

From macro to micro

The key is to shift focus from removing whole sections of content to editing at the micro level. Start by targeting two distinct types of content that creep into may websites: marketing blurb and instructional text.

Marketing blurb can be found far beyond the web and appears in all kinds of promotional material. It is copy full of its own self-importance and devoid of real information. Good promotional copy informs as well as sells. In contrast marketing blurb shouts about how good the product or service is without providing tangible evidence to support the claim.

Marketing blurb is also the "happy talk" (as Steve Krug puts it) which you find on many home pages. Copy like this does nothing to answer users' questions or direct them towards

Web copy should be more than "marketing blurb." It should be information focused providing details to back up any marketing claims.

achieving their goal. It is the written equivalent of small talk. Users also rarely read instructional text. They would prefer to muddle through rather than read instructions. Such copy is therefore often ignored.

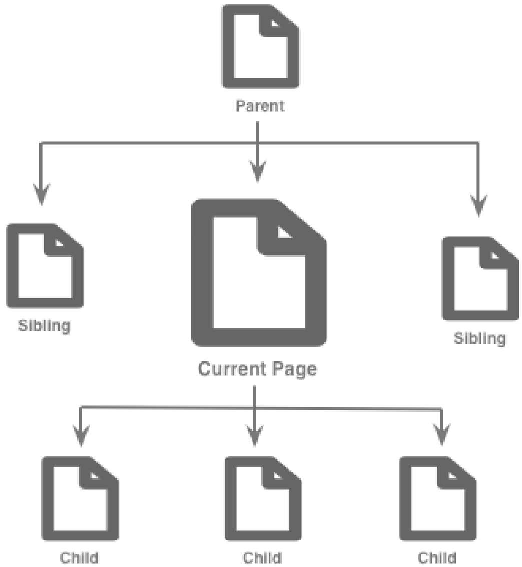
The aim should be to eliminate instructions entirely by making the site intuitive. Where this cannot be achieved it should be reduced to the minimum number of words.

In the process of identifying and pruning your copy, you will start to think about how it should be organized and structured. Once you have stripped out the dead wood it is time to start work on your site's "information architecture."

User centric structure

Information architecture refers to the way content is organized. The most common expression of this is the site map. A site map is the hierarchical structure of your site organized in a similar way to a family tree. Much of the terminology draws from this analogy. Each page has a parent (the page immediately above it in the site hierarchy). It also has children (those pages below) and siblings (those on the same level).

Although there is much more to information architecture than the site map, this is the area in which you will have most involvement. Working with the web designer or possibly information architect, you will need to decide on a site structure. Because the website owner is often involved in the process of creating a site structure, it is important that you



The terminology used to describe the levels of a site map is similar to that used on a family tree.

understand the basic techniques and common mistakes involved in its creation. One such technique is known as card sorting.

Structuring through card sorting

Card sorting is an effective way to start structuring the content of your website. Each individual area in your final content list is written on to separate cards. These cards are then sorted into piles of related content and each pile is named, thus creating a section.

Often the easiest approach is to pin these cards onto a wall and sort from there. Each pile can be named by simply attaching a post-it note to the top. By using cards and post-it notes you can try out different approaches and naming conventions until something works.

Card sorting is a powerful tool when web designer and owner works together, but it is even more useful when end users also participate. The most common use of card sorting is to understand users' mental models.

Carrying out a card sorting exercise with end users requires a slightly different approach to that outlined above. The main difference is that the number of cards should be significantly reduced. Asking an end user to sort and organize several hundred cards is unrealistic in most circumstances. Approximately 30 cards is a more manageable number unless you can spend considerable time working with each user. This means that you will need to do some initial sorting in advance.

You may also want to presort the cards into sections before the session begins. Users can find it hard to organize cards when working from a completely unsorted starting point. When given a structure to evaluate they normally find the exercise much easier and quickly start suggesting organizational structures of their own.

There are a whole variety of software packages designed to make site map creation easier. However, there is something very flexible and tactile about using post-it notes or index cards.

Taking this kind of pre-structured approach will inevitably bias the results. This can cause a problem if you are taking a quantitative approach to the exercise. Allowing site structure to be dictated by numbers (e.g. 86% of users placed this page under this section) rather than having a predefined structure would be inappropriate. I would recommend a qualitative rather than quantitative approach.

A qualitative approach is where the person running the session questions the user about their decisions. Qualitative testing is much more interactive and less observational, allowing you to understand the specifics of how they organize the cards. The aim is to encourage the user to articulate their thoughts, thereby revealing their mental model. This allows you to then make informed decisions about the site's structure.

Although card sorting works well for informational sites made up of many separate pages, a growing number of web projects are more like web applications than multi-paged websites. In such cases a site map is not always adequate to explain the structure of the site and "use case" should be created.

Going with the flow

Producing a use case involves identifying a single goal that a user may have (for example buying a product) and identifying the process they would take to achieve that goal. This can be recorded in written form or as a diagram. The use case should also note the exceptions that may occur in the process, as well as the main flow. Note where something goes wrong, like when the user mistypes their credit card number. Use cases help with more complex tasks like site registration, e-commerce transactions or recovering lost passwords. The following is a use case for recovering a lost password:

User recovery process for lost password

Main scenario (when things go smoothly):

- User provides email address
- System verifies email and retrieves password
- System sends email to the specified email address

Exceptions (when things go wrong):

- No email is entered
    - *The user is asked to enter an email address*
- The email address is incorrectly formatted
    - *The user is asked to correct their email address*
- The email address is not found
    - *The user is told that the address cannot be found and is asked to try again or register.*

Our example involves a number of exceptions. Each one will need additional code and copy to be written. Without the use case a developer may not grasp the extent of work and you would be unaware of the additional copy required. It would have been easy to miss these different eventualities.

Use cases and card sorting are only the tip of the information architecture iceberg. To avoid making mistakes in this complex area, you must also know the common pitfalls.

Common mistakes in structuring sites

There are numerous mistakes I see made when people create a structure for their sites, but two happen more than others. The first of these is in the naming of pages and sections.

Confusing naming

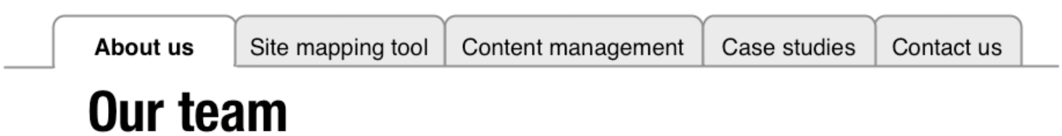
Let's look at a menu bar from a fictional company:

The first problem is jargon. Never assume your users know all the acronyms. They may be new to the sector or use a slightly different variation of your company's terminology. The names of your sections and pages should be free of jargon and potentially unfamiliar product names. Titles should be descriptive and use the plainest language possible.

In our example Acme Elite is a site mapping tool aimed at web developers. Because it is a new product, people will not have heard of it and so it should be described in clear language. Not everybody will know that CMS stands for content management system. Our revised menu therefore looks like this:

There is still more we can do. Although naming should be descriptive it should also be short. Ideally all menu items should be one or two words long. Users should be able to quickly scan a menu and identify sections most likely to have content they need.

"Case studies and testimonials" is an obvious candidate for shortening. We can even go a step further. The constant reference to Acme is unnecessary and makes scanning more difficult. Users know what site they are on and don't need reminding. These small changes dramatically improve our menu:



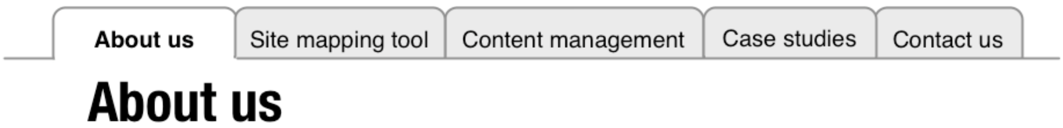
The final issue to highlight is inconsistent naming between what is shown on the menu bar (About us) and the associated page title below (Our team). Be careful that the way you refer to pages does not change. Every link to a page should be referred to in the same way.

Where a page title needs to be longer than the wording used in menu item make sure they mirror each other. Inconsistent naming can cause confusion making users unsure if they have previously viewed a page.

Our final menu now looks like this:

Search engine voodoo

The reason some sites repeat the company name in the menu is that it is supposed to aid search engine placement. Although it is possible it may have a *small* effect, the drawbacks to usability are significant enough to undermine any benefits.



The second common pitfall is that of presenting the user with too many options.

Overwhelming options

I commonly come across site structures with excessive links in the navigation. This goes against conventional wisdom that suggests the optimal number of options are between six and eight. Any more and users become overwhelmed and struggle to process the choices available.

With so many options on the Hartnell College homepage, users will quickly become overwhelmed.

The desire to present many options is understandable. There is pressure placed on website owners to ensure certain content is not "buried" deep within the site. There is also a misconception that the number of clicks in a site should be minimized.

Like many of the misconceptions relating to the web, the belief that users do not like to click is based on out-of-date thinking. The problem with clicks used to be the time a new page took to load. Today that is becoming less of a concern as broadband is more pervasive. Users do not mind additional clicks if they feel they are making progress.

This leaves the fear of content becoming buried. How will anybody discover a crucial product if it is four levels down? What if the user looks in the wrong section?

Remember that there is more to site navigation than the site's hierarchy. A good website will provide numerous navigational tools to help the user find key content. These include:

An understanding of the various navigational tools alongside the other techniques I have outlined should allow you to complete a site map for your site. The emphasis now shifts to editing your content and ensuring it is engaging and easy to read.

[17]

Scannable and approachable

It is not within the scope of this book to equip you to be a copywriter. I am presuming you have some skill in that area or are merely adapting existing copy for the web. Instead my focus is on techniques that can make copy more web friendly. These adaptations accommodate the unique medium through which you are communicating. These techniques can be reduced to three simple rules.

- Make it engaging
- Make it clear
- Make it scannable

Let's begin with the need to make copy engaging.

Make it engaging

Computers and by association websites, are impersonal. At best people perceive them as indifferent, at worst they view them as hostile. It is important to counteract this perception.

The copy on your website should use a personal tone, written directly to the reader, and in the first person. It should be more informal than you would use if writing for a printed publication. This overcomes the coldness associated with computer interactions.

In the chapter 4 I suggested that you should consider the "personality" of your brand. If your brand was a person

From greeting you in Korean to approachable terms and conditions, Flickr.com is an excellent example of a website that adds personality into its copy.

how would that person speak? Would they be 'to the point' or chatty? Friendly or formal? It is this personality that you need to reflect in your writing.

Make it clear

The copy on your site needs more than personality. It must also be clearly written. Long sentences, complex punctuation and uncommon words can be problematic.

Even if your target audience is well educated and has a high reading level it is still good practice to avoid such pitfalls. Clear copy can be read and understood much faster. It is also more accessible to those with cognitive disabilities such as dyslexia. Most of all it is easier to scan and scanning is the key to truly successful online copywriting.

Make it scannable

> According to usability expert Jakob Nielsen, in 1997 only 16% of people read a web page word for word. Information overload has increased dramatically over the last decade so that figure will certainly have fallen sharply.

The sad reality is that nobody is going to read your carefully crafted copy. Users rarely read a page online, rather they scan it looking for information or a link that will take them closer to their goal. If they come across a large block of text they will likely ignore it, preferring to follow a link in the hopes of finding something more obviously useful.

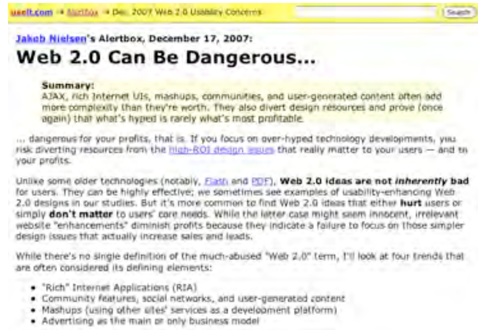
If we want to help users find the information they require and ensure that they read key messages, then we need to support scanning. Fortunately this can be achieved using two simple techniques, the first of which is known as front loading.

Be upfront

Front loading is a technique that accommodates the way people scan a page. When a user comes across a new page they are likely to read the first few lines of the first paragraph. If the content seems relevant they scan down the remainder of the page reading the first few words of each paragraph until they find exactly the content they are after.

Accommodate this habit in your writing. The first paragraph of the page should provide a summary of everything that follows, allowing the user to quickly ascertain if the page is relevant. Each paragraph should make its main point in the first sentence so that users an easily pick out relevant content.

Although this can be a tricky technique to master, it is worth the effort. Always have a summary of each page at the top of the main content area.



Jakob Nielsen adds a summary to each article on his site so that people can quickly decide if it is relevant to them.

Breaking down the blocks

The second technique is simply breaking up large blocks of text into more manageable sections that can be scanned. There are a number of ways that content can be broken up, as demonstrated by the website opposite.

Each technique is designed to help users find relevant content on the page without reading every word.

By using these techniques in conjunction with everything else in this chapter you should be able to create copy that is concise, user centric and scannable. In short, you will be able to create killer copy.

Next Actions

In this chapter we have focused on the identification, organisation and editing of written copy. However, copy is not the only type of content on your website. There are three other types of content worth noting:

- **Graphics** - "A picture says a thousand words" and well chosen imagery can replace paragraphs of text and aid scan-ability. From charts and graphs to photography and illustrations, graphics are a vital component in a site's content.
- **Multimedia** - With the growth of broadband we are seeing an explosion in multimedia content including video, animation and audio. These can greatly enhance written content and aid comprehension, especially when trying to explain complex ideas or demonstrate unfamiliar products.
- **Applications** - Many websites are now much more than brochureware sites containing almost desktop-like functionality. Driven by complex coding and extensive databases of information, they are often the "killer content" for many sites.

It is your responsibility to oversee the content in these areas. Before we move on, you need to repeat the steps from in this chapter and apply them to these new types of content:

- **Action one: Identify content** - Work with your development team to ascertain what is achievable within your budget. Can the graphics be sourced or produced? What content is better explained with multimedia? Do you have the data to power the applications you want? Is there the time and expertise to build them?
- **Action two: Organize content** - As you develop your site map, take into account graphical and multimedia elements. Most of all, create "use cases" so that everybody knows how the application based content will operate.
- **Action three: Edit content** - Your graphics, multimedia and applications should be easy to understand, clearly represented and engaging, just like your copy. Work with your team to ensure that these principles are applied to all content.

The best way to tell if your content is being effective is to test it on real users, which we'll do in the next chapter.

In this chapter

- **The profit and loss of usability**
    - The perceived losses of user testing
    - The real profit of user testing
        - *Detecting problems, fast*
        - *Increased user satisfaction*
        - *Reduced support costs*
        - *Increased efficiency*
- **Bargain basement usability**
    - Test a little but often
        - *Why often matters*
        - *When to test?*
    - Beware of decreasing returns
        - *Recruit loosely*
- **Running an effective test session**
    - Be prepared
        - *Where and when*
    - Understand the role of facilitator
        - *The facilitators responsibilities*
        - *Who should facilitate user testing?*
    - Work from a script
- **Fixing the problems**
    - Filter out background noise
    - Prioritize and report

[1]

6 User centric design

Throughout the first five chapters of this book, I have mentioned the importance of usability. Whether writing about the pillars of web design in chapter one or creating site structures in chapter five, the emphasis has been on supporting users through user testing.

Beyond design testing in chapter four, we have not discussed the practicalities of *how* to perform user testing. In this chapter, we will. I will present a strong business case for usability testing and dispel myths that it is time-consuming and expensive. I will also provide practical tips on running a user test session and how to interpret the results. Finally, we will look at common usability mistakes and how best to avoid them.

It will fall to you as website owner to ensure that usability lies at the heart of everything you build online. Having a firm understanding of its importance and the techniques for implementing it is fundamental to the role.

Let's begin by looking at the benefits and perceived costs of usability testing.

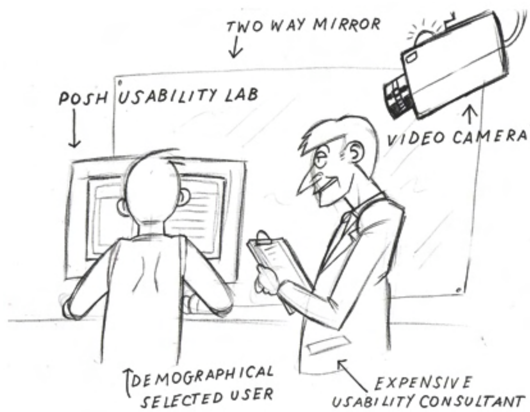
The profit and loss of usability

The subject of usability generates a dichotomy between what we think and what we do. We know it is good to focus on usability. We need only look at Apple and the iPod to know that it provides tangible benefits. However, it is hard to prioritize usability when deadlines are looming and budgets are tight, so user testing gets pushed to the bottom of the agenda. It is as if the perceived losses of testing outweigh the potential profit. Are these assumptions true? Is user testing time-consuming and expensive?

The perceived losses of user testing

There is a widespread perception that user testing is time-consuming and expensive, and to some extent with good reason.

Traditionally user testing cost millions and took weeks to complete. It was held in expensive usability labs with two-way mirrors, computer suites, and video surveillance. Large numbers of test subjects were required to provide statistically relevant data. Each had to conform to a specific demographic profile and so recruitment was difficult. A usability consultant, testing in a lab, with carefully selected subjects is effective. However, it is beyond the budgets and time frames of most organizations.



Traditional usability testing is expensive because it involves consultants, usability labs and carefully selected users.

User testing does not need to be like this. It can be lightweight and inexpensive. It can also be done yourself. Although testing yourself is not the most effective approach, it is better than no testing at all. However, even the most lightweight user testing will require some time and budget. Do then the benefits outweigh this cost?

[3]

The real profit of user testing

The benefits provided by user testing cannot be understated. Even the most lightweight approach will have a profound affect on your web presence. The benefits of user testing include:

- Fast problem detection
- Increase user satisfaction
- Reduced support costs
- Increased efficiency

Let's look at each in turn.

User testing can uncover technical problems as well as usability issues.

Detecting problems, fast

If user testing is done throughout your project, potential problems are identified faster. Regular testing will also find technical bugs. If you can identify problems early, they are much easier to fix. The further into a project, the more expensive and time-consuming changes become.

Increased user satisfaction

Users who become frustrated with your site rarely return. They will never see the improvements you make or recommend it to a friend. They may even criticize it. In the competitive world of the web, repeat visitors and customer recommendations are crucial.

Reduced support costs

Even if you have no competition or a captive audience, you cannot ignore usability. Poor usability generates large numbers of support calls and complaints. It is often more economical to user test than to deal with the extra support calls.

Increased efficiency

Finally, an easy to use site can provide real monetary benefits through efficiency. This is most easily seen on intranets. An easy-to-use intranet allows users to complete tasks quicker and "time is money."

[4]

To a lesser extent, this principle also applies to your public site. If users can complete tasks quickly, they will perceive your site as a time saver and visit regularly.

User testing can provide real return on investment. However, this return can only be realized if the cost of user testing can be kept to a minimum. How is this achieved?

Bargain basement usability

The bargain basement approach to usability testing was pioneered by usability experts Steve Krug and Jakob Nielsen. Although they differ on the details, they agree on three key principles:

- Test a little but often
- Use a limited number of testers
- Don't become too concerned with who you test

These principles are crucial if you want to user test while delivering on time and in budget. Let's look at each in turn.

Common usability mistakes

Jacob Nielsen annually updates his list of the ten most egregious offenses against users on his website: http://useit.com/alertbox/9605.html


useit.com → Alertbox → Top 10 Design Mistakes

Search

Jakob Nielsen's Alertbox:

Top Ten Mistakes in Web Design

Summary:
The ten most egregious offenses against users. Web design disasters and HTML horrors are legion, though many usability atrocities are less common than they used to be.

Since my first attempt in 1996, I have compiled many top-10 lists of the biggest mistakes in Web design. See links to **all these lists** at the bottom of this article. This article presents the highlights: the very worst mistakes of Web design. (Updated 2007.)

1. Bad Search

Overly literal search engines reduce usability in that they're unable to handle typos, plurals, hyphens, and other variants of the query terms. Such search engines are particularly difficult for elderly users, but they hurt everybody.

A related problem is when search engines prioritize results purely on the basis of how many query terms they contain, rather than on each document's importance. Much better if your search engine calls out "best bets" at the top of the list -- especially for important queries, such as the names of your products.

Search is the user's lifeline when navigation fails. Even though advanced search can sometimes help, simple search usually works best, and search should be presented as a simple box, since that's what users are looking for.

2. PDF Files for Online Reading

Users hate coming across a PDF file while browsing, because it breaks their flow. Even simple things like printing or saving documents are difficult because standard browser commands don't work. Layouts are often optimized for a sheet of paper, which rarely matches the size of the user's browser window. Bye-bye smooth scrolling. Hello tiny fonts.

Test a little but often

Key to this approach is the principle of "little but often." Testing should occur throughout a web project's life-cycle and that means keeping testing lightweight.

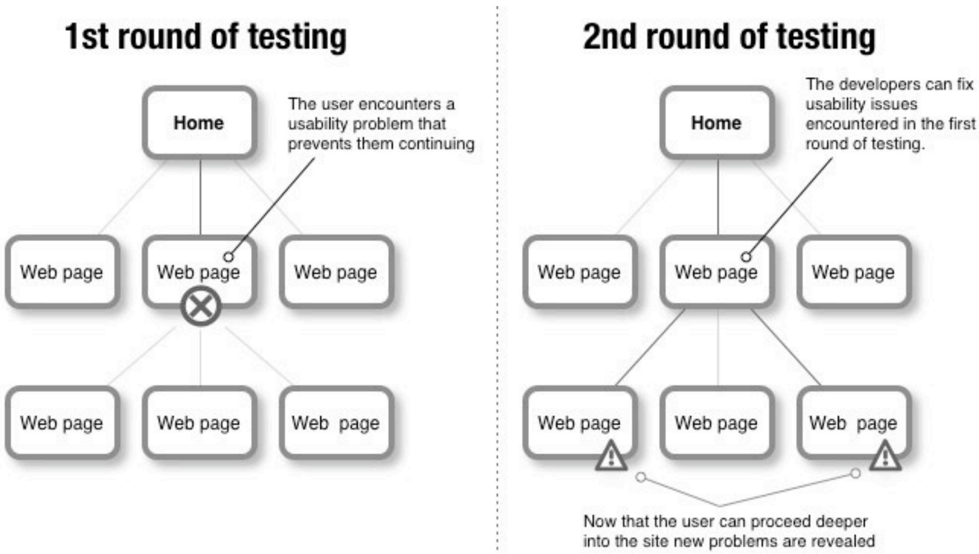
Steve Krug calls this approach "cubicle testing," where any new development is shown to colleagues to see if they can make sense of it. This simple form of testing is remarkably effective.

If you choose to be more sophisticated in who and how you test, never let that be at the expense of quantity.

[5]

Why 'often' matters

When initially testing, many users get stuck at the first hurdle. A second round lets you to fix those problems, allowing users to progress further and uncover new issues. The number of rounds is largely dictated by budget and time. However, the more rounds, the more issues you will uncover. This is true even with a limited number of testers.



The more rounds of testing, the more issues will be uncovered.

When should you schedule these numerous rounds?

When to test?

Before the project commences, *test your existing site or that of your competition*. These sites act as a free prototype which help identify potential usability issues. Next, *test sketches and design concepts*. Your designer may resist showing users unfinished work, but this is a valuable chance to identify issues before too much time has been invested.

When testing a design for usability, focus on whether the user "gets it." Do they understand what the site is about and how it works? Did the user understand the terminology used and where they paying attention to the right screen elements?

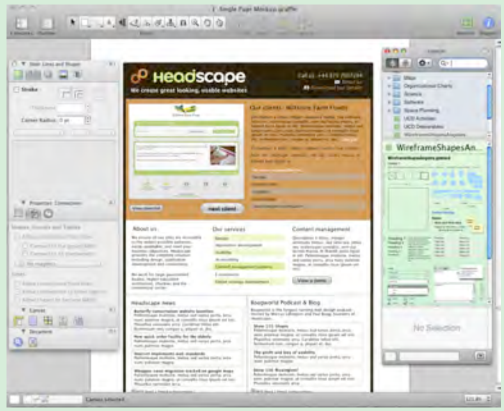
Before beginning production *consider testing against a wireframe*. A wireframe is a disposable version of your site containing cutdown design, content and interaction. It provides a realistic experience against which to test. It is ideal for testing navigation and basic task completion.

The downside is that even a disposable wireframe can feel time-consuming and expensive to produce. However, that is preferable to testing against a finished site, which cannot easily be changed.

There are a number of tools that can reduce the time spent building wireframes. The best time saver is to use a content management system (CMS) to construct your wireframe. If done well, this CMS driven wireframe can be reused as the basis of your final site. The wireframe is therefore no longer wasted.

User testing should not end with the wireframe. As you build the site itself, test it. It is perfectly possible to test a half-finished site. Select tasks for users to complete that focus on finished sections of the site.

Wireframe tools



Omnigraffle (above) is just one of the tools that can be used for creating wireframes. You can also use Visio, Powerpoint, or plain old HTML. There are also online tools such as jumpchart.com which help make the process easier.

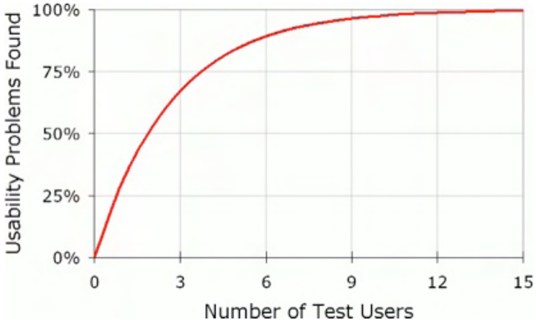
Finally, *do a round of testing pre-launch*. By this stage the majority of issues will have been discovered. However, a last check will uncover minor problems that can be corrected.

There are many opportunities for gathering user feedback, but you do not need to test at every stage. I recommend that *user testing should be an ongoing exercise even after launch*. Always seek new ways to make your site easier to use.

Now that I have told you *when* to test, the question becomes *who* to test?

[7]

Beware of decreasing returns



In his article "Why You Only Need to Test With 5 Users" (useit.com/alertbox/20000319.html) Jakob Nielsen demonstrates the diminishing returns that come from increasing the number of test subjects.

Many website owners believe that usability testing is worthless if you do not test a large groups of people within the target demographic. They are therefore discouraged from testing. However, this belief is not true.

Statistical testing as outlined above *is* expensive and time consuming. It does not provide significant benefits over the bargain basement approach. In 2000 Jakob Nielsen wrote:

> *Elaborate usability tests are a waste of resources. The best results come from testing no more than 5 users and running as many small tests as you can afford.*

The reason is that the majority of users encounter the same problems when testing. The more users tested, the more overlap he found in problems found. Eventually the level of overlap is so high that the likelihood of discovering more issues is remote. As I said earlier and Nielsen reinforces above, multiple rounds of testing are more effective.

Steve Krug takes the logic further suggesting that you should only test three or four people. This catches the majority of serious issues, although admittedly some minor issues could slip through. He believes that this is a price worth paying as testing only three or four people allows testing and debrief in a single day.

In short, the more people you test the lower your return on investment. This is also an issue for recruitment of testers.

Recruit loosely

It is easy to waste time and money recruiting the perfect user who matches the personas we created earlier. This is fine if you have limitless resources. However, it cannot be allowed to reduce the number of rounds of testing.

Having the right users is not as important as you may think. Most users encounter the same problems when using a website, no matter who they are. It is also good practice to design a site that is usable by all, not just your exact target audience. That said there are exceptions. It is unwise to test with users who have radically different experiences of the web. You should also be aware of any accessibility needs your audience have that could affect how they use your site.

Being too specific over the demographics of your test subjects can make testing prohibitively expensive and time consuming.

A good example of this is a website aimed at the elderly. This audience have physical conditions that may affect their use of a site and *generally* don't have as much experience using the web. You would therefore probably not want to test exclusively with 20 something technology geeks!

Now that you know who to recruit and in what numbers, you are almost ready to begin. However before you do, let's look at how to run an effective test session.

Running an effective test session

Running your first usability session can be intimidating, especially if you have never even seen one. You probably have questions about where to run the session, what you are supposed to do and what kind of things to cover.

Fortunately, running a test session is remarkably straightforward and can be done by almost anyone. There are three simple principles you can use:

Do regular informal testing, too. Ask somebody else in the office that isn't involved with the project to take a look at your work.

- Be prepared
- Understand the role of the facilitator
- Work from a script

How, then, do you prepare?

Be prepared

It is possible to do usability testing with no preparation whatsoever using the cubicle test I mentioned earlier. However, if you want to run something more formal a little preparation goes a long way. Before you begin recruiting, answer two basic questions. Where and when are you going to test?

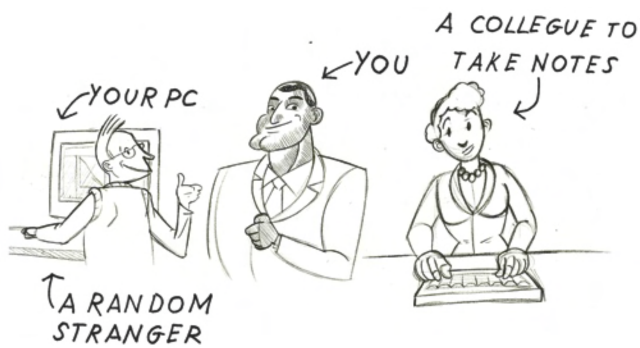
Where and when?

If you can easily visit your testers, then you may wish to test where they normally access the web. This provides two advantages. First, they are more relaxed in their own surroundings. Second, you are seeing them in their "native environment" which is more realistic. However doing this is not always practical. The alternative is to ask tester to come to a central location. This does not need to be anywhere sophisticated. It can be even be done at your own desk.

The most important requirement of the test environment is that it is quiet and the tester will not be disturbed. Although a constantly ringing phone may be realistic it does not aid successful user testing!

Once you know where you are going to test, draw up a schedule. Try to schedule all of your sessions on a single day. Each session should last a maximum of 40 minutes as people struggle to concentrate for longer. Placing each session an hour apart gives you an opportunity to make additional notes and preparing for the next session. It also allows time for users who have a lot to share or struggle with their tasks.

Always expect at least one person to drop out. Somebody will always be too busy or sick to attend. Have a backup available to step in at the last minute. Even if this is a colleague who is not involved in the project, it is better than nothing.



Usability testing can be lightweight. All you need is a random stranger, a PC, and a notetaker.

We have established where and when. The next question becomes, who does the testing?

Understand the role of facilitator

The person responsible for running a usability test session is known as the facilitator. Unless you are using an expert, this role will probably fall to you. But are you the best person to carry out the testing? Is there somebody you could use instead?

Who should facilitate user testing?

The problem is that you are close to the project. You understand how the site works and could be tempted to guide users in the right direction. You are emotionally invested in the project and it is hard for you to remain impartial.

A good facilitator should always remain calm. He or she needs to be patient and a good listener, capable of drawing opinions from others. Unfortunately, not everybody is capable of that. I myself make a terrible facilitator. I talk far too much and get frustrated when users fail to "get it." Ask yourself, are you the right person for the job and if not, who is?

The facilitator's responsibilities

Whoever your facilitator is they need to understand the role. The position has three responsibilities:

A facilitator should always be calm, patient and a good listener.

- **To encourage the tester to communicate.** Many users sit in silence struggling with a site unless encouraged to speak. The facilitator should challenge users to think aloud. Ask open ended questions that cannot be answered with yes or no. Constantly ask what they are thinking and question their choices.
- **To intervene when necessary.** There is a perception that the facilitator should never intervene to help a struggling tester. However, this is counterproductive. If a user becomes completely stuck, show them how to continue. This provides an opportunity to discuss why the way forward was not obvious and allows a chance to discover other issues deeper in the site.
- **To lead the tester through the usability script.** It always pays to prepare a usability script beforehand. This outlining what you intend to cover. It is the role of the facilitator to guide the tester through this script.

If a script is required, what should go into it? What should be tested and how?

Work from a script

What goes into a usability script largely depends on what you are testing. If it is a design concept, your testing will be limited to questions about the navigation and communication of core messages. You could also carry out some flash testing (as discussed in chapter 4) but beyond that your options are limited.

Testing against a wireframe or early versions of the site allows users to complete key tasks. For example, users could be asked to find the price of a particular product or the contact details for a key member of staff.

Basic testing on this site early on would have shown the approach was fundamentally flawed. The site has since been replaced.

Base the choice of task on activities that your personas would wish to complete. Think back to the persona we created in chapter 2. Jane was considering a visit to a health spa. We established that the first two pieces of information Jane wanted was price and availability. Any user testing for the spa should include tasks to find this information.

Although what is tested will vary depending on the project and stage of development, some information should always be included. Below are highlights from a fictional transcript demonstrating the information that should always be covered.

Content to cover	Explanation of the approach
Hi Jane. My name is Paul and I am going to be running our session today. Joining me is Pete. I have asked him along to take some notes as we talk.	Introducing yourself and others in the room helps put the user at ease. Offering coffee helps too! Be sure to explain any intimidating recording equipment.

Content to cover	Explanation of the approach
We are here to improve a website that is under development. You are going to help us test the site. We are testing the site and not you, so you can relax!	By explaining to the user that you are testing the site and not them, they will behave more naturally.
You do not need to worry about messing up. There are no right or wrong answers in a usability test. What we do need is complete honesty. If you are struggling with something or do not like the way it works, say so. You aren't going to offend anybody.	If the user thinks the session is a test with right and wrong answers, they will tell you what they think is correct rather than what they feel. Many users are also worried about offending the facilitator. It is important to stress that you want honest answers and no offense will be taken.
The most important thing to remember is that we need you to explain what you are thinking. Think out loud and talk about the options you are considering. Before you click on a link explain what other options you considered and why you picked that one.	Getting the user to articulate their thoughts is fundamental to the success of the session. This cannot be stressed enough. Even though you explain the need up front, you will still need to prompt the user throughout the session.
If you have any questions, feel free to ask. I might not be able to answer them right away as I could prejudice the testing, but I will answer them at the end.	It is important to explain before you begin why you may not answer their questions during the session. If they do ask questions be sure to address them at the end.
Let's start off with something easy. Can you tell me a bit about yourself? Tell me about your job?	Begin a session with simple questions such as family status, age and job title. This helps build the user's confidence and provides some background information.
Tell me about your computer experience. How confident do you feel using a PC? Do you use them for work? At home? How much do you use the internet? What kind of sites do you use most and find useful?	Building up an understanding of the user's computer and web experience is useful context for the session. It also indicates how representative they are of the target audience.
Let's talk about the site. It is for a health spa. Before I show it I want to ask about your expectations. What do you think a health spa website should look like and what information would it contain?	It is often helpful to ask users about their expectations. If the expectations do not meet the reality it can cause confusion. Also it provides the opportunity to find out more about what users want from the site.

After this introduction the session would become more specific. The direction is dependent on the material available to test against and the type of site. This specific testing should either fall into the category of "do they understand what they are seeing" or task completion. Once the testing has been completed the next challenge is how to respond to the results.

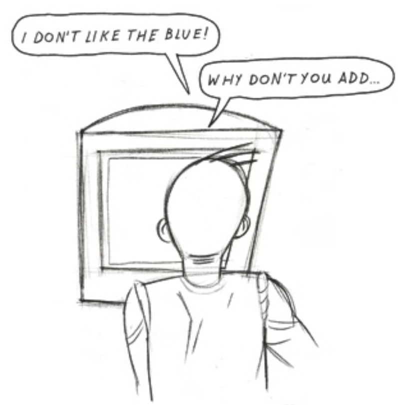
Fixing the problems

Even after over a decade in web design, users still surprise me. They react unpredictably. What seems obvious to us mystifies them. Sitting through a usability session can be both frustrating and demoralizing.

User testing can feel overwhelming, especially the first time you do it. Many people go into usability testing hoping to validate the approach they have taken. Instead it often does the opposite. Although things can appear to be a disaster, not every criticism requires a response and not every problem needs fixing. The key is to filter and prioritize.

Filter out background noise

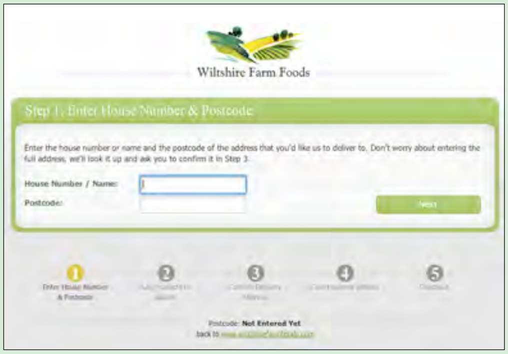
The first step is to weed out the distractions, starting with a design-related issue. In usability testing participants often comment on aesthetics. This is a distraction for two reasons. First, the aim of usability testing is not primary to address visuals. Second, design is very subjective and comments like "I do not like the green" have little value. Unless the vast majority of testers are making the same comment, you can ignore anything said about design.



Filter out subjective opinion and suggestions that lead to scope creep.

The second common distraction is suggestions for new content. Comments such as "wouldn't it be good if the site did this" do not help evaluate what is currently there. The scope of the project was defined much earlier in the process and if new content or

Case Study: Wiltshire Farm Foods



www.wiltshirefarmfoods.co.uk/quickorder

Wiltshire Farm Foods is an e-commerce site which superbly demonstrates how business constraints sometimes need to come before usability considerations. Their site requires a postcode before displaying prices. In user testing a number of participants made it clear they were uncomfortable purchasing from a company that required personal data before showing prices.

There are good reasons for this approach. The company's entire business model is based around regional franchises. Franchises can select products to stock and at what price, which allows them to match regional tastes and affluency. Changing this model would be costly for WFF and could lead to increased prices for their customers.

functionality is added at this stage it will lead to scope creep.

I am not suggesting that ideas about content are worthless. As with design suggestions, if the vast majority are suggesting something you have to take their comments seriously. Ask whether you have missed something fundamental or whether it is simply a nice extra. If it is the latter, do not throw the suggestion away. Rather, add it to the list of ideas you compiled back in chapter 2. These can be implemented in the future.

The final filter is return on investment. Sometimes a problem cannot be fixed without investing a disproportionately high amount of money compared to the return received. In many cases this is because of existing technology or business processes which cannot be changed.

Although there are things we can do to minimize this inconvenience we are ultimately limited by the realities of business.

Once the list of issues has been reduced, the final step is to prioritize them and present them to the development team.

Prioritize and report

How you communicate the results of user testing to the rest of your team is key. It's easy to overwhelm and demoralize them or set them off on an ill-considered campaign of fixes.

If you want people to *actually* read the results of your usability study, the report needs to be short. A page or two is usually adequate to communicate the issues which need addressing. You can always provide additional supporting evidence if people need convincing. The primary aim of the report is to list the issues and propose possible solutions.

The layout of your report must also be considered. It cannot simply be a list of issues. Some level of prioritization needs to be provided. This prioritization is based on two factors: the complexity of the fix and the seriousness of the problem. I suggest having two sections entitled quick wins and deal breakers.

Quick wins are minor issues that are so easy to fix, it is silly not to. A good example of this might be a poorly named link that made a user pause for thought. It didn't stop the user completing the task and so cannot be considered crucial. Yet it is so simple to rename the link that there is no reason not to.

Deal breakers prevent users from proceeding further. A classic example is a user who cannot find the checkout button on an e-commerce site. Without it they are unable to continue and are forced to give up. They are priority issues that simply *have* to be fixed.

Not all issues fall neatly into these two categories. Much of the time users who encounter problems manage to muddle through, which isn't necessarily bad. From

Quick wins

Some usability fixes are so simple that there is no reason not to do it. For example, removing an unnecessary cancel button can prevent users from accidently pressing the wrong button and loosing the data they have added.

[17]

childhood we have all learnt that muddling through and experimenting is a great way to learn. When you first watch a test session you may well be horrified by the strange and peculiar way some users interact with your website. It is not necessary to address every occurrence where a user deviates from your expectations. As long as they were able to complete the task and do so without becoming frustrated you do not need to worry.

These issues are not deal breakers because users succeed in overcoming them. However, they are not necessarily quick wins either. Depending on the fix they could be quite hard to overcome.

Ecommerce sample usability report

Quick Wins

Disorientated users

Problem: Users had trouble identifying which pages they had already visited. Several users became frustrated when they continually visited the same page.

Proposed solution: Consistently name pages in link text thereby clearly identifying the destination page. Also visually distinguish between visited and unvisited links.

Concerns about return policy

Problem: Several users seemed concerned about whether goods could be returned but found no information on the site dealing with this issue.

Proposed solution: Write an FAQ on return policy and create a prominent link to this page from all key locations (homepage, shopping basket, and checkout)

Deal breakers

Failure to register address information

Problem: At checkout several people failed to register their address information because they included a space in their postcode. This was not recognised by the system. After repeated error messages they gave up.

Proposed solution: Ideally update the technology to accept spaces in postcodes. At the very least show an example postcode and instructions on how to enter them correctly.

Additional Issues

Hard to find contact information

Problem: Users failed to find the contact page in 3 out of 5 cases. Those that did find the page, took several attempts.

Proposed solution: Make the contact page a top level section and include basic contact information on every page on the site.

A usability report should be short and easy to digest. Organize it into quick wins, deal breakers and additional issues. Explain each issue succinctly and suggest a solution.

In effect these are a third category of **additional issues** that can be addressed after the quick wins and deal breakers. Depending on the size and complexity of the web project it may be necessary to prioritize these still further, but in most cases they can be grouped together.

With your three categories defined you have the structure for your report. All that is left is to populate these categories with the issues and proposed solutions. This can then be discussed with your team.

Where possible sit down with your team face to face and talk through your findings. This not only ensures everybody has read the report but enables you to provide some context for the issues described. Finally, this meeting provides an opportunity to plan together how to overcome the problems.

Next Actions

Usability testing can be hugely beneficial without putting a strain on budget or timescales. You should have a clear understanding of how to run a test session and the role of facilitator. You know who to recruit and when to test in the process. Finally, you are equipped to analysis the results and report back to the rest of the team.

With all of that knowledge at your disposal it is time to create a usability test schedule. This involves three separate actions:

- **Action one: Identify test points in the development** – I have already written about the need to test throughout the development process. Now is the time to add those test points into your project plan. Are you going to test the initial design concepts? Will you produce a wireframe and test that? What about initial prototypes? Is there time in the plan for pre-launch testing? Scheduling testing upfront decreases the likelihood of it getting squeezed out.
- **Action two: Planning your post launch testing** – Testing should not stop once the site goes live. Organisations continually assess the usability and effectiveness of their sites. This is particularly true when a site has ongoing development. Plan regular review sessions every few months to ensure those "quick tweaks" made to the site have not created stumbling blocks for users.
- **Action three: Creating a culture of ad-hoc testing** – Although scheduled testing is great, also foster a culture of ongoing ad-hoc testing. Constantly ask friends and colleagues to have a quick look at your site. When speaking to your customers get their feedback and maybe even schedule time for a test session after customer meetings. Wherever possible, get people outside of the development team to look at your site.

A user centric approach has become best practice within web design over the last few years. However, best practice exists also exists in how that site is built, which I'll address in the next chapter.

In this chapter

- **Identifying the cowboys**
  - Learning from history
  - The consequences of poor code
    - *Inaccessible code*
    - *Bloated code*
    - *Hard to maintain code*
    - *A culture of redesign*
  - A better way to build websites
- **A matter of style**
  - Improved printing
  - Capturing the emerging market
  - Responding quickly to change
- **Never turn away users (or google)**
  - But accessibility is expensive
  - Achieve increased traffic with minimal effort
- **Exceed your legal obligations**
  - Navigating overwhelming guidelines
- **Creating an accessibility policy**
  - Establish your long term accessibility goal
  - Have a roadmap for overcoming common problems
    - *Poorly described images*
    - *Badly labelled links*
    - *No alternatives to media*
    - *Reliance on Javascript*
    - *Hard to read text*
  - Testing accessibility
  - Maintaining accessibility
  - Dealing with complaints

[1]

7 Ensuring best practice

Being a geek, I love Star Trek. I am sorry, I cannot help it. I enjoy the amount of thought that goes into it. Take the difference between the original Star Trek series and the Next Generation. In the original series it was like the Wild West. Kirk, was a futuristic gunslinger exploring the galaxy, pushing back frontiers and breaking all the rules. In the Next Generation, the federation had grown up and those pioneering days were gone. It was about politics and alliances. New discoveries were happening, but at a slower pace.

The reason I bring up Star Trek is because there is a comparison to be made. The early days of the web were like the original series. There were no rules, everything was new and we were flying by the seat of our pants. Now the web has matured. Like the Next Generation we have our own 'prime directives'. These include best practices, standards and even legal legislation. Web design has grown up a lot. Unfortunately, there are still a lot of Kirks around, building websites like it's 1999.

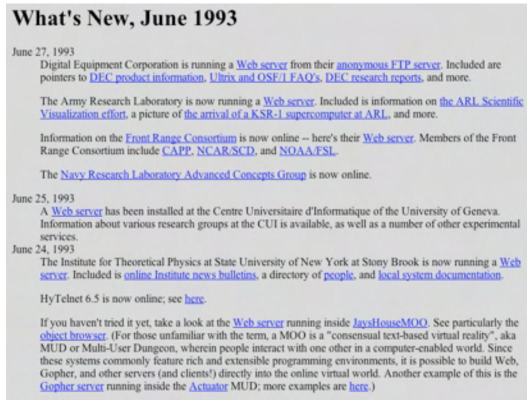
This chapter will inform you of current best practice, emerging marketings and your accessibility obligations. This will ensure you do not get caught by cowboy designers peddling out-of-date techniques.

Identifying the cowboys

In order to identify cowboy designers we need to understand best practice. In order to do that I need to start with a history lesson.

Learning from History

When Tim Berners-Lee proposed the world wide web back in the early nineties, he could not have imagined what we have today. Early web pages were purely textual. There were no images and certainly no video. There was also no substantial control over layout or colors. A web page was expected to describe the *meaning* of content not to dictate its appearance. The appearance of the document was dictated by the browser.



What's New, June 1993

June 27, 1993

Digital Equipment Corporation is running a Web server from their anonymous FTP server. Included are pointers to DEC product information, Ultrix and OSF/1 FAQ's, DEC research reports, and more.

The Army Research Laboratory is now running a Web server. Included is information on the ARL Scientific Visualization effort, a picture of the arrival of a KSR-1 supercomputer at ARL, and more.

Information on the Front Range Consortium is now online -- here's their Web server. Members of the Front Range Consortium include CAPP, NCAR/SCD, and NOAA/FSL.

The Navy Research Laboratory Advanced Concepts Group is now online.

June 25, 1993

A Web server has been installed at the Centre Universitaire d'Informatique of the University of Geneva. Information about various research groups at the CUI is available, as well as a number of other experimental services.

June 24, 1993

The Institute for Theoretical Physics at State University of New York at Stony Brook is now running a Web server. Included is online Institute news bulletins, a directory of people, and local system documentation.

HyTelnet 6.5 is now online; see here.

If you haven't tried it yet, take a look at the Web server running inside JaysHouseMOO. See particularly the object browser. (For those unfamiliar with the term, a MOO is a "consensual text-based virtual reality", aka MUD or Multi-User Dungeon, wherein people interact with one other in a computer-enabled world. Since these systems commonly feature rich and extensible programming environments, it is possible to build Web, Gopher, and other servers (and clients!) directly into the online virtual world. Another example of this is the Gopher server running inside the Actuator MUD; more examples are here.)

Early markup provided no control over design. It existed to describe the content, not appearance. The browser decided how to display the page.

For example, a heading would be marked up with a heading tag like so...

```
<h1>Identifying the cowboys</h1>
```

While a paragraph would be marked up using a P tag...

```
<p> While a paragraph would be marked up using a P tag...</p>
```

The browser would interpret this markup displaying headings in a larger font and putting carriage returns between paragraphs. In short the web page would describe the content's *semantic* meaning.

As the web grew in popularity it became more than a repository of information. It began to be perceived as a marketing tool, and website owners wanted control over the appearance of their pages. Browser manufacturers obliged by introducing support for adding images, controlling colors and setting fonts. The markup now described the appearance of the page as well as the content. Design and content began to mix.

[3]

Even this was not enough to satisfy the marketeers. They wanted to replicate print designs on the web. This led to the abuse of markup. Instead of tags being used to describe the meaning of content they were selected because the browsers displayed them in a particular way. For example, web designers would choose a H1 tag not because they wanted to markup a heading, but because they wanted to make text large and bold.

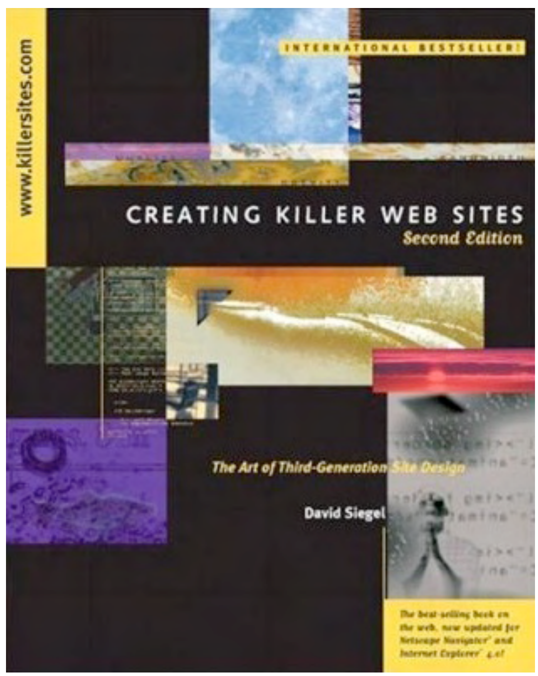
The biggest abuse was in the use of the table tag. The table tag was originally created to display tabular data similar to most spreadsheets. Web designers quickly discovered that tables could be used to position content on a page with almost pixel control.

Admittedly, this approach worked. Website owners got the 'print like' designs they wanted. Software automated the process of creating this spaghetti of code keeping development costs low. Where then was the problem?

The consequences of poor code

Unfortunately design control came at a cost. The complicated, messy markup created by table based design had ramifications. Web pages became...

- Inaccessible
- Bloated
- Hard to maintain



In 1997 David Siegel's book 'Creating Killer Web Sites' popularized the use of tables for controlling web page layout. At the time this appeared to be positive, but with hindsight it proved detrimental.

Inaccessible code

With the browsers displaying this 'bastardized code' in slightly different ways and offering support for their own proprietary tags, it became increasingly hard to build sites that were accessible by all. Designers were often forced to present different versions of a site to each browser, so increasing development time. Designers working with limited budgets sometimes

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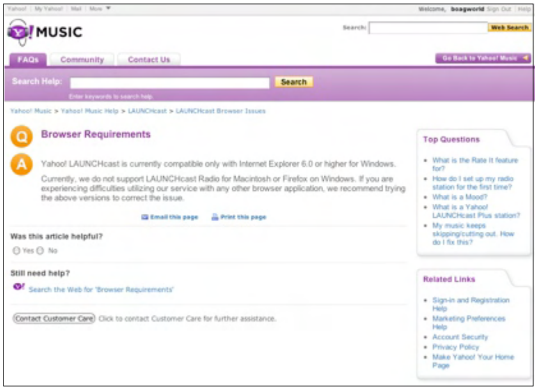

Yahoo! Music effectively excludes users because they are not using the latest browser.

gave up entirely and only supported a single browser. If the user happened to be using a competing browser or an old version they were effectively excluded from the site. These badly coded websites can also exclude users accessing the internet via an alternative device such as a screen reader (used by people with visual impairments). Table-based code can also exclude those with a slower connection.

Bloated code

Because HTML markup was never intended to produce complex design, large amounts of additional code became required. The average web page swelled in size and took a considerable time to download.

When broadband arrived, web designers believed that download speed was no longer an issue. However, the rise of broadband has been accompanied by an increase in web access via mobile devices. These devices typically only have dial-up connection speeds.

Download size is also still an issue for larger, more heavily trafficked websites. There is a cost associated with data served from a website. Once downloads exceed a certain limit the hosting provider may start to charge. Tiny amounts of data can make a real difference when downloaded many thousand times.

The cost of poor code is not just financial. There is a cost in man hours.

Hard to maintain code

Complex code was hard to maintain. Even the simplest change, such as altering the size of text, had to be made many hundreds of times across every page on a website.

Website owners once paid web designers ridiculous fees to make changes to content when they should have been able to do it themselves. Many sites have unnecessary content management systems simply because the code was too complicated to understand. Sites became obsolete as new browsers were released and broke existing code. It was often more cost effective to throw out a site and start again than fix what was there.

Fixes were required as browsers updated. Unfortunately because of the complexity of the code these fixes were expensive.

A culture of redesign

The difficulties in maintaining these websites led to a culture of redesign. Every few years an organisation becomes frustrated with their website and gets a web design company to fix it. Unfortunately this new site was often just as badly built and would also degrade over time as new browsers were released and content was not kept up to date. The process would repeat itself.

So far I have spoken about these problems in the past tense, implying that websites are no longer built this way. Many still are. For a variety of reasons web designers choose not keep up with best practice. It falls to you as the client to set the standard of work you require. To do this you need to understand standards-based design.

A better way to build websites

While web designers were bastardizing markup to suit their needs, Tim Berners-Lee and a group of industry experts (the World Wide Web Consortium) were working on a solution to the problem. They proposed a complete separation of content from design. The markup would return to its original role of defining the meaning of content. Meanwhile a separate file would describe to the browser how that content should look. This file was called the cascading stylesheet (CSS). This separation of content from design provided the design control demanded, while avoiding the pitfalls of other techniques.

At first browser support was limited. However, thanks to the campaigning of groups like the Web Standards Project that quickly changed. A new generation of web designer emerged dedicated to building websites that conform to these new best practices. These

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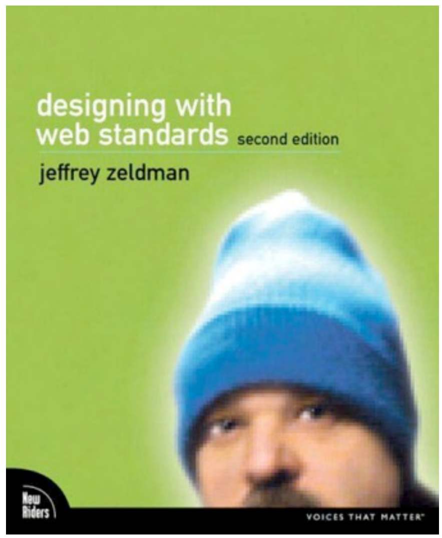
websites are more likely to be accessible, faster to download and easier to maintain. They provide a host of additional benefits which are explored in the next section.

Unfortunately not all web designers are so progressive. Many still produce websites where content and design are mixed and accessibility is ignored. With many clients still ignorant of best practice, these developers have little motivation to change their ways. These clients only care that their site looks 'okay on their computer'. However, you should consider the broader picture and so I will endeavor to clearly explain the benefits of standards-based design. Let's begin with control over styling.

A matter of style

The greatest benefit of this new approach to building websites is born out of the separation of design from content. With all design being defined from a single file (the CSS) it is simple to change that file and give your site a different look. The content remained the same but the site's design can change radically. This offers a whole host of possibilities, not least when printing.



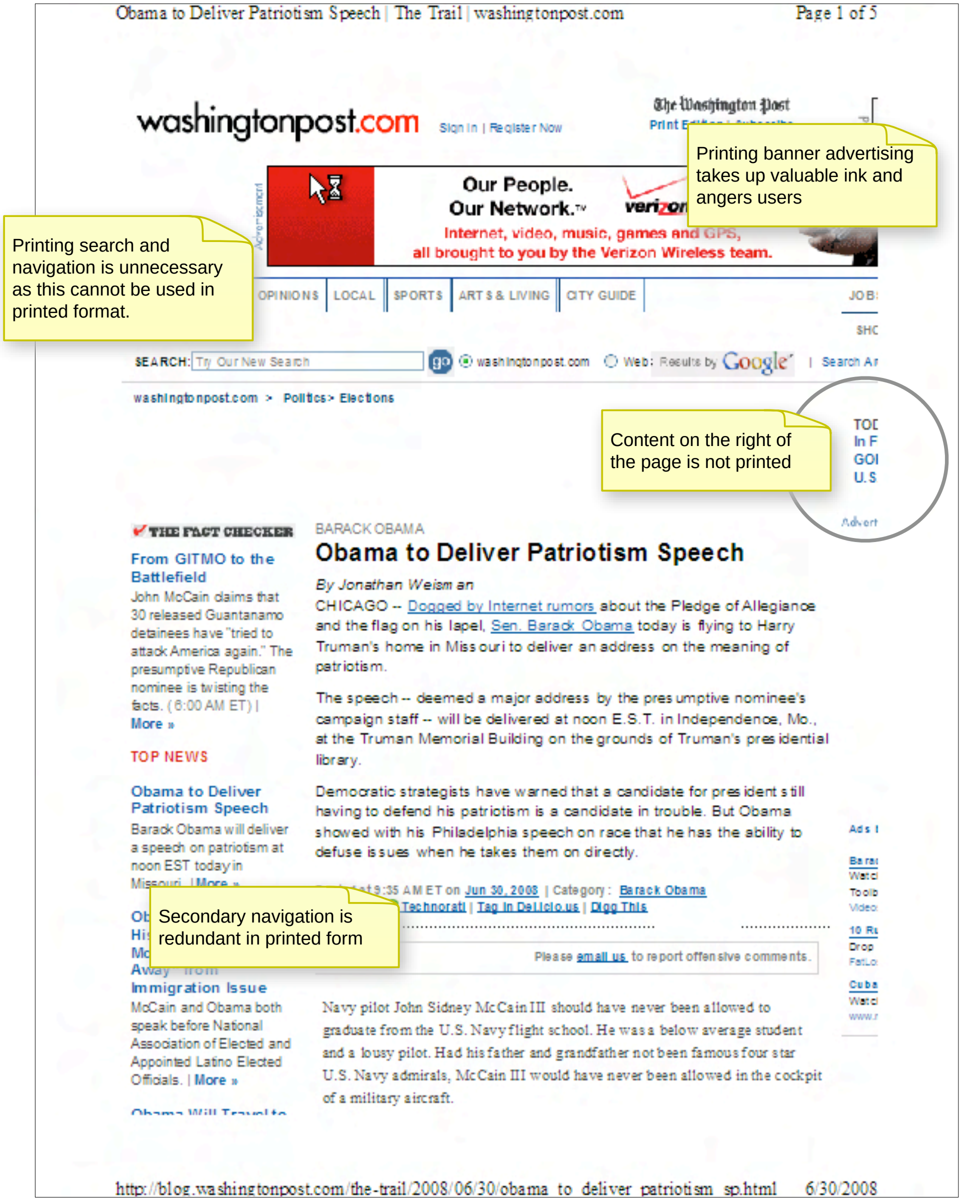
Designing with Web Standards by Jeffrey Zeldman is the definitive introduction to standards-based design. It is ideal for explaining the benefits of standards to designers and developers.

Improved printing

If you have ever printed a webpage you will know that printing on the web sucks. There are two fundamental flaws.

It wastes paper and ink by printing screen elements that the user doesn't need. Why print the navigation or interface graphics? These are needed while interacting with a website, not for reading a piece of paper.

Many websites fail to print properly. This can manifest in many ways but the most common is content being truncated down the right of a page. This can be clearly seen on the Washington Post website.



Many websites print poorly. They cut off content and waste both paper and ink. Although users can correct these problems with plugins and settings, you should always ensure your site prints correctly.

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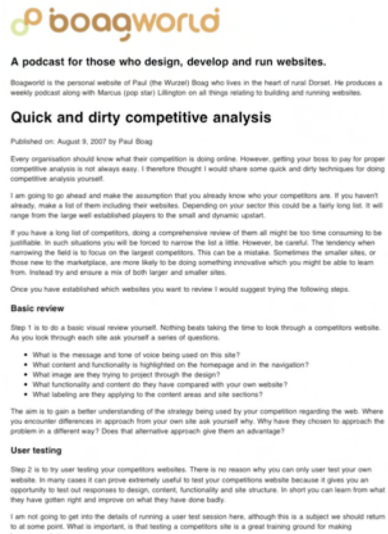
Standards-based design resolves these problems by allowing you to specify a different look and feel when printing. By swapping the stylesheet you can change to a design that prints perfectly and removes the unwanted screen elements. Take for example my own site at boagworld.com. When people print one of my blog posts all of the secondary content and navigation is removed. It prints only the information users want.

This is how the boagworld.com website looks when viewed through a web browser.



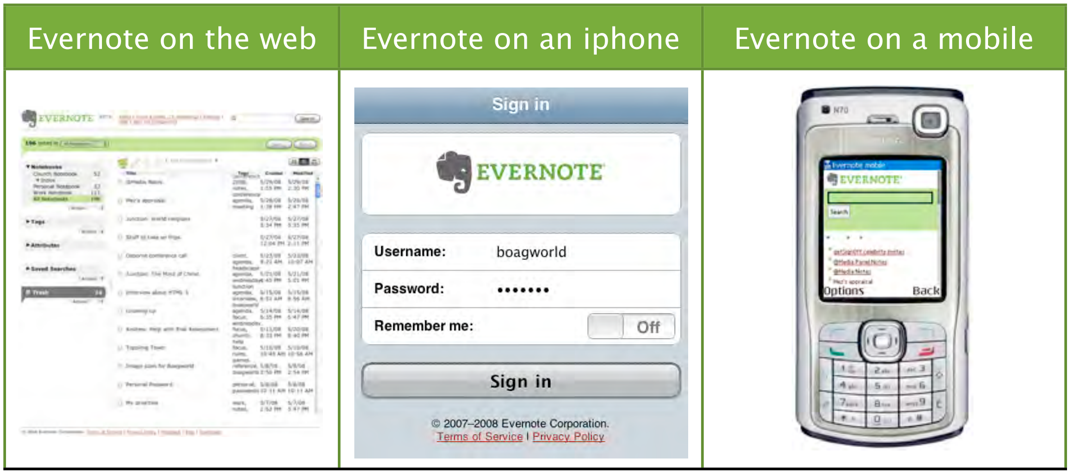
This is how the same site looks when printed.

Separation of content from design also helps when catering to the emerging mobile sector.

Capturing the emerging market

Cameron Moll in his book 'Mobile Web Design' states that by 2010 it is anticipated there will be 4 billion mobile phone subscribers. That is an astounding 59% of the entire planet. The mobile phone has only existed 35 years and yet the mobile phone industry has sold 2.7 billion units. Compared with 850 million personal computers over 30 years, this is amazing growth. In the US and UK access to the web from a mobile device accounts for between 17 and 19 percent of web usage. These figures are set to increase.

In chapter 12 we look at harnessing this emerging market. For now all you need to know is that separating content from design is a key part of the process. Separation allows you to deliver a mobile friendly stylesheet to devices capable of reading one, and no stylesheet to old devices.



Evernote.com use standards to help bring different visual experiences to a variety of devices.

The ability to swap styles is only the tip of the iceberg. Separating content from design also allows your website to adapt based on circumstances.

Responding quickly to change

Traditionally websites have been difficult to change. When content and design are mixed a small change, like altering the default font size, requires every page on the site to be edited. With standards this is no longer the case and that offers a wealth of advantages.

Imagine you were launching a new advertising campaign that had a different look and feel from the rest of your brand. Using standards based design you could change the entire site to match this design and swap back when the campaign was over.

You could also style the site depending on where the user was referred from. If they came from a partners website it could rebranded to match their style. This would provide a seamless experience for the user.

Jason Santa Maria uses stylesheet switching to customize the design of his site to suit the content of each page.

The real power of standards is not in complete redesigns, but in the ongoing evolution of your site. Standards makes it easy to continually improve your site based on user feedback. If people complain that links are hard to read then you can quickly change them. If users cannot find the search bar, restyle it. The ability to make quick, incremental changes in response to user requirements provides a competitive edge.

Standards also provide some tangible improvements to the accessibility of your site.

Never turn away users (or Google)

A common response I hear when talking about web accessibility is that it "does not apply to us because we don't have any blind users." Setting aside the obvious absurdity of this statement (you won't have blind users if your site is inaccessible), it demonstrates a fundamental misunderstanding of what web accessibility is about.

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Tim Berners-Lee once said:

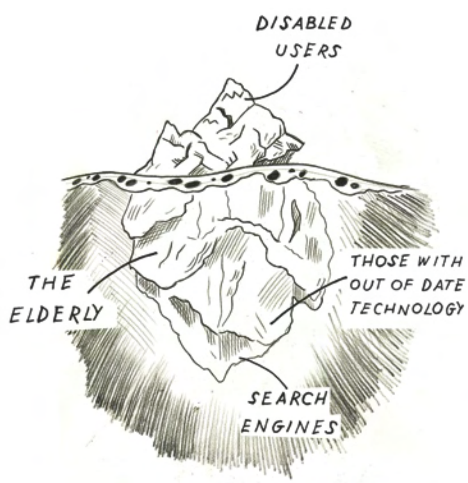
> *The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect.*

Note that he does not say *disability* but instead uses the phrase *access by everyone*. Accessibility is not just about access for the disabled. It is about access for everyone.

You should still have access to the web whether you use a screen reader because of a visual impairment, or a mobile device with poor connection speeds and text only support. Access should be irrespective of device, connection and indeed disability.

Once you have this mindset, the importance of separating content from design becomes more obvious. Although your content will remain the same its presentation will need to change based on user requirements. A mobile device with a small screen will require a different design solution to that of a desktop computer. A screen reader requires no design at all, while somebody with low vision may want larger text. All of this is straightforward when design and content are separate.

Recognizing that accessibility is about access for all brings even greater realizations. Not least from a financial perspective.



Disability is the tip of the accessibility iceberg. It also including meeting the needs of the elderly, those with out of date technology and search engine ranking.

But accessibility is expensive

A big objection to providing an accessible site is the expense. Quotes to make a site "accessible" often seem disproportionately high when compared to the financial returns from a minority disabled audience.

In reality this reasoning is flawed. First, the high cost of "making a site accessible" is normally only associated with sites built using out of date techniques. When a site has separated content and design it is inherently more accessible. Also, the cost of further improving that accessibility is significantly less. Second, as we have already established, accessibility is not just about the disabled and so return on investment would be significantly higher than just focusing on disabled users.

In the United Kingdom alone it is estimated that those registered as disabled have a spending power of over $160bn. Add to this those not registered as disabled but with physical or cognitive conditions that affect their use of the web. The elderly are a great example of this audience. As we age our vision declines, as do our motor skills, making websites increasingly difficult to use.

A restaurant owner would never turn away paying customers so why do it on your website?

Even if we stopped there this constitutes a significant audience that you are potentially turning away from your website. When you add those using a dial up connections, older computers or those lacking the latest plugin, it quickly becomes apparent that access for all cannot be ignored.

Imagine turning away customers from your restaurant simply because they are too old or suffer from color blindness. You simply wouldn't do it. Why then do we do it on the web?

You are not just turning away users. If your site is not built using best practices you could also be turning away search engines.

Achieve increased traffic with minimum effort

In many ways a search engine like Google is the ultimate disabled user. It cannot see and has only limited support for more advanced web features such as video and audio. It is easy to build a site that is either totally or partially inaccessible to Google.

Search engines are only interested in one thing, providing relevant results to their users. They only look at the content. They don't care about the design or the advanced web features.

If you want your website to rank highly on search engines you need to ensure they can access your content. Building with best practice and accessibility in mind will do just that.

By separating design from content you make it easier for a search engine to catalogue your site. If you markup that content semantically (describing the headings etc) you make it easier for the search engine to understand what the page is about.

```
<img src="pic.jpg" alt="Paul and James in front of Authors Seat, Edinburgh" />
```

The alt attribute describes the content of an image. This is important for visually impaired users but also helps with search engine indexing.

Finally many of the techniques used to improve disabled access also help search engines. For example blind users cannot see images and so a hidden description is associated with each one. This is called an alt attribute. It tells the user what is contained within the image. However, it also tells a search engine the same thing.

Many organisations pay large sums of money to improve their ranking on search engines, while ignoring accessibility as "not cost effective." If they spent the money on best practice they could have both. In chapter 10 we will explore more ways to promote your site. For now you need to be aware that accessibility can help search engine ranking.

Accessibility can provide financial benefits by increasing the amount of traffic going to your site and allowing more of those visitors to actually gain access. However, that is not the only reason to worry about accessibility. There are also potential legal obligations.

Exceed your legal obligations

Fear of litigation is the most common motivating factor for addressing a website's accessibility. From lobby groups campaigning for disabled rights, to web designers trying to drum up business, there is no shortage of people saying your site is breaking the law. Most of these claims are extreme, and although potentially true, do little to encourage best practice.

I am not a lawyer and have no intention of giving legal advice about your liability. The varying legislation on web accessibility worldwide makes that impossible. What I can share with you is my experience and what I have observed online.

There will probably be a legal obligation on you to provide an accessible website. Whether it is Section 508 in the United States or the Disability Discrimination Act in the United Kingdom, most countries have some form of legislation to address the issue of online accessibility. Even if your website contravenes the legislation, you won't necessarily be taken to court.

A more likely scenario is that you will receive a complaint about some aspect of your site. How you respond to that complaint dictates whether you end up in court. Failure to respond quickly or take the complaint seriously could lead to litigation. If you respond quickly and apologetically, then the chances are the user will go away happy.

How you handle complaints will dictate whether your organisation ends up in court.

Am I proposing you ignore web accessibility until somebody complains? Certainly not. Hopefully I have already demonstrated good reasons to address accessibility beyond legal requirements. I merely wished to dispel the fear mongering that surrounds this subject.

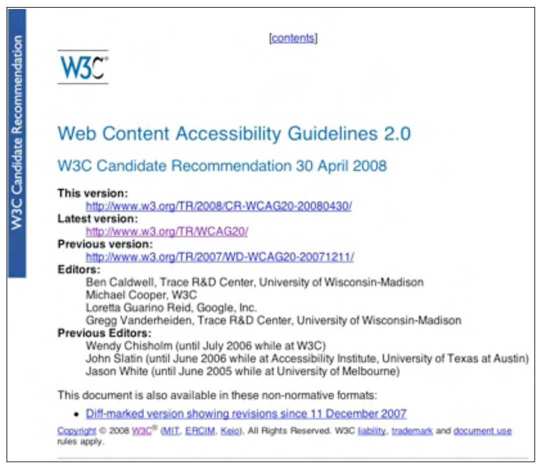
This kind of fear mongering demands all or nothing. You must be compliant with legislation today or face the consequences. This can seem overwhelming and many give up without trying. They choose instead to take the risk that nobody will draw attentions to the failings of their site.

Instead I believe website owners should be looking to start small, and improve accessibility over time. A large proportion of accessibility problems can be overcome with a few simple fixes. The question is what should these fixes be?

Navigating overwhelming guidelines

There is no lack of people suggesting ways to ensure your site's accessibility. From government legislation to pressure groups and disability charities, the amount of advice can be overwhelming.

Once again the best solution lies with the World Wide Web Consortium (W3C). The W3C did not just produce the specification for HTML, CSS and other aspects of standards-based design. They have also produced extensive guidelines on accessibility. That is why accessibility and standards are so closely linked.


W3C Candidate Recommendation

[contents]

W3C®

Web Content Accessibility Guidelines 2.0

W3C Candidate Recommendation 30 April 2008

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This document is also available in these non-normative formats:

- Diff-marked version showing revisions since 11 December 2007

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The web content accessibility guidelines 2.0 (WCAG 2) are the definitive template for web accessibility going forward.

What is more, the guidelines produced by the W3C have become the template for almost all other accessibility advice. The first guidelines published by the W3C came out in 1999 and were referred to as WCAG 1. Since then the web has moved on considerably, so the W3C have produced a second version called WCAG 2.

At first glance the W3C guidelines can be very intimidating. The documentation associated with them is extensive and highly technical in places. However, the guidelines themselves are relatively easy to understand. They are broken down into four principles:

W3C guidelines appear intimidating but the core principles are easy to grasp.

- **Perceivable** - Elements on your website must be presentable to users in ways they can perceive.
- **Operable** - User must be able to navigate and use your website.
- **Understandable** - Your website must be easy to understand.
- **Robust** - Content must be robust enough that it can be accessed by a variety of different devices.

All common sense. Each of these four areas are further segmented into specific ways they can be achieved. For example under perceivable there is a guideline which reads:

> *Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language.*

Each guideline is written in language that is relatively easy to understand and so I recommend you take the time to read them all. The guidelines are divided into individual success criteria, but this contains technical detail not relevant to you as a website owner.

Understanding the guidelines is important for two reasons. First, it makes it easier to ensure that any web designer you hire knows the latest accessibility techniques. Shortcomings will be obvious when you are aware of what is required. Second, you need to understand the basics of accessibility if you wish to create an accessibility policy for your organisation.

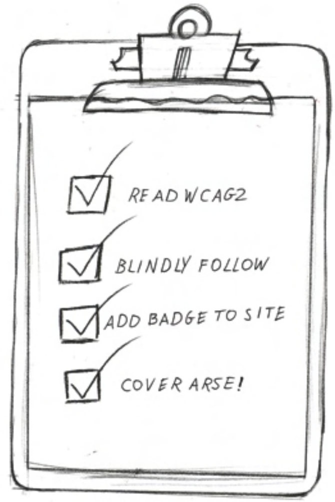
Creating an accessibility policy

As I have already said many organisations embrace accessibility not with a desire to improve access, but from a fear of litigation. This leads to an 'ass covering' mentality. They fixate on a set of guidelines (like WCAG) and blindly tick every box until they have fully conformed with the specification.

This approach is flawed because it is organizationally focused rather than user focused. Blindly following generic guidelines that may or may not apply to the specific needs of your users is wasteful and serves nobody.

A better approach is to use WCAG as a starting point for the creation of an accessibility policy. This outlines your organisation's approach to dealing with issues of accessibility and should include:

- Your ultimate objectives in terms of W3C guidelines.
- A roadmap for reaching these objectives.
- A process for testing compliance with these objectives.
- A plan for maintaining the accessibility of your site over time.
- A procedure for responding to complaints.



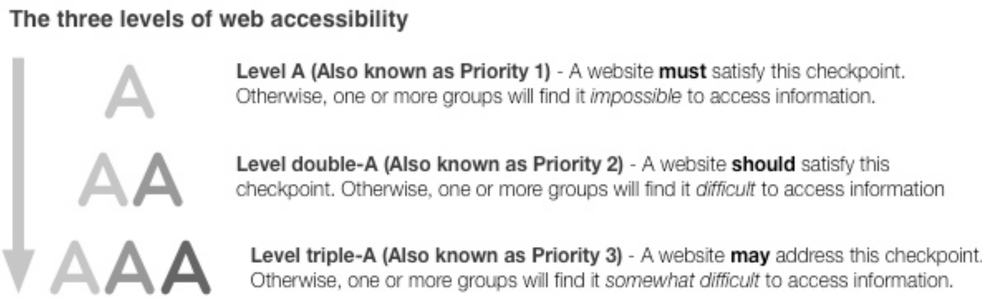
Many organisations only choose to comply with the W3C accessibility guidelines in order to avoid prosecution.

This policy should not be drawn up in isolation but in consultation with your developers (who will have to implement the objectives) and your content providers (whose help will be vital if your site is to remain accessible). Let's look at each of the elements that appear in your accessibility policy.

Establish your long term accessibility goal

Every accessibility policy should have an end goal in mind. This objective will probably change over time but there is value in documenting your current aim. What that aim should be comes from discussion with developers, content providers and end users. However it will probably be based on some aspect of WCAG 2.

Each WCAG 2 guideline is broken down into one or more success criteria. These criteria are rated according to their level of conformance. There are three levels: A, AA, AAA.



Traditionally organisations have decided to reach a certainly level across all guidelines. For example they will aim to make an entire site Level AA compliant. Depending on your circumstances this could prove difficult to achieve. A better approach would be to aim for a minimum of Level A across the board but seek to comply to higher levels of accessibility on some guidelines. This more tailored approach take into account the varying requirements of your business, content and audience.

Of course, identifying an end goal is one thing. Getting there is quite another.

Have a roadmap for overcoming common problems

Even achieving the most basic level of accessibility (Level A) can be challenging if you are starting from scratch. Your accessibility policy should therefore outline a roadmap for achieving your goals.

The Pareto principle (or the 80/20 rule) states that for many events, 80% of the effects come from 20% of the causes. This certainly holds true for accessibility where a small number of issues cause the vast majority of problems. It is therefore logical to start any roadmap by resolving these issues first. But what are the main issues? That is a subjective question, but here are the most common problems I encounter:

Poorly described images

I have already mentioned that images should have associated alt attributes. This benefits both visually impaired users and search engine placement. However, the problem of poorly described images is not simply a lack of description. It is badly written descriptions.

Because many people have realized the benefit of alt attributes for search engine placement, they have taken to filling these descriptions with keywords and making them overly long. Make sure all content images have an alt attribute and that it clearly describes what is being shown in a single sentence.

However, it is not just image that are labelled badly, so are links.

If a link is labelled 'click here' it is meaningless out of context. For visually impaired users this can be frustrating.

Badly labelled links

The text contained within a link should be able to describe that link without context. This is because screen readers have the ability to read all the links on a page as a single list. This helps users quickly navigate without listening to the entire page. The problem arises because a link entitled "click here" does not give the user any information about where the link leads. A better link would read simply "latest news." Where a longer description is required a title attribute (similar to an alt attribute) can provide more information.

The use of descriptive links not only helps screen reader users but also other users who are quickly scanning a page looking for the next link to follow. Finally search engines use the content of a link as a way of judging what the page linked to is about.

As well as describing links and images, you also need to consider other forms of media.

No alternatives to media

When using video, audio or any form of media that requires additional plugins you need to provide an alternative version. This alternative should either be in the form of a transcript (in the case of audio) or captions (in the case of video or other media where visuals and audio are synced).

At first glance this seems a massive undertaking. However, there are a number of services like castingwords.com who provide transcription at a very reasonable rate. There are also tools like overstream.net, which help in the creation of captioning.

Castingwords.com converts audio to text. This is just one of the services that will help your site become more accessible.

The reason it is so important to provide these alternatives is because not all users have access to the technologies that show this content. This is also true for Javascript.

Reliance on Javascript

Javascript is a programming language that is used to achieve many of the interactions we see on websites. From popup windows to services like Google Maps, Javascript is amazingly flexible and heavily used.

Javascript in itself is not inaccessible. Javascript exists to add interaction and behavior to a website in the same way HTML provides content and CSS design. The problem is in the implementation.

Not everybody has access to Javascript and search engines regularly ignore it. It is therefore important that all content is accessible even when Javascript is not available. The most common problem is using Javascript to create navigation and other links. If Javascript is not available it is impossible to follow those links to the content beneath.

Equally when Javascript is used to add content to a page this content becomes inaccessible if Javascript is disabled. Never rely solely on Javascript as a method of accessing content.

The final accessibility mistake I see regularly is preventing users from resizing text.

The Best Buy site does not adapt well when users enlarge the text. Screen elements are forced out of position and text overlaps.

Hard to read text

By default all major browsers allow users to control text size. This is required for users with less than perfect vision. Most visual impairments require fonts sizes to be increased. However, there are some that require smaller text to fit better within a limited field of view.

Although browsers provide this functionality, many web designers 'fix' the font sizes on their sites. There is no good reason for this beyond laziness. By doing so they reduce the burden of testing for themselves, but gain no other tangible benefit. Be sure to check that designers have made the fonts on your web project scalable.

By addressing just these five problems you will dramatically improve the accessibility of your website. None of these issues is particularly hard to overcome and the financial investment is minimal. By doing so you will increase the traffic to your site and the number of visitors able to successfully navigate it.

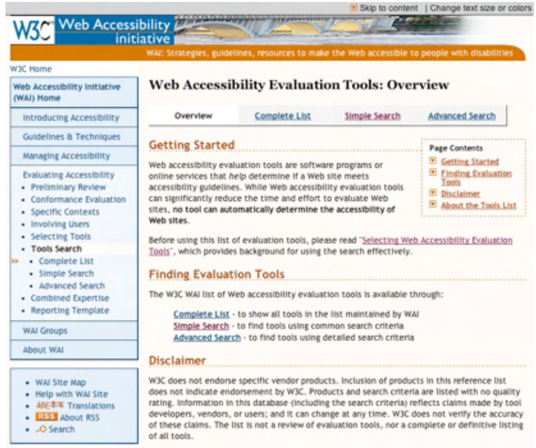
However, an accessibility policy shouldn't just address quick fixes. It should also provide a comprehensive approach to improving and maintaining site accessibility. To do this it needs to include a degree of accessibility testing.

Testing accessibility

How you intend to test the accessibility of your site should be a fundamental component of any accessibility policy.

Most organisations rely too heavily on automated services. These online services claim to test web accessibility but can only carry out a basic review. For example, they cannot ascertain whether descriptions in alt attributes on images are meaningful or merely stuffed with keywords to improve search engine placement. They are also unable to test some guidelines at all. This is particularly true with WCAG 2.

There is a place for automated testing. It is useful for identifying potential problems across a large site, but should never be used in isolation.



Although sometimes misused, accessibility checkers do have a role to play. For a list of tools see www.w3.org/WAI/ER/tools/

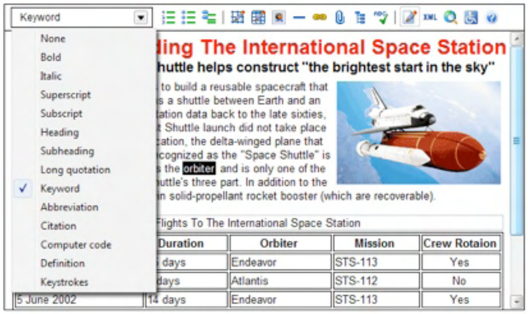
User testing with disabled users is far more effective than any amount of automated testing. Granted, finding appropriate disabled users is not easy, especially when faced with such a wide range of potential disabilities. Fortunately there are a number of organisations who can help you with recruitment. They can arrange testing for you and even advise on how to solve the problems that arise.

Paying for real users may be beyond your budget. If this is the case, then ensure that somebody is made responsible for regularly testing the accessibility of your site through a mixture of manual quality control and automated testing.

Whatever approach you choose to adopt, make sure it is documented in your accessibility policy including how often you intend to test. Frequent testing is important because although it is easy to launch an accessible website, it can be hard to maintain.

Maintaining accessibility

Maintaining the accessibility of your site can be problematical if it is being updated on a regular basis. It is even more complex if multiple people are involved in adding content. Your accessibility policy should address how to maintain accessibility over the long term. This is achieved in three ways:



One accessibility weaknesses of many content management systems is the editor. Although the CMS itself produces accessible code, the editor allows content providers to undo this good work. Consider using an editor like xStandard (xstandard.com) that has been built with accessibility in mind.

- Regular testing (as I explained above)
- Training
- Using the right technology

The most important of these is training. Ensure both your development team and content providers understand the basic rules of accessibility. For content providers this may only need to be a set of simple rules to follow. Your development team on the other hand will need a deeper understanding and may require formal training.

Unfortunately, a good understanding of accessibility will not help when technology fails to produce accessible code. This is especially important when using content management systems (CMS). Make sure your CMS can output clean accessible code and that wherever possible it enforces accessibility on content editors (such as requiring alt attributes to be defined for images).

No matter how good your testing and maintenance plan, problems will arise and you may receive complaints. How you respond to those complaints will determine whether you find yourself in court.

Dealing with complaints

Your accessibility policy should establish the following:

- **Who is responsible for dealing with complaints.** If this is not clearly defined, complaints often remain unanswered. If a user does not receive a response because nobody saw it as "their job," they are more likely to turn to litigation.
- **How quickly your organisation should respond to initial complaints.** The person responsible for responding to complaints often has other responsibilities. An email from an angry user may not come high on the list of priorities. In order to ensure a quick response set targets in the accessibility policy. This will prevent emails being forgotten.

- **The process for addressing a complaint.** What happens when a complaint is received? Who estimates the amount of work to fix the problem? Who signs off on the expenditure? Who is contacted if legal advice is required? These are the kind of questions that need answering in your policy.
- **What to do if the complaint cannot be addressed.** Sometimes an accessibility issue simply cannot be fixed or the cost of doing so would be prohibitive. In such cases a decision has to be made about how to respond. This is where it is necessary to open a dialogue with the person complaining. Ask them how they believe the problem could be resolved? Offer them alternative methods of getting the same information (printed brochure, phone, etc). If you can explain the problem and offer a compromise most people are happy. The important thing is to address the complaint and not hope it goes away.

Dealing with complaints quickly and efficiently should not only avoid litigation but also create improved customer loyalty. Users who encounter problems that are then resolved quickly view your website in a more positive light then if they had not encountered the problem at all.

Next Actions

This chapter started by demonstrating the importance of accessibility and standards. It then went on to identify elements that you should address in these areas. The emphasis has been on informing, rather than encouraging specific actions. That is because the implementation of standards and accessibility is done by your development team, rather than yourself. That said, I would encourage you to complete the following three steps.

- **Get your team onboard** - The first and most important step is to ensure both your developers and content providers understand the importance of standards and accessibility. If you are recruiting an outside agency, ensure they are using modern techniques. If you have in-house staff, use the content of this chapter to argue for best practice and then consider training to bring people up to speed. If you don't convince your staff then development will be an uphill battle.
- **Create an accessibility policy** - Start by writing a rough draft yourself. Don't worry too much about specifics at this stage but concentrate on creating a skeleton for discussion. Next sit down with your development team and review the current state of the site. In particular look at the common accessibility issues and identify which ones need addressing. Also discuss with your developers what is an achievable goal for site accessibility. Finally, work with your content providers on a training program that will ensure accessibility over the long term.
- **Finish what you start** - Once you have completed the actions above consider your long term strategy for ensuring accessibility. Draw up a periodic test plan preferably using real disabled users. Also ensure that somebody is ultimately responsibility for the ongoing accessibility of your site. Ideally this person should come from your development team who understands the technical detail.

I recognise that some of what I have suggested in this chapter maybe overkill for smaller organisations, but you should be able to tailor it to your needs. The key is ensuring accessibility over the long term and to a large extent that is reliant on the tools you use. This brings us nicely on to content management systems.

In this chapter

- **The pros and cons**
  - The benefits of a cms
  - The drawbacks of a cms
- **Establishing your requirements**
  - Core functionality
  - The editor
  - Managing assets
  - Search
  - Customization
  - User interaction
  - Roles and permissions
  - Versioning
  - Multiple site support
  - Multilingual support
- **Examining your options**
  - Off the shelf vs. custom built
  - Choosing a type of cms
- **Making your selection**
  - Licensing
  - The development team
  - Security
  - Accessibility and code quality
  - Documentation and training
  - Support
  - Community

8 Taking control

In the early days of the web, website owners had no control over their sites. They relied on a web designer to make even the most basic change. Many web designers took advantage of this reliance, charging exorbitant fees to make even the smallest alteration to copy.

Over time things changed. You no longer needed to know HTML in order to add a phone number or correct a spelling mistake. Tools existed that helped do the job. However, they were primitive and it was still easy to 'break' your site.

We now have a plethora of tools at our disposal from blogs to enterprise-level content management systems. The question is no longer 'how can I edit my website' but 'which tool is best for me?'

Although a content management system (cms) is not a silver bullet, it does have many benefits. This chapter explores those benefits, identifies the drawbacks and guides you through selecting the right content management system for your organisation.

Let us begin that journey by asking a simple question. Do you need a content management system?

The pros and cons

You may have preconceived ideas about whether you need a cms. Maybe you believe that your site is too small to justify the expense. Alternatively, you might be overwhelmed by content updates and convinced that a cms will solve all your woes.

Whatever the case, it is important to examine the pros and cons of a cms. Making the wrong choice can have long-term ramifications for your site.

Let's begin by looking at what makes content management systems so attractive.

A content management system is not always necessary, especially for smaller websites.

The benefits of a cms

Content management systems have become very popular over the last few years and now even the most basic cms allows:

- **A lower barrier to entry** - A cms allows anybody with basic computer skills to edit a website. It is no longer necessary to know HTML or understand specialist applications. If you can use a word processor you can edit a website.
- **Decentralized management** - A lower barrier of entry means managing web content can be distributed across the organisation, rather than resting with a few 'web specialists'. Because most content management systems are browser-based this editing can be done anywhere at anytime.
- **A reduction in management costs** - With maintenance shared across the organization it become less necessary to employee web experts.
- **Faster updates** - Without the bottleneck of a web team and the time involved in briefing that team, updates happen faster. A cms also makes it considerably easier to

implement site-wide changes such as updating navigation or editing the sites footer.

- **Greater control** - A cms allows control over permissions, making it possible to restrict who can edit which page. More advanced system also allow workflow meaning that a page can only be made live once approved by specific individuals.
- **Consistency of design** - Having multiple users updating a site's content can lead to inconsistencies in presentation. A cms addresses this through the use of templates that standardize the design.

A cms can look like a lifesaver to a web team sinking under website updates.

More sophisticated solutions, like those explored later in the chapter, provide even greater benefits. However, the list above makes it obvious why overworked web teams are attracted to content management systems. They are even more attractive to organisations who pay external agencies to update their site.

A content management system can look like the ideal solution when content is out of date and there is nobody with the time or skills to update it. Why then is it that so many organisations complain about their cms? While the benefits of a cms are obvious, the drawbacks are harder to spot. Yet they do exist and can come as a painful shock if you are not prepared.

The drawbacks of a cms

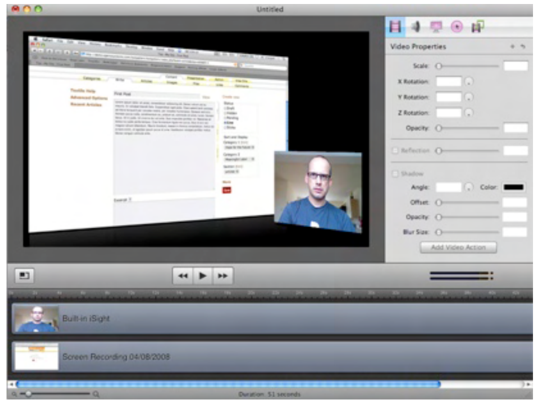
Before making a decision about whether to adopt a cms, or indeed which cms to choose, you first need to be aware of the hidden costs. These include:

- The cost of training
- The cost to quality
- The cost to functionality
- The cost of redundancy and flexibility

- The cost of commitment

It is important that you understand the impact of each.

The cost of training



Video tutorials are an effective accompaniment to training. They can be produced inexpensively using tools like Screenflow for the Mac or Camtasia Studio for Windows.

No matter how well designed the application or how good the documentation, some level of training is required. Training is particularly important with free open-source systems. These tend to have less documentation and the interface is often designed by programmers rather than user experience experts. The result is a great learning curve.

The more content production is delegated, the more people it is necessary to train. Whether this is done through onsite training or video tutorials it is still a considerable cost. Furthermore, organisations often fail to consider that training is an ongoing cost. The more people using a system, the higher the likelihood somebody will need to be replaced.

This ongoing cost is not limited to training new cms users. Existing content provider also require refresher courses if they are not using the cms regularly. I have often provided training for an organisation only to receive a call six months later because people have forgotten how to login.

Ultimately the price of having a lot of people editing your site is the cost of increased training. However, that is not the only cost that grows with numbers.

Before going live many organizations insist that content is reviewed and approved. Although this maintains quality it can create a bottleneck.

The cost to quality

What a cms gives with one hand, it often takes away with the other. Quality and control are classic examples of this problem. Enterprise-level content management systems have complex workflow tools that prevent new content from going live until it has been double checked for quality.

The problem with this is two fold. First, this functionality is usually found in more expensive systems. Second, few organisations implement this kind of quality control because it creates a bottleneck in the approval process. This bottleneck is precisely the kind of problem a cms was *supposed* to solve.

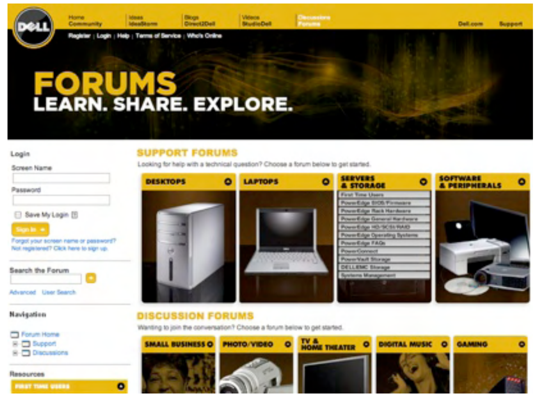
This highlights a substantial problem with content management systems. They are often implemented in the hope they will solve what is an organizational rather than technical problem. Unfortunately technology cannot solve everything.

At one extreme you can open up your cms to allow anybody to post to your site. This will lead to a decline in the quality of your content. On the other you can limit access and create a bottleneck where only one or two individuals can make content live. The technology can offer you lots of options along that sliding scale. You need to find a happy medium.

Of course, at least a cms offers this control, unlike an HTML-driven website. However, a non cms driven site allows more flexibility when it comes to functionality.

The cost to functionality

When you have a website that is not built on a cms the possibilities are endless. Because you have complete control over your code, it is possible to build any additional functionality you require. However, once you commit to a content management system things become more complex.



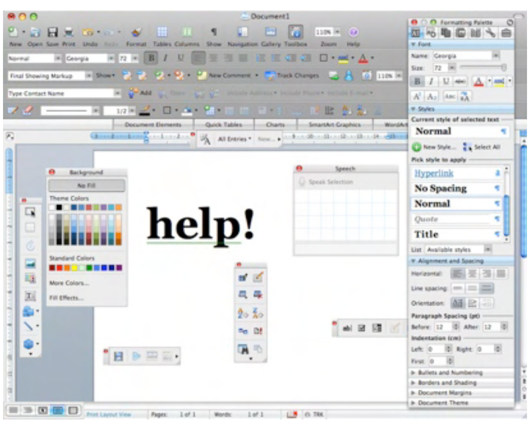
Users of the Dell website are required to login twice, once to access their account and once for the forum. This is because the underlying technologies do not work together.

Although it is possible to build additional functionality that sits alongside your cms, there can be problems with integration. For example, if your cms does not have a forum and you wish to add one, you may have to ask users to login twice. Equally you may find it hard to tie your cms in with other systems that you later purchase.

Some content management systems provide plugins for additional functionality. However, often you are forced to either compromise or wait until the next release of the cms and hope it supports your requirements.

Although you may find yourself frustrated by a lack of functionality, it is also possible to be frustrated by too much.

The cost of redundancy and complexity



Like Microsoft Word, many content management systems can appear massively complex because they include functionality few use.

Unless you have a content management system developed to your exact requirements, it will probably contain functionality you do not need.

It is a problem that Microsoft Word has suffered from for years. Word is very powerful and provides an enormous range of features. Yet the majority of people only use a fraction of what is available. Most pay for functionality they do not use, and struggle to learn a complex application. This is the problem many content management systems are facing.

The reason people have not stopped using Word in favor of a simpler solution is that they are invested both financially and in time. This brings us to the final drawback of content management systems.

The cost of commitment

Content management systems demand a high level of commitment on many fronts. These include:

- The upfront financial investment in implementing the system
- The cost and time involved in training staff
- The substantial amount of data entered into the system

The third area can be particularly tricky. Once your content is in a content management system, getting it out is not a simple matter.

With such an investment in both time and money it is important to make the right selection. Changing your mind later is expensive.

So am I suggesting you should avoid content management systems entirely? Not at all. The benefits they provide are real and cannot be ignored. However, you should go into the process of selecting a content management system with your eyes wide open. A content management system is not a magic bullet that solves all your content woes. However, it can be a useful tool if selected carefully.

How then do you make that selection? You begin by establishing your requirements.

Establishing your requirements

When I left home for University my mother taught me a valuable lesson. If you want to save money, never go grocery shopping when you are hungry and always write a list. If you don't you will be tempted to buy things you do not need.

The same principle is true when it comes to selecting a content management system. Without a clearly defined set of requirements you will be seduced by fancy functionality that you will never use. Before you know it you will be buying an enterprise level system for tens of thousands of dollars when a free blogging tool would have done.

How then do you establish your list of requirements? Although your circumstances will vary there are ten areas that are particularly important:

- Core functionality
- The editor
- Managing assets
- Search
- Customization
- User interaction
- Roles and permissions
- Versioning
- Multiple site support
- Multilingual support

Avoid creating a wish list. Think back to Chapter 3 and the advice I gave on writing a brief. Keep your requirements to a minimum but at the same time keep an eye on the future. On one hand you don't want to pay for functionality you never use. On the other, you don't want to be stuck with a content management system that no longer meets your needs.

Let's look at the areas you *should* consider.

Carefully consider your requirements before looking at content management systems. This will ensure you are not seduced by unwanted features.

Core functionality

When most people think of content management, they think of the creation, deletion, editing and organizing of pages. They assume all content management systems do this and take this functionality for granted. That is not necessarily the case. There is also no guarantee that it is done in an intuitive fashion.

Not all blogging platforms allow the owner to manage and organize pages into a tree hierarchy. Instead the individual 'posts' are automatically organized by criteria such as date or category. While this keeps the interface easy to understand, in some circumstances the lack of this functionality can be frustrating.

Consider carefully the basic functionality you need. Even if you do not require the ability to structure and organize pages now, you may in the future. Be wary of any system that does not allow you to complete these core activities.

Blogger.com is an online blogging tool that does not allow pages to be organized into a hierarchy. Think carefully before using tools that do not support core features.

There are thousands of content management systems on the market, most of which offer this core functionality, but they vary widely in usability. Always test a system for usability before making a purchase; opensourcecms.com allows you to try out a number of different options.

The editor is one core feature worth a test drive.

The editor

The majority of content management systems have a WYSIWYG editor (What You See Is What You Get). Strangely this editor is often ill-considered, even though it is the most used feature within the system.

Traditional WYSIWYG editors give the content provider the ability to customize the appearance of a page to such an extent that it could undermine the consistency of design and branding as discussed in chapter 4. In order to achieve this level of design control the cms mixes design and content. As we established in chapter 7, this is undesirable.

Wordpress is one of the most popular blogging solutions. It is extremely powerful and completely free of charge. However, its default WYSIWYG editor should be replaced with something that encourages more semantic markup, especially when being used by less experienced users.

The new generation of editors take a different approach. The content provider uses the editor to markup headings, lists, links and other elements without dictating how they should appear.

Ensure that your list of requirements includes an editor that uses this approach and does not give content providers control over appearance. At the very least look for content management systems that allow the editor to be replaced with a more appropriate solution.

The editor should also be able to handle external assets, such as images and downloads.

Managing assets

Managing images and files are badly handled by some cms packages. Issues of accessibility and ease of use can cause frustration with badly designed systems. Ensure that the cms you select forces content provider to add alt attributes to images. You may also want a cms that provides basic image editing tools such as crop, resize and rotate. However, finding such a cms can be a challenge.

Also consider how the content management system deals with uploading and attaching PDFs, Word documents and other similar files. How are they then displayed to users? What descriptions can be attached to the files? Is the search capable of indexing them?

Search

Approximately half of users will start with search when looking for content. However, the search functionality available in content management systems is often inadequate. Here are a few things to look for when assessing search functionality:

- **Freshness** - How often does the search engine index your site? This is especially important if your site changes regularly.
- **Completeness** - Does it index the entire content of each page? What about attached files such as PDFs, Word documents, Excel and Powerpoint?
- **Speed** - Some search engines can take forever to return results. This is especially common on large sites.
- **Scope** - Can you limit the scope of search to a particular section of the site or refine search results once returned?
- **Ranking** - How does the search engine determine the ranking of results? Can this be customized either by the website owner or by the user?
- **Customization** - Can you control how results are returned and customize the design?

The issue of customization is one that goes far beyond search.

Customization

Now that we have techniques for separating design and content, the presentation of your content should not be dictated by technology. Unfortunately, many content management providers have failed to adopt best practice and their systems produce horrendous code. This places unreasonable constraints on design and seriously impacts accessibility.

Some content management systems do not allow customization. They effectively dictate the visual appearance.

You need a content management system that allows flexibility in the way content is returned and presented. Can you return news stories in reverse chronological order? Can you display events on a calendar? Is it possible to extract the latest user comments and display them on the homepage? Flexibility makes a cms stand out.

Talking of user comments, it is worth mentioning all forms of user interactions.

User interaction

Chapter 11 will explore the different options available for interacting with your users. However, some consideration needs to be given to the subject now. If you intend to gather user feedback, your cms must provide that functionality or allow third-party plugins to do so. Equally, if you want a community on your site then you will require functionality such as chat, forums, comments and ratings.

As a minimum you will require the ability to post forms and collect the responses. How easy does the cms make this process? Can you customize the fields or does that require technical expertise? What about the results? Can you specify who they are emailed to? Can they be written to a database or outputted as an Excel document? Consider the type of functionality that you will require and look for a cms that supports that.

Ask what tools exist for communicating with your customers. Can you send email newsletters? Can recipients be organized into groups who are mailed individually? What about news feeds and RSS?

RSS feeds allow users to keep up-to-date with changes on lots of websites without visiting each site individually. This is most commonly used for news stories. Each time a new story is published the sites RSS feed is updated. If users have 'subscribed' to that feed using a piece of software called a news aggregator, they will be notified of the change.

RSS feeds are still growing in popularity but are quickly becoming an indispensable feature of any cms.

Finally consider how you want users to be managed. Do you need to reset passwords or set permissions? Do you need to be able to export user information into other systems?

But it is not just user permissions that may need managing. You also have to consider permissions for those editing the site.

Roles and permissions

It is important to maintain control over who can post what on the website.

As the number of content providers increase, you will want more control over who can edit what. Personnel should be able to post job advertisements but not add content to the homepage. This requires a cms that supports permissions. Permissions allow you to specify whether users to edit specific pages or even entire sections of the site.

As the number of contributors grows, you may require one individual to review the content being posted to ensure accuracy and consistent tone. Alternatively content might be inputed by a junior member of staff who requires the approval of somebody more senior before making that content live.

In both cases this requires a cms that supports multiple roles. This can be simple with editors and an approver, or complex allowing customized roles with different permissions.

Finally, enterprise level content management systems support entire workflows where a page update has to go through a series of checkpoints before being allowed to go live. These complex scenarios require the ability to roll back pages to a pervious version.

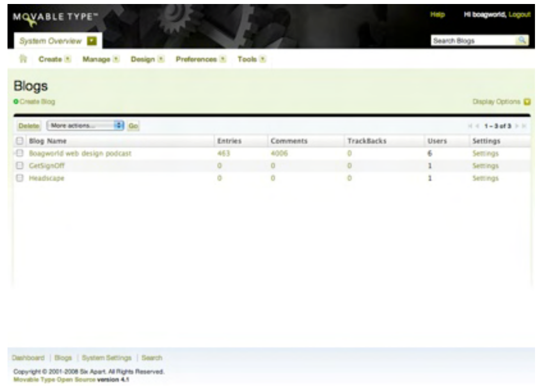
Versioning

Being able to revert to a previous version of a page allows you to quickly recover if something is posted by accident. Some content management systems have complex versioning that allow you to rollback to a specific date. In most cases this is overkill. The most common use of versioning is simply to return to the last saved state.

Although this sounds like an indispensable feature, it is rarely used except in complex workflow situations. That said, versioning was once a enterprise level tool that is now available in most content management systems. This is also true of multi-site support.

Multiple site support

With more content management systems allowing you to run multiple websites from the same installation, this is a must-have feature.



Even blogging tools like Movable Type (featured above) and Wordpress now support the management of multiple websites.

Although you may not currently need to manage more than a single site, that could change. You may decide to launch a new site targeting a different audience. With the growth of the mobile web, you may create a separate site designed for mobile devices. Whatever the reason, having the flexibility to run multiple websites is important.

Another feature that you may not require immediately but could need in the future is multilingual support.

Multilingual support

It is easy to dismiss the need to support multiple languages. Your site may be targeted specifically at the domestic market or you may sell a language-specific product. Even if your product is language specific, that could change. It is important that your cms can grow with your business and changing requirements.

Just because your CMS supports multiple languages does not mean you will be able to deliver a multilingual website.

Just because you are targeting the domestic market does not mean you can ignore language. We live in a multicultural society where numerous languages are spoken. Being able to accommodate these differences provides a significant edge on your competition.

Think through the ramifications of this requirement. Just because you have the ability to add multiple languages doesn't mean you have the content. Too many of my clients have insisted on multilingual support and yet have never used it. They have failed to consider where they are going to get the content translated and how they intend to pay for it.

The suggestions above will help you to narrow down your list of requirements. Now comes the job of examining the different options available.

Examining your options

With so many content management systems available, how do you begin to narrow the field? Your list of requirements will help, but you cannot compare them against every single system. You need a way to quickly narrow the field.

First decide if you want to use an existing content management systems or get something custom built.

Off the shelf vs. custom built

In most cases the answer to this question is: why reinvent the wheel? There is little point building something from scratch when it has already been built a thousand times before. But there are always exceptions.

A custom build provides your exact requirements and overcome many of the drawbacks mentioned earlier. A bespoke cms is completely flexible.

This flexibility can be important when your requirements deviate from the norm. Maybe you have existing systems that your cms must integrate with. Or

Be careful when using a custom-built CMS. Ensure you are not tied to a single supplier.

perhaps you have an unusual business model that requires your site to work in a different way. The more your requirements differ from others' the less likely an off the shelf system will work for you.

Unfortunately a custom content management system can be expensive. However, that is not their only weakness. Without careful planning you can find yourself tied to the developer who built the system.

If you are running an off-the-shelf content management system (especially one of the more well known names) it is relatively easy to change developers if you are unhappy with the service you have received. However, this is not the case with bespoke builds.

Without careful documentation it can be hard for one developer to understand the code of another. If you decide to use a bespoke system, ensure that the developer provides adequate documentation so that this problem is avoided. Also ask what technology is being used and call around to see if others can support that programming language. If your developer chooses an obscure language you may have problems finding somebody who can write the same language.

In most cases the answer is to work with an off-the-shelf system. If that is your choice, how do you go about narrowing the field?

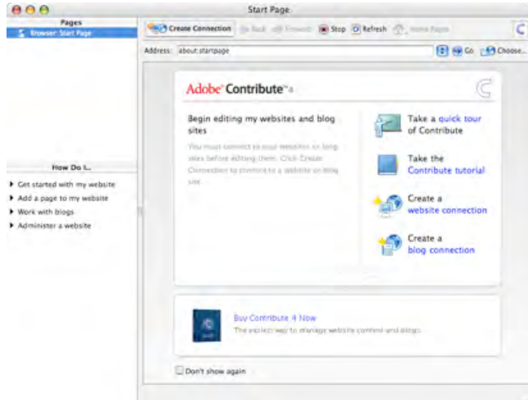
Choosing a type of cms

Content management systems fall into several broad categories. Although individual systems vary within these categories, each has certain general characteristics. By matching your requirements to one of these broad categories you help narrow the field considerably. These categories are:

- Desktop applications
- Partial content management systems
- Blogs
- Enterprise level content management systems

Let us look at the characteristics of each and what features they support.

Desktop applications



Adobe Contribute is an excellent desktop application for the less experienced content contributor.

Some argue that desktop applications are not content management systems because they do not manage your content online. However, they do 'manage content' and so are worth mentioning.

Products like Adobe Contribute, Dreamweaver or Microsoft Expression fall into this category. They tend to be relatively cheap, require no special technology on your web server and are easy to setup.

Desktop applications normally provide an excellent editor, and more modern versions also place the emphasis on marking up the meaning of content rather than defining its appearance. However, these applications can fall down on core functionality. Adding and deleting pages can become painful when working with large numbers of pages.

Beyond editing their use is limited. Some offer basic permissions but nothing in terms of versioning, search or multi-lingual support.

The use of desktop applications should be restricted to sites that change infrequently.

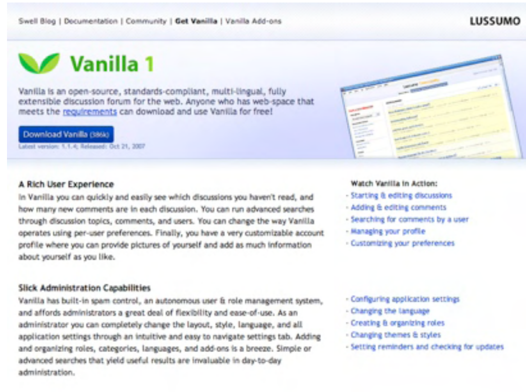
Partial content management systems

Most webpages rarely change. It is only specific sections that need updating on a regular basis. There is no reason why your entire website needs to be built using a content management system. It is possible to combine a desktop application with partial systems to deal with specific functionality. There are excellent tools for managing news, events, communities and search.

The downside of this approach is that it can be hard to get these various tools talking to one another. This can become complicated if you use a number of them together.

Despite the number of available tools, they don't cover functionality like versioning, permissions, multi site or multilingual support.

That said, they are perfect when you have one or two areas of your site that need updating or where you require community features.



The Vanilla forum (getvanilla.com) is just one of many solutions that provide a portion of the functionality offered by a full content management system.

Blogs

Blogs are the most common form of content management. Their core functionality is to publish a series of pages sorted by category and date. This is ideal for managing regularly updated news. Recently blogs have become considerably more powerful, allowing for the ordering of pages into hierarchical structures. Many now offer plugin support allowing the integration of additional functionality.

Blogs normally come with a basic editor that emphasizes appearance over meaning. It may therefore be necessary to replace the editor with something more advanced. Although most blogs support a basic level of permissions they do not generally offer versioning.

Blogging software like Wordpress is installed on your own web server. Alternatively you can use a system like Typepad which is hosted for you. This is ideal if you do not have a web server capable of hosting software. We explore these concepts further in chapter 9.

They also lack multi-lingual support, but do allow the management of multiple websites. They provide an adequate search function and allow extensive customization.

Blogs are often perfectly adequate for smaller organisations. They are especially good at dealing with constantly updating news stories. For larger organisations a full cms is more appropriate.

Enterprise level content management systems

Enterprise level content management systems are comprehensive solutions that offer the complete suite of functionality from versioning to multilingual support. They often carry a hefty price tag although there are also open-source solutions available.

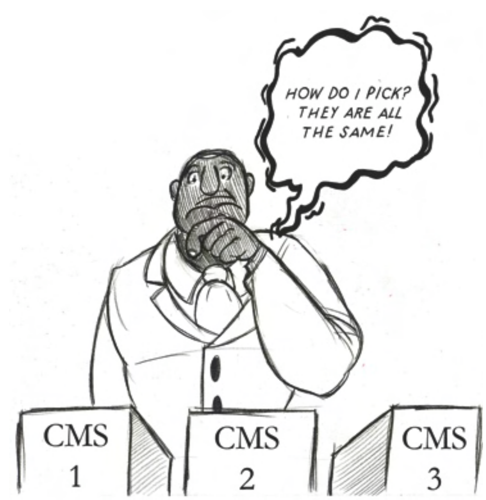
Although most of these content management systems meet our criteria, the quality of implementation can vary tremendously. It is necessary to look at the different options and compare ease of use, power and flexibility. These full-blown content management systems are ideal for organisations who require a wide range of functionality and have regularly changing content produced by a large numbers of contributors.

Once you have established the type of cms you require, it becomes a matter of comparing and contrasting the different options. However, you may find a number that are possible candidates. How then do you make the final selection?

Making your selection

Many content management systems offer similar functionality. After all, most people want similar things. However, functionality and price should not be the only criteria by which you make your judgement. There are a number of additional issues which need considering:

- Licensing
- The development team
- Security
- Accessibility and code quality
- Documentation and training
- Support
- Community



With so many content management systems offering similar functionality, look at external factors when making your choice.

Licensing

Examine in detail the license attached to your choice of cms. Some licenses that state you can make no change to the source code or use a alternative developer.

You may also find that your license is per site or (worse still) per user. This can become very expensive if you want to setup multiple sites or have a large number of content contributors. Ideally you want an agreement that allows unlimited use of the cms with the exception of reselling.

The development team

Look carefully at the development team behind any cms you are considering. Is it an open source project with a community of developers or the product of a single company? Neither approach is wrong, but you need to be confident in the long term health of the product.

Open source projects can be highly productive despite often being created by volunteers, but they can die off quickly if a more attractive project comes along. If you are considering an open source solution look at the age of the product, since mature products are more likely to remain supported in the long term.

Red Dot is a leading content management system with a committed team of developers. This is apparent from their vibrant community site and frequent patches and updates.

With a commercial product you need to be confident in the long term viability of that company. Consider requesting a copy of their accounts to confirm their financial stability.

In both cases look for a team that is regularly releasing updates to their system. This is particularly important from a security perspective.

Security

Security is an important issue for any cms. If your site is hacked, you could lose content or find yourself in litigation if hackers get hold of your users' personal data.

Judging the security of a content management system may require some technical expertise. If unsure, get an expert's opinion. At the very least do a Google search on the name of the cms and 'security issues'. If you see lots of results then get an expert opinion.

Accessibility and code quality

As we established in chapter 7 it is important to build using the latest best practice. This ensures your site is accessible and provides the flexibility to adapt over time.

Judging whether a cms uses best practice is difficult if you are not a web designer. However, talk to the cms developers about their approach to accessibility. Equipped with the knowledge from chapter 7, you should be able to get an indication of their competency.

One aspect of best practice we have yet to discuss are webpage addresses. For a long time content management systems produced addresses that looked like this:

```
http://www.boagworld.com/index.php?sourceid=navclient&q=4
```

However, more recently content management developers have realized this is hard to read and damaging to search engines placement. Therefore modern content management systems produce addresses that look more like this:

```
http://boagworld.com/technology/friendly_urls/
```

This is a huge step forward and also allows the web address to be used as a navigational tool. Users can identify where they are in the site and edit the url to find different pages. For example if the above address is shortened to:

```
http://boagworld.com/technology/
```

Use what you have learnt from Chapter 7 to speak with cms suppliers about their approach to accessibility and standards.

it will return all pages within the technology section.

Whenever possible look for systems that support friendly urls. They are a good feature to have and provide an indication of how up-to-date the practices of the developers are. If a cms supports friendly urls they may well support accessibility and standards too.

Additional information on best practice should also be made available through the documentation that supports the cms. This too is an important differentiating factor.

Documentation and training

Good documentation is a crucial component of any cms. As I have already said, content providers may not be using the system on a daily basis. They can easily forget how it works. Documentation should therefore be comprehensive and easy to use. Some content management systems also provide walkthroughs and video tutorials. These help users better understand how the system operates.

There should also be documentation for developers too. This will enable your web team to adapt the cms to better suit your needs. Without this it can be nearly impossible to work out how the cms can be customized.

Alongside documentation, training is another useful resource. This is important for content providers who need more than a manual before they start using the system. Training provides them with hands on experience and the opportunity to ask questions.

No matter how good the cms and supporting documentation, there are occasions when you will require additional support.

Support

You need to ask some hard questions about support. What happens if you identify a bug in the content management system? Will you be required to pay for the fix? How fast can you expect a response? Do you require 24/7 support?

You need to know your requirements and understand what the cms provider can offer.

Beyond fixes, there are broader questions about help. If you have a problem with the system, is there somebody you can turn to for advice? Do you have to pay for this support and when is this support available?

If you encounter a problem with your cms outside of business hours, will you be able to get help?

Of course not all content management systems come with support. It is unusual for anything but enterprise level systems to offer this option. If it is not available you need to look at whether the system has a vibrant community.

Community

The community is made up of other individuals who use the cms. They share advice and experiences via forums, mailing lists and support sites. Such communities are particularly important for open source content management systems because these products rarely offer formal support and training. However, many commercial products also have excellent online communities.

A good community will be able to answer questions, offer support and even make available a range of plugins that can be used with your cms. Before investing in a cms ensure it has a vibrant community. Visit the support site and look at how many users are registered and how often they post. Examine the topics people are discussing and particularly how supportive they are to new users. It is not unusual to find apparently vibrant communities that are hostile to new users asking 'dumb questions.'

Next Actions

This chapter has provided all the techniques you need to narrow down the thousands of content management systems to a handful of options. However, a final selection needs to be made and the choice implemented. This can be achieved in the following steps:

- **Action 1: Get familiar** - Although reading about a content management system is important, you must see the system in action and if possible have some 'hands on' time with it yourself. If you are buying the cms from a provider then ask them to setup a test installation so you can use the system yourself. If you are using an open source program then try out their online demonstration and watch any video tutorials they have. Do everything you can to become familiar with the system.
- **Action 2: Collect references** - Unfortunately no demonstration can tell you what it will be like to use on a daily basis. Speak to existing customers. Ask them about their experiences of using the system and the installation process. Ask about the systems flexibility and ease of use. Bear in mind that nobody likes every aspect of their cms, so take their answers with a pinch of salt.
- **Action 3: Plan the implementation** - Once the selection has been made it is necessary to set up your system. Do not underestimate this task. Not only does the system need to be installed and configured, you have to customize the templates and add your content. Work closely with your development team to establish timescales and don't forget to leave adequate time for testing and bug fixing. Do not be surprised if it takes considerably longer than you expected.

One of the big problems you will encounter when choosing a content management system is 'techno babble.' Techno babble is the jargon thrown at you by developers when talking about technology. The next chapter will help you decode this foreign language.

In this chapter

- **Understanding the web**
  - From the web to your PC
    - *Why can't you see my site when I can?*
    - *Why is my site down?*
    - *Why is my site so slow?*
  - How web pages are built
    - *What is a database?*
    - *What is a server side language?*
  - Web 2.0, AJAX and other buzzwords
- **Grappling with the browser**
  - Different browsers, different bugs
  - Browser plugins
- **Hosting your site**
  - Assessing server requirements
  - Finding the right hosting package
    - *Dedicated hosting*
    - *Shared hosting*
  - Assessing hosting companies
    - *Uptime*
    - *Support*
    - *The control panel*
    - *Limitations on growth*
    - *Hidden changes*

[1]

9 Decoding technobabble

Web developers are very precise people. This is necessary to explain complex concepts in a clear way to other developers. Inaccuracy and oversimplification cause mistakes and confusion.

Web developers are going to hate this chapter.

The problem is that they have developed their own language to explain these complex technologies and concepts. AJAX, Web Services, XML, Schemas, Domains, Client side, MYSQL, the list goes on. Although these terms are meaningful to web developers, they sound like technobabble to everybody else.

The reason web developers will hate this chapter is because I oversimplify things to make them intelligible. As a result, some of what I explain will only be part of a larger picture. However, it is more important to grasp the concepts than understand the specifics. It is this compromise many web developers fail to make.

In this chapter I aim to decode the technobabble and explain how the web works, including concepts you need to understand, such as the peculiarities of browsers, terms like client side and server side, hosting, and buzzwords like AJAX and web 2.0.

Let us begin by looking at how the web works.

Understanding the web

Although I'm using a word processing program to write this book, I have little understanding of how it works. I have a vague notion that everything I type is somehow converted into ones and zeros, but I have no real understanding of how that happens. It feels like magic. To the majority of us that is also how the web feels. We are happy to use it but have no idea how it works.

To the majority of us the web feels like magic. We have no idea how it works.

Fortunately there is no need to know how the web works. That said, a basic understanding is useful for those times when the web does not behave as expected. At least then you will understand why it is causing you problems.

How then are you able to open up a web browser and almost instantly find out anything?

From the web to your desktop

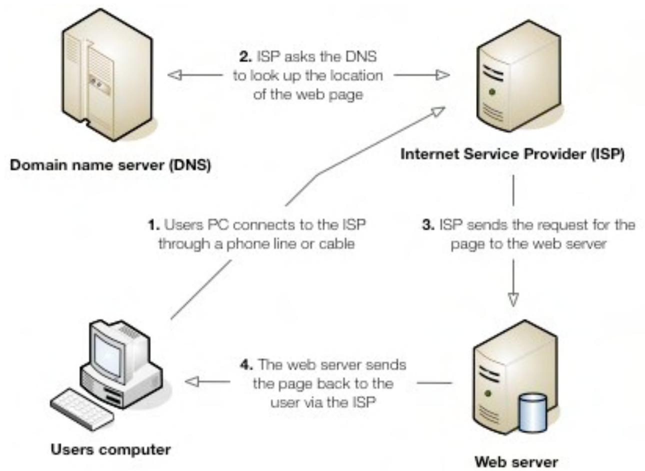
Most of us know that the web is a vast network of computers spread across the globe. While that is the extent of our knowledge, it's also a fairly accurate description. However, knowing more will help explain why sometimes users cannot see your website.

Most of us connect to the web through a telephone line. The speed of this connection is dictated by the quality of the line. A growing number have access via cable. Either way when a user requests a page from your site the request does not go straight to the computer holding the page. First, it is sent to an internet service provider.

The internet service provider (ISP) is the organization who we pay for web access. There are literally hundreds of thousands of ISPs connecting people to the web.

The primary job of the ISP is to pass on a request for a page to the computer holding that page. It first needs to know where that computer is and to do that it needs to contact a domain name server.

Every computer connected to the internet has a unique number that identifies it, called an IP Address. Think of this as the computer's telephone number. Try opening a web browser and typing 72.14.207.99 into the address bar. You will be taken to Google.



There are many steps involved in downloading a web page. Unfortunately there are also many things that can go wrong.

IP addresses are hard to remember, so we normally type a domain name such as google.com. The domain name server is a computer that matches domain names with IP addresses. Once it has converted the domain name (Google.com) to an IP Address (72.14.207.99) and informed your ISP, the ISP will send your request for the web page to the web server.

The web server is the computer which holds your website. It is not very different from your home computer and, with the right software, it is possible to host a website on your home computer. Once the web server receives a request from the user it will find the specific page and pass all of its files to the user via his ISP. The web page then appears in the user's browser.

All of this happens in a few milliseconds. The request for a page and the page itself pass around the globe almost instantaneously, bridging oceans and crossing continents. It is not surprising that there are occasional problems. Three of the most common issues are:

- Domain name redirection
- Connection issues
- Slow download

[4]

Let's look at why each occur and what solutions exist (if any).

Why can't you see my site when I can?

When you first launch your website some users maybe unable to see it. If you had an existing site, users may see that instead. If this is your first site, they may see nothing at all. It is confusing because some will be able to see the new site while others will not.

This is caused by the domain name servers I mentioned earlier. When a new website address is created or that addressed is associated with a different web server, the domain name servers need to be told. Until this happens the website address will not be recognized by the domain name server or will go to the wrong place.

With so many domain name servers worldwide this update can take time. Also, some domain name servers can be updated before others. This is how some can see the new site while others cannot.

Updating domain name servers can take up to 72 hours and so patience is required. If your site needs to be live for a specific date you will need to plan ahead. Speak to your development team as they will have several solutions to this problem. However, you will need to inform them well in advance.

Domain name updates are not the only reason that users cannot connect to your website.

Choosing a domain name

Here are five tips for selecting a domain name:

- **Avoid hyphenated names.** They are easy to forget and hard to read over the phone.
- **Check spelling.** Avoid incorrect spelling like digg or flickr. Also watch out for national differences (color vs. colour).
- **Be descriptive.** Use a name that describes what the site is about.
- **Be local.** Ensure you get the extension for your country (e.g. .fr).
- **Keep it simple.** Use short easy to remember addresses.

Why is my site down?

A common point of contention between website owner and developer is connectivity. The website owner receives complaints from people who cannot access

It is possible for your website to be unavailable for one person but viewable by everybody else.

the website and yet the developer claims the site is running smoothly.

Web server problems are the primary cause of connectivity issues. However, there can be other causes too. Gather as much information for your developer as possible when your receive complaints. Ask the user:

- If they can connect to other websites.
- How long they have had the problem.
- If they have been able to access the site from other computers.
- What browser they are using.
- Have they received an error message.

Connectivity problems can be caused by numerous factors beyond the control of your web team. There maybe problems with the users computer, their connection to the phone line, their ISP or even with the web itself. For example entire countries have gone offline because undersea cables were severed.

With enough information the developer can ascertain where the problem lies and how best to solve it. However sometimes the problem is not unavailability, but rather slow access.

Why is my site so slow?

The speed at which your website downloads is important. Users will look elsewhere if they find your site frustratingly slow. Download speed is dictated by two factors; the size of your web pages and the size of the user's connection to the web.

Unfortunately you cannot control the user's connection. What you can control is the size of your web pages.

Traditionally web designers have focused on making web pages as small as possible, but this focus has slipped with the proliferation of broadband. Large images and video have

[6]

made web pages more attractive but considerably larger. Although there are techniques to minimize the size of a web page, you may have to compromise your content if you know users have a slow connection. Usually, download speed is not an issue these days. However, if you are receiving complaints you may have to cut back on video, audio and imagery. You may also have to ask your developers to streamline their code.

You now know how a web page is delivered to a user, but how is it created in the first place?

Before adding multimedia content to your site, consider carefully whether your users will have sufficiently fast connections.

How web pages are built

Web pages are essentially text files. They do contain special HTML tags, but you could open them in a text editor and easily read them.

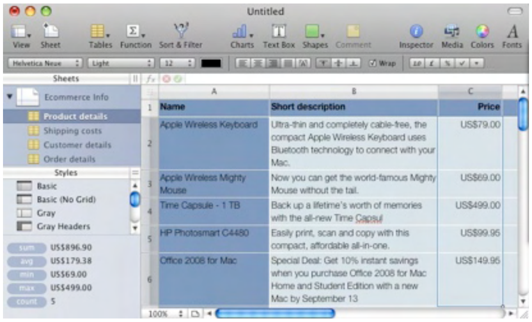
These 'text' files sit on a web server within folders, just like the files on your computer. For example a web address such as:

```
http://boagworld.com/podcast/index.html
```

is simply loading an html file called 'index' from a folder called 'podcast' on the web server that the 'boagworld.com' domain name is associated with.

However, things are not always that simple. Many websites generate their pages 'dynamically' using some form of content management system (as discussed in chapter 8). These pages do not exist as files. Instead they are built as requested, using a combination of a database and server side code.

The majority of technobabble used by developers relates in some way to this dynamic generation of pages. Terms like MYSQL, SQL Server, ASP, PHP and Cold Fusion all refer to this process. Therefore to decode their technobabble it is necessary to understand the concept of databases and server side code.



If you have used Numbers on the mac or Excel on the PC, you have an idea of how a database works.

What is a database?

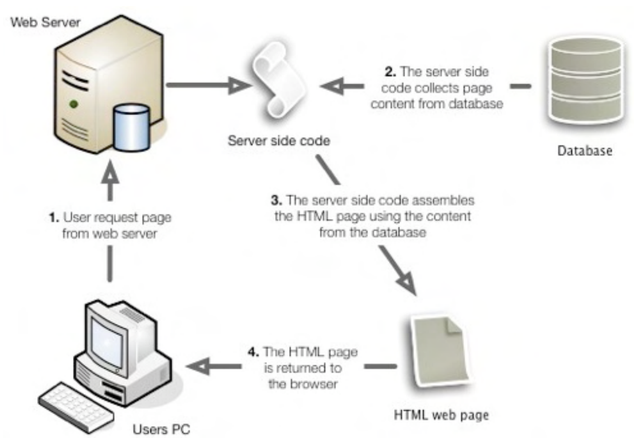
A database is a receptacle for holding information. It does this using tables, rows and columns. If you have used Microsoft Access or Excel you are already familiar with databases.

Content management systems use a database to hold information about your site. Every title, keyword, or other piece of information on a specific web page is held in the database.

There are many different types of databases from an Excel file to a massive Oracle database used on large, heavily trafficked websites. The majority of websites use either MYSQL or SQL Sever. The developer's choice is normally based on personal preference, restrictions of the web server, and which server side language is being used.

What is a server side language?

A server side language is code that runs on the web server. This 'code' can be written to fulfill a variety of tasks. The most common role is to extract content from a database and turn it into an HTML page. The code identifies the page the user wants, collects the appropriate information from the database and turns this content into HTML before passing it back to the user.



The most common function of server side code is to extract content from a database and deliver it as HTML to the user's browser.

[8]

There is a variety of languages to choose between. Some of the most common are ASP, .net, PHP, Cold Fusion, JAVA and Ruby. The pros and cons of these languages are beyond the scope of this book. It is a decision best left to the developer. As with databases the decision is based on personal preference and restrictions of the web server. That said there are dangers in the selection process.

In chapter 8 I mentioned there was a danger of being tied to a particular developer because he chose to code in obscure language. I was talking about their choice of server side language.

Ask your developer what server side language they intend to use. If it is one I have named, then you are fine. If not, ask around and see if other developers can support it. Ask the developer why they chose it. If their answer does not make sense to you, ask for clarification. Some developers unintentionally use technobabble to avoid answering a question. Challenge them, even at the danger of looking ‘stupid’.

Typically for the web, the model I have outlined above is beginning to change. Content is not always delivered as HTML and the web is no longer a series of pages being loaded. We are beginning to see the emergence of a new web, Web 2.0.

Asking for a web 2.0 site is meaningless. Web 2.0 is a methodology not a deliverable.

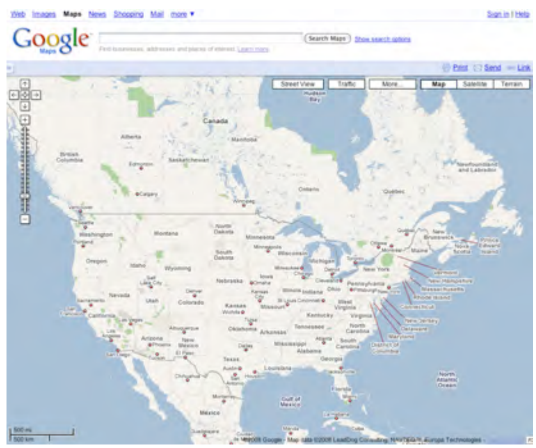
Web 2.0, AJAX and other buzzwords

The term Web 2.0 is in some senses a pointless buzzword thrown around by web designers. However, it is a term you may encounter and so it is worth addressing. There is little agreement as to the nature of Web 2.0. It is a term that has emerged to describe a subtle change in modern websites. I have seen Web 2.0 used to describe:

- **A design aesthetic** - Web 2.0 sites often have a specific look and feel that utilizes large typography, color gradients and reflections.
- **Open data** - Some Web 2.0. sites make their content available to desktop applications, web feeds and even other sites. This has led to a wealth of sites that combine content from other sites in innovative ways.
- **A community led focus** - Web 2.0. sites usually have a community component. This can range from sites like YouTube who are entirely community driven to comments on a blog post.
- **Desktop like experience** - Web 2.0. sites often make use of Javascript to create a more desktop like experience. This is achieved by reducing the amount of page refreshes required through the use of AJAX.

AJAX uses Javascript to grab content from the web and add it to existing pages without the need to refresh the page. This allows sites like Google Maps to constantly update content (in their case a map) without waiting for the page to reload. It has become the basis for many web applications available today.

Although impressive, it does have drawbacks. AJAX can create accessibility problems for search engine indexing, older browsers and people using screen readers.



Google maps use Javascript and AJAX to update their maps without the need to reload the page.

AJAX and Web 2.0 features are tools in your arsenal for creating a great website, but they are not the final objective. Do not let them become a distraction. Furthermore, AJAX is heavily dependent on the browser. As we will discover, the browser is far from perfect.

Grappling with the browser

The browser is a desktop application that displays webpages constructed from HTML, CSS and assets (video, images etc). It is what is referred to as a 'client side application.'

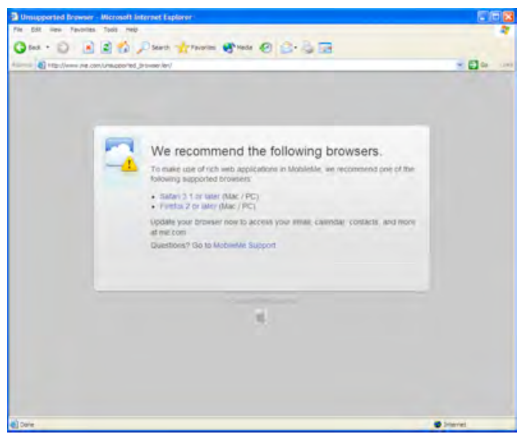
The client side is the user's PC. If the browser runs code it has downloaded, this is 'client side code.' Code that is running on the web server is 'server side' code. This includes the programming languages I mentioned previously.

Although the server side (your web server) is a predictable environment, the client side (the browser) is not. On the server side you decide what technology is installed, how powerful the server is and what the connection to the web is like. On the client side you have no control. The unpredictability of the client side can lead to a plethora of problems, the greatest of which is the differences between browsers.

Different browsers, different bugs

Gone are the days when a site could cater to almost all users by designing for Internet Explorer. Users are increasingly adopting alternative browsers such as Firefox, Google Chrome, Opera and Safari. By ignoring other browsers you potentially turn users away. Why, I hear you ask. Because your website does not appear consistently across browsers.

Mobileme as viewed in Safari



Mobileme as viewed in Internet Explorer 6

Internet Explorer 6 is less capable than modern browsers. Some organisations such as Apple, have decided to no longer support it while others have provided a stripped down site.

Just because a website looks perfect in one browser does not mean it will look so in every browser. Whether this is because of different interpretations of the HTML specification or bugs in the browser itself, sometimes a browser displays a page incorrectly.

To make matters worse there are different versions of each browser. These can make a difference in the way they display pages. For example Internet Explorer 6 had a substantial number misinterpretations of the HTML specification which caused all kinds of problems. Many of these problems were corrected in IE 7, but it broke sites that had been designed to work around the shortcomings in IE 6.

Many website owners become frustrated with their developers when their site does not display consistently across all browsers. They receive complaints from some users and want to know why there are problems. In reality it is inevitable. With a growing number of browsers and multiple versions of each, problems will occur.

The only solution to this problem is careful and systematic testing. Once issues are identified workarounds can be found and implemented. It is a time consuming and expensive process. The more browsers you test the more expensive it becomes.

Caching conundrum

Imagine this scenario: You ask your designer to make a change to an image on your website. You check the site and it hasn't been done. When you confront the designer he claims to have made the change, but you cannot see it. The reason is that the browser has cached the image.

When you visit a web page the browser stores a copy of that page for future use. This means that the page loads faster when you return, because it does not need to download it again. Most of the time this is hugely beneficial, but occasionally you see out-of-date content because the browser has not realized things have changed.

Quick tip to avoid cached content

To make sure you are viewing the most up-to-date version of a page, hold down the 'Shift' key when pressing refresh in your browser. This forces the browser to download the latest version of a page.

Even the largest organisation draws a line. Even though Yahoo! is one of the biggest sites on the web, they choose not to test every single browser variant. Instead, they have a process of graded support.

[12]

	Win 2000	Win XP	Win Vista	Mac 10.4	Mac 10.5
Firefox 3.†	A-grade	A-grade	A-grade	A-grade	A-grade
Firefox 2.†		A-grade			A-grade
IE 7.0		A-grade	A-grade		
IE 6.0	A-grade	A-grade			
Opera 9.5†		A-grade			A-grade
Safari 3.1†				A-grade	A-grade

Yahoo! rate browsers by their capabilities and popularity. Capable, modern browsers (A-grade) are tested more thoroughly. For more information on this approach to browser support visit... http://developer.yahoo.com/yui/articles/gbs/

Graded browser support does not attempt to provide the same visual experience to all browsers. It accepts that some browsers are not capable of displaying modern websites or are too buggy to do so reliably. Instead, browsers are classified into categories and receive different visual appearances depending on that category. For example, A-grade browsers are modern browsers that are less buggy and more capable. These browsers receive the full visual experience and are carefully tested to ensure they work correctly. C-grade browsers have limited functionality and so are only given a basic visual appearance. Some categories receive more testing than others depending on the level of usage they receive.

This approach can seem foreign to many website owners. They are used to print design where everybody sees their brochure in the same way. In Chapter 4 I explained how screen resolution and page constraints can alter the way a user sees a design. Well the browser can too. This is the nature of the web and insisting on pixel perfect design across ever browser is not only unachievable but expensive too.

Unfortunately the differences in user experience do not end with the browser. It is also affected by the plugins installed.

Plugin problems

Browsers only understand a basic set of technology. They know how to display HTML and CSS. They can interpret Javascript and a few other technologies, but that's about it. They are not designed to handle video, games or other multimedia elements. Today's rich internet experience is only possible because of plugins.

Plugins are essentially additional mini applications that can be added to a browser enabling it to understand and run other technologies. The most widespread plugin is the Flash player. Flash is a technology that allows web designers to create complex animations, play video and even build desktop-like applications. Much of this would be extremely hard or impossible without a plugin.

With plugins offering such a wealth of additional functionality, why do many web designers shy away from using them? The answer lies in their availability.

The problem with a plugin is that the user is required to install it. Unfortunately, due to security concerns, browser manufacturers will not allow plugins to be automatically installed. Therefore, there is no guarantee that a specific plugin will be present. Without that certainty, it becomes necessary to consider what will happen if it is not there.

One approach is to ask the user to install it, but fears over spyware, viruses and performance problems can make users reluctant. Some may be unable to install it due to corporate restrictions or lack of knowledge. You cannot rely on users to install software.

You have two options to solve this problem. First, if the content is not critical you could choose to hide it entirely from users without the plugin. Second, if the content is critical you must provide an alternative method of accessing it, as discussed in chapter 7. Producing content twice (once for the plugin and once in an accessible form) is expensive and time consuming.

Some will say this problem does not apply to all plugins. Adobe argues that 99% of all users have Flash installed. With so many users having Flash, why worry about an alternative version? There are three reasons:

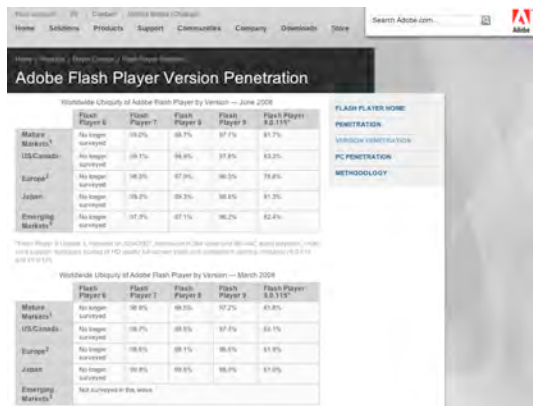
Sites like Vimeo and YouTube rely heavily on Flash to display animation. What happens when Flash is not available?

- **Multiple versions** - Even though Flash is almost universally available, not everyone has the latest version. Like browsers, there are many different versions of most plugins and the functionality supported by each version varies. Just because a user has the right plugin does not mean they will be able to view your content.

- **Alternative devices -** High penetration figures almost always refer to installations running on a PC. This does not take into account the growing numbers of users accessing the web via cell phones or other devices. For example at the time of writing, the iPhone is unable to access content built in flash. Also content contained within plugins is generally inaccessible to users of screen readers and other assistive technologies.
- **Search engine placement -** Most content designed for plugins is inaccessible to search engines. This has a significant effect on your site's ranking. Although some improvements are being made in the indexing of Flash, it is still far from being as indexable as HTML.

The market penetration of a plugin is important especially when there are multiple plugins providing the same functionality. For example there are a number of plugins which provide video, including Flash, Quicktime, Windows Media, Real Player and more. Market penetration can be the deciding factor when selecting a plugin. That said, these figures do not tell the whole story.

Fortunately the unpredictability of the client side is not reflected on the server. This brings us on to hosting your website.



Adobe provide detailed figures about the penetration of its Flash plugin.

Hosting your site

Choosing where to host your website can be confusing. There is a danger of paying too much, suffering from site outages or even being unable to host your site at all. There is an overwhelming number of hosting companies (not to mention hosting the site yourself) with countless ways to set up and run your website. You first need to narrow the field by clearly defining your requirements.

Assessing server requirements

The code written by your web developers may not run on your web server. That is why many website owners choose to have the web developers to arrange hosting. If things don't work, there is only one person to blame! However, that is not always the right move. If you are using an external agency they may charge a premium to host your site. Also, their package might not be as good as an independent supplier. Finally, you may already have a web server which could be suitable for hosting. There are any number of reasons why you may choose to organize things yourself.

Website owners often let their developers arrange hosting so they have a single point of contact if things go wrong.

If you do wish to arrange hosting and want to avoid the scenario where your site does not work, then you need to know what code can or cannot run on your web server.

Earlier I explained that a web server could use databases and server side languages to generate HTML for the browser. However, a web server does not 'just know' how to run server side code or access a database. It needs software installed on the web server first. Without the right software, it won't be able to run the code that generates your website.

There are two approaches to ensuring your web server and code are compatible. The first is the approach I proposed in chapter 3 about informing the developers of any technical constraints they had to work within. This now includes the limitations of your web server and which databases and server side languages it can run. The alternative is to look for a hosting environment that supports the code produced by your developers.

Your choice is largely dictated by circumstances. If you have an existing hosting environment, the developers will have to work within those constraints. If you do not, it is better to let the developer find hosting that fits their requirements. The next step is finding a hosting package that supports the server side code you wish to run.

Finding the right hosting package

All you need to host your own website is a connection to the internet and a computer with the right software installed. This can be a cheap solution for those with low-traffic websites and the technical know-how to set it up. Self hosting is normally for large organizations who want to cut the cost of external hosting and have more control over their sites.

Compare Hosting Packages

Below is a feature comparison for all shared hosting packages.

Resource	Basic	Pro	Ultimate	Bus Basic	Bus Pro	Bus Advanced	Developer
Disk Space	1Gb	1.5Gb	2Gb	1Gb	2Gb	4Gb	1Gb
Bandwidth	20Gb	40Gb	75Gb	20Gb	40Gb	75Gb	10Gb
Websites	1	2	3	3	5	10	5
Subdomains	1	5	10	5	10	15	5
POP3 Accounts	3	7	10	10	20	30	5
FTP Accounts	1	2	3	3	5	10	3
SmarterStats Statistics	0	0	0	1	2	3	0
MySQL Databases	0	2	3	0	3	5	4
Microsoft SQL Databases	0	0	1	0	0	1	4
DNS Zone Editor	✗	✓	✓	✗	✓	✓	✓
ASP.NET 1.1 / 2.0 / 3.5	✗	✓	✓	✗	✓	✓	✓
ASP.NET AJAX 1.0	✗	✓	✓	✗	✓	✓	✓
ISAPI_Rewrite v3	✓	✓	✓	✓	✓	✓	✓
HotlinkBlocker	✓	✓	✓	✓	✓	✓	✓
ODBC DSN	0	2	4	1	5	10	10
Online file manager	✓	✓	✓	✓	✓	✓	✓
Standard Support	✓	✓	✓	✓	✓	✓	✓
Business Support	✗	✗	✗	✓	✓	✓	✗
Premium Support	✗	✗	✗	✗	✗	✗	✗
Uptime Guarantee	99.9%	99.9%	99.9%	99.95%	99.95%	99.95%	99.9%
Setup Fee	FREE	FREE	FREE	FREE	FREE	FREE	FREE
Yearly	£29.99	£39.99	£59.99	£109.99	£164.99	£249.99	£49.99
or Monthly		£3.99	£5.99	£10.00	£15.00	£25.00	£4.99
	Order	Order	Order	Order	Order	Order	Order

Many hosting companies have a terrifying variety of hosting packages.

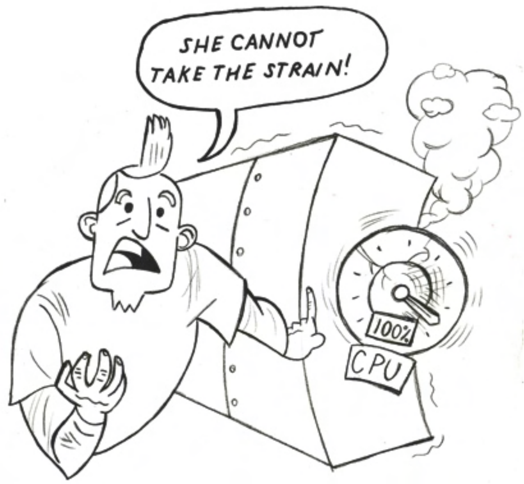
For the vast majority self hosting is not the best option. It requires a lot of technical support and can become expensive if you have to scale your hosting to support a more popular site. Most therefore sign up for a hosting package with an external company.

Every provider has a variety of packages accommodating different configurations. However at the most basic level there are two choices: dedicated or shared hosting. Your web developers should advise you on the more appropriate solution for your site. However, as your choice has business ramifications you need to understand the options. Let's start with shared hosting.

Shared hosting

With shared hosting your site 'shares' the same web server as a number of other sites. The advantage is that you 'share' the cost of the server too. Shared hosting tends to be significantly cheaper, which is why it tends to be the most popular solution for small to medium businesses.

Shared hosting has its drawbacks. You are limited to a set of pre-installed software that comes with your hosting plan. If you are using a popular server-side language and common database, this will not be a problem. You simply buy hosting that includes the combination of software you need. If your configuration is unusual you may struggle to find appropriate hosting. Shared hosting can also be a problem if you add functionality in the future. If you introduce functionality that uses different technology, it may be necessary to change hosting package in order to install that technology.



Although shared hosting is adequate for most websites, you may encounter performance issues.

Fortunately, these restrictions are beginning to change. There are even options available that give you the same level of control as a dedicated solution. However, they are harder to find, more expensive, and suffer from our next problem, performance.

Because you share your web server with others, there is a danger that those sites affect the speed of yours. For example, if the other sites are badly coded, they could cause the whole server to run slowly. Another possibility is that somebody's site experiences an increase in traffic. This causes the web server to work harder delivering the new page requests.

That said, most shared web servers are capable of dealing with these problems and the hosting companies monitor performance carefully. Shared hosting is perfectly adequate in most situations, but if you require more control then consider dedicated hosting.

Dedicated hosting

With dedicated hosting you buy or rent a web server that resides at a hosting company. It is like hosting the site yourself, but the server resides at a professional data center. The

Media Temple is one of a growing number of hosting companies to offer Dedicated virtual hosting. This is shared hosting but has many of the benefits of dedicated, including the ability to install whatever software you wish.

advantage is better security (important for storing personal information) and a faster web connection.

Dedicated hosting also avoids the problems of shared hosting. Because only your site reside on the server there are no performance issues caused by other sites. Also you have complete access to the computer allowing you to install any software you choose.

The downside is price. Dedicated hosting is expensive compared to shared. There is the cost of hosting and the additional cost of associated software. This can range from free (for open source solutions) to thousands of dollars for enterprise level software. That said, the cost of dedicated hosting is coming down and there are some excellent deals around.

Dedicated hosting remains the best option for highly trafficked websites, those that require custom-installed software, or organisations running a number of different sites. Deciding on the type of hosting and what software you require will go a long way to narrowing the field. Just like the selection of a cms, you also need to consider the company behind the product. In this case you need to assess the hosting provider.

Assessing hosting companies

Presuming that your site does not require anything unusual in terms of hosting, you will be faced with a plethora of potential providers. Some will be temptingly cheap, but be wary of buying on price alone. There are a number of other criteria you should consider:

- Uptime
- Support

- The control panel
- Limitations on growth
- Hidden charges

Let's take a look at each, starting with uptime.

Most uptime guarantees are worthless. The figures quoted are merely a figure they are striving for.

Uptime

The last thing any website owner wants is for their website to be unavailable. Many hosting companies therefore provide uptime guarantees. Figures range from 95% uptime to 100%. What exactly are they guaranteeing and is it something you should worry about?

In most cases uptime guarantees are worthless. They do not actually guarantee that your website will be available 100% of the time. This is merely a figure they are striving for. If they fail, they will compensate you. This compensation usually involves a partial refund of your hosting bill, but this could be insignificant compared to the losses in sales. Always clarify what compensation is being offered.

Remember that even the largest organisations have downtime. It is a problem that can never be entirely avoided. Websites can be unavailable due to connectivity issues, poor code or any number of reasons beyond the control of your hosting company. As a result they often specify exclusions from compensation in their terms of service.

In short uptime guarantees are meaningless. They are simply a marketing tool. Instead, search for reviews of the hosting company or look at their support forum. If their are lots of complaints about downtime, think twice. However, in most cases the service offered in regards to uptime is fairly universal.

Instead of asking how often your site is likely to go down, ask what happens when it does? What kind of support can you expect?

Support

Support is arguably the single most important factor in choosing a hosting company. Whether it is your website going offline or a piece of functionality not running, it is inevitable you will have problems with your hosting. You will need to quickly reach somebody who can help.

When your website goes offline you want to be sure of a fast response.

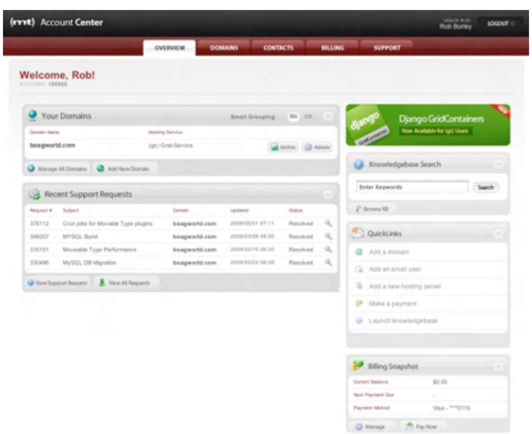
How can you tell if a hosting company offers good support? Look for the following things:

- **24/7/365 support -** When your website is offline you need to be able to get help instantly. Check that your hosting company offers support 24 hours a day, 7 days a week, 365 days a year.
- **Telephone support -** There is an increasing trend towards email only support. However, technical problems can be hard to diagnose and prolonged conversation via email are time consuming. When your site is offline you need the immediacy of a phone call. Ensure that option is available to you.
- **Speedy response -** Whether contacting your hosting company by email or phone you should expect a speedy response. It is unacceptable to sit on hold while your site is down or waiting days for a response to an email query. I recommend calling the technical support telephone number before you sign up for their service. How long do you have to wait before speaking to a real human being? Also, send a question via email and see how long it takes to get a reply.
- **In country support -** Personally I prefer speaking to local support staff. Being put through to call centers in far-flung locations can be frustrating when discussing complex technical problems. If you do not share the first language of support staff misunderstandings are easier. By calling the support number before signing up you

can establish whether there will be communication problems.

- **Knowledgeable staff -** Call centers are often manned by individuals with limited technical knowledge. This can be frustrating when endeavoring to resolve technical issues. Ideally you should be able to speak directly to the individuals managing the web servers. If you are not technical ask your web developers to speak to the support staff at the hosting company before signing up. They should be able to judge their technical competency.
- **Technobabble free support -** Talking to technical staff can be *equally* frustrating if support staff are overly technical. By calling the support line before purchasing you should be able to get a sense of their communication skills.
- **Self service support -** Contacting technical support is the last resort. In most cases you should be able to find the answer to questions yourself through your hosting company's support site. Look at their site and see if they have frequently asked questions, a knowledge base, forums and a list of current known issues. Facilities like this can save time, so make sure they are available.

Self service should also extend beyond support. Most hosting companies also provide a control panel for managing your site.



A web-based control panel allows you to carry out basic maintenance on your site.

The control panel

Calling technical support every time you want to change the password is frustrating, so most hosting companies provide a control panel for basic maintenance. This includes managing email, changing passwords, uploading files, backup and accessing site statistics.

Evaluate the control panel and discuss it with your developers. If the hosting company does not have a demo available on their site, call and ask for access to one.

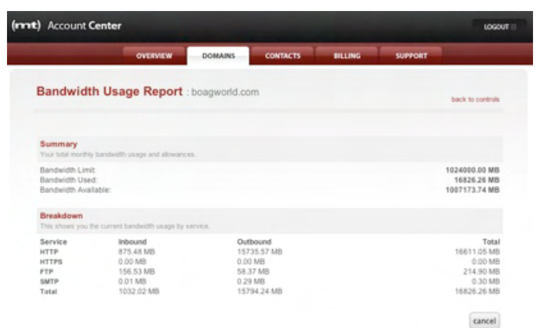
If nothing else this will demonstrate how responsive their customer service is.

Once you have access, ask yourself whether it provides all the functionality you require? Is it easy to understand and use? For example, how does it handle the management of multiple sites? This is particularly important as your online presence grows.

Limitations on growth

As your site becomes more successful you will become more ambitious in your plans, and visitors will flock to it in ever larger numbers. Will your hosting company keep up with this growth? In order to answer this question you need to understand three things:

- **Can you manage multiple websites centrally? -** You may start with a single site but if it is a success you could want to launch more. It could be a sub-site that supports a marketing campaign or a site dedicated to a subset of your audience. These sites will need to be managed centrally, so avoid multiple logins to administer multiple sites. Check with your hosting company that they provide a single interface to manage multiple sites.
- **What is the upgrade path? -** As your site grows in terms of visitors and complexity you may find the need to migrate from shared hosting to dedicated. You may even need to upgrade your dedicated box to something more powerful. It is important to understand how this process works. You want to avoid the need to backup your entire site and install it all over again. A good hosting company should make this a seamless transition.
- **What happens if you exceed your bandwidth limits? -** The more successful your website the more expensive it will be in term of bandwidth. Most hosting plans come with a bandwidth limit. The hosting company has to pay for each piece of data a user downloads from your site, so they cap how much data they allow to be downloaded. This is



If your hosting plan has a bandwidth limit, does your control panel display current bandwidth usage?

more than adequate for most sites, but what happens if you exceed your bandwidth limit? How much extra will it cost? What happens if you exceed your limit without a higher rate package in place? Will it costs you even more? Does the control panel provide a way to monitor current bandwidth use?

It is not just bandwidth that can become expensive. You may discover there are other hidden charges too.

Additional bandwidth usage is just one hidden cost that may show up on your bill.

Hidden charges

Some hosting companies can appear to be inexpensive on the surface but have a hidden cost. Establish what is included in the monthly charge and what is not. I have encountered hosting companies who have made additional charges for:

- More than a predefined number of email accounts
- Advanced email functionality such as exchange server or spam filters
- A technician to physically restart your web server
- Add-on technologies
- The ability to run databases
- Access to website statistics

The list could go on. There is nothing wrong with hosting companies using this form of modular pricing. It can keep the price down if you only require basic functionality. The problem comes when they do not clearly communicate these additional costs and they come as a surprise.

Next Actions

Commissioning a website is a minefield of jargon and technical detail. However, this chapter has tackled the key technical issues you need to know. We have addressed how the web works and why things sometimes go wrong. We have looked at how web pages are created and how that is changing thanks to AJAX. We have investigated the problems with browsers and most importantly looked at how you host your site.

Now is the time to turn what you have learnt into action.

- **Action one: End the technobabble** - Stop allowing your developer to use language you do not understand. Next time they do, ask them to explain. It is their responsibility to ensure you have the information you require to make an informed decision. You should not be embarrassed to ask if you do not understand something.
- **Action two: Choose a host** - If you have yet to arrange hosting, now is the time to speak to your developer using the knowledge from this chapter. Together you can investigate the options available. Alternatively if you already have hosting, begin a review of the service. Does it measure up to the criteria we have discussed? Should you be considering alternatives?
- **Action three: Expand your vocabulary** - I have only scratched the surface of the technobabble you may encounter. Should you come across terminology that you cannot get explained, I recommend looking the glossary of terms found on the Sitepoint website (sitepoint.com/glossary/). This provides definitions for everything from Accesskeys to XHTML.

You now have all the information you need to know in order to commission and build a website. We have addressed writing a brief, assembling your team, designing your site, writing your content, and ensuring usability, accessibility and best practice. We have even looked at how to find somewhere to host your site.

Does that therefore mean your job is done? Unfortunately not. Although the build phase is over you still need to promote your site, engage with your users and plan for the future. It is this we need to address next, starting with site promotion.

In this chapter

- **Become number one on Google**
  - Avoid being blacklisted
    - *Spot black hat operators*
    - *Spot black hate techniques*
  - Improve your search engine rankings
    - *Improving your sites build*
    - *Improving your sites content*
    - *Encouraging quality links*
  - The problem with search engines
  - Pay per click advertising
- **Beyond the search engine**
  - Offline promotion
    - *Business stationary*
    - *Traditional media*
    - *Miscellaneous marketing material*
    - *Word of mouth*
  - Targeting your audience
    - *Social sites*
    - *Editorial sites*
    - *Viral marketing*
- **Measuring success**
  - Monitoring marketing
    - *Monitoring conversion*
  - Finding and resolving problems
    - *Dropout points*
  - Identifying popular content

[1]

10 Driving traffic

In the movie 'Fields of Dreams' Kevin Costner hears a voice in his corn field tell him, "If you build it, they will come." Many website owners have the same mentality. They believe if they build a website, users will turn up. Unfortunately it does not work like that. They mistakenly see their website as a marketing tool in its own right.

The best way to think of a website is as a shop front. If you open a new store a few people will wander in, but not in substantial numbers. In order to make your shop a success it needs to be promoted.

You need to continually promote your site if you want to maintain a high level of new visitors. It is not enough to promote your site when it is first launched. A long term strategy for site promotion is required.

Many see search engine placement as the answer for their long term strategy. They spend vast amounts of money on search engine optimization experts. However, search engine placement is only a single component in a larger strategy. You will also need to actively pursue your audience, create great content and promote your site offline.

That said, being ranked well on sites like Google is the linch pin of your broader strategy, so we'll begin by looking at the role of the search engine.

Become number one on Google

My publisher will love the fact that I have a section entitled 'become number one on Google'. Titles like that sell books. After all, that is what every website owner wants.

There is no shortage of companies promising the number one position. But can they really deliver what they are offering? To answer that question we need to refer back to something I said in chapter 7:

> *Search engines are only interested in one thing - providing relevant results to their users.*

If your content is not relevant, no amount of clever search engine optimization is going to get you to number one.

There are of course ways to 'trick' Google into ranking your site better, but these break Google's own guidelines. These are sometimes used by SEO companies to improve ranking. In almost all cases the benefit is temporary as Google works to close such loopholes.

Google comes down hard on sites who disregard their guidelines, but there are techniques which will legitimately improve your ranking. These focus on removing obstacles which could hinder search engines from indexing the content of your site.

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BMW given Google 'death penalty'

Search giant Google has "blacklisted" German car manufacturer BMW for breaching its guidelines.

Investigations by Google found that BMW's German website influenced search results to ensure top ranking when users searched for "used car."

Google has now reduced BMW's page rank to zero, ensuring the company no longer appears at the top.

BMW admitted using so-called "doorway pages" to boost search rankings, but denied any attempt to mislead users.

Some of the suspect pages already appear to have been removed

BMW's activities were revealed in a blog by Google software engineer Matt Cutts.

BMW's German website, which is heavily reliant on javascript code unsearchable by Google, used text-heavy pages liberally sprinkled with key words to attract the attention of Google's indexing system.

"If Google says all doorway pages are illegal we have to take this into consideration" — BMW spokesman

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Car manufacturer BMW was effectively removed from search engine Google after attempting to inappropriately manipulate their ranking.

How can you distinguish between agencies using legitimate techniques and those using 'black hat' techniques? How do you avoid the fate of BMW?

Avoiding being blacklisted

Although there are many companies who provide valuable search engine optimization (SEO) services, there are also a number who are out to deceive. There are two ways to identify a less-than-reputable SEO company: information about the company itself and the techniques they choose to use. Let's address each in turn.

Spot black hat operators

Be skeptical of any company that contacts you out of the blue. The ideal way to find somebody is via personal recommendation. Failing that, apply the same methodology we used to select a web design company in chapter 2.

Beware of companies who guarantee a particular ranking. If a company promises that you will be ranked number one on Google, ask for more information. It is easy to get ranked number one on Google for an obscure term. It is much harder for something that is useful from a marketing perspective.

Always challenge organisations who guarantee prominent placement on a search engine.

What happens if a company fails to live up to its guarantee? Is there any real value in their promise? The answer is probably not.

Finally ask the SEO company to clearly explain the techniques they use. Do not use a company who are evasive in answering this question. If you discover the techniques they are intending to implement, this will enable you to judge whether you are in danger of being blacklisted.

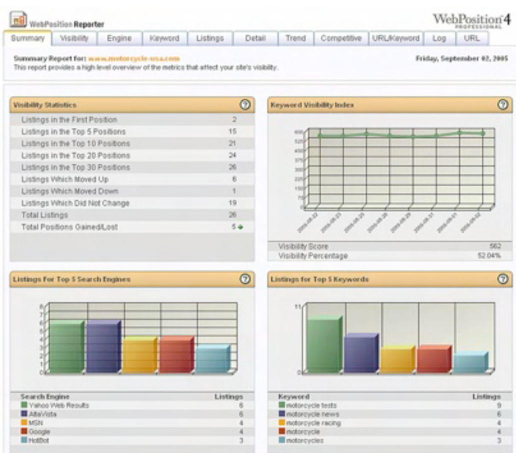
Spot black hat techniques

Google provides excellent documentation on how to improve ranking. They also provide advice on avoiding unacceptable SEO techniques. These nefarious techniques include:

- **Hidden text and links -** These exist only to improve search engine rankings. They are intentionally hidden from users and visible only to search engines.
- **Search engine only content -** Using techniques such as redirects and cloaking, it is possible to present different content to a search engine than to a real user. This approach is often used by sites built in Adobe Flash because search engines find it hard to index Flash sites. This breaks Google's terms of service.
- **Automatically submitting to Google -** Many use software packages such as Web Position to automatically submit websites to multiple search engines. This is specifically prohibited by Google's terms of service.
- **Duplicating content -** Although Google recognizes that some content can be duplicated for legitimate reasons (e.g. a separate print version of your site), it frowns on websites that deliberately duplicated in an attempt to manipulate rankings.
- **Doorway pages -** These pages are created with the sole purpose of ranking well for certain keywords. They often have poor content and exist solely to funnel users to the main site.

The BMW website presented very different content to users (top) than to search engines (bottom). This broke Google's Webmasters guidelines.

- **Keyword stuffing -** This is the practice of loading a webpage with keywords in an attempt to manipulate ranking. This creates a negative user experience and could ultimately cause Google to take action.
- **Participating in link schemes -** Although site ranking is partially based on who links to you, link exchange programs are a bad idea. Exchanging links without considering their relevancy will damage your ranking.



Web Position is one of many tools that will automatically submit your site to search engines. Although these tools save time they break Google's terms of service.

Will implementing the above techniques get you removed from Google? Probably not. However, they will damage your ranking over the long term and almost certainly be a waste of money.

Should you therefore avoid hiring SEO companies? Not necessarily. There are many reputable companies offering superb advice on how to improve your rankings. Use what you have learnt here to find a respectable supplier.

But what if you cannot afford a SEO expert? What can you do yourself?

Improve your search engine ranking

You and your team can do a number of things to improve your placement on search engines. These fall into three broad categories:

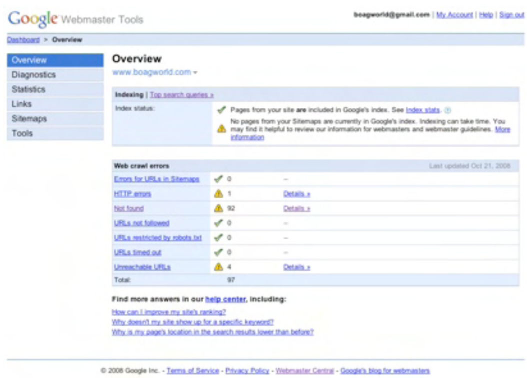
- Improving your site's build
- Improving your site's content
- Encourage quality links

We have touched on the subject of building for search engines in chapter 7, but there is more you can do.

Improving your site's build

In chapter 7 we saw how accessibility can improves search engine placement. We avoided content types that search engines could not access (like Adobe Flash), marked up content semantically and used appropriate ALT and title attributes. Although these techniques ensure content is accessible to search engines, it does not mean they will discover that content in the first place. The following will ensure Google and other search engines discover your content.

- **Create a clear hierarchy -** Every page should be reachable from at least one other page of your site.
- **Use text links -** Links between pages should be textual rather than use images, Flash or other unaccessible technologies.
- **Use short URLs -** Some web addresses created by dynamically driven websites (such as those built using content management systems) cause problems for search engines. Shorter web addresses with fewer parameters (characters after the ? in the address) are more likely to be found.

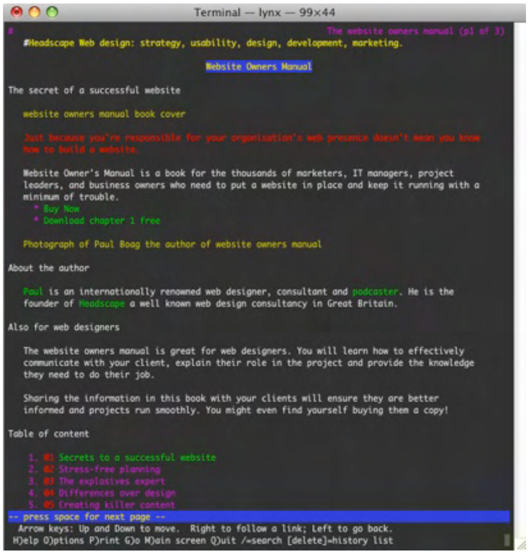


Google has a suite of tools that provide a way to make your site more Google-friendly. They show you Google's view of your site, help you diagnose problems, and let you share info with Google to improve your site's visibility.

- **Add a site map -** Add a site map that includes links to the important content. Try not to exceed 100 links on a page as this can cause problems.
- **Submit your site -** A search engine will find your site through those who link to you. Speed up the process by submitting your site for indexing. For Google this can be done at http://www.google.com/addurl.html. You can also submit a site map using Google's Webmasters tools. This helps Google learn the structure of your site and increases the number of pages indexed.

Once search engines can access your website, you need to address the content.

[7]



Check that search engines can view your site using a text browser such as Lynx. Search engines access your site in a similar way.

Improving your site's content

The most important consideration when writing copy for search engines is the inclusion of search terms. Before writing a page have a clear idea of what it is about and what search terms people might use to find that subject. Next, incorporate them naturally into copy, headings, image alt attributes and the page title.

Be careful not to use too many search terms. Two or three per page is adequate. If you use more, copy may become hard to read and the ranking of each individual term will be reduced. Do not stuff a page with search terms as you may be penalized. They should be incorporated naturally into your copy. Try reading your copy out loud. If it sounds like you are forcing the use of keywords it will require some rewriting.

Focus on writing good copy. Well written and engaging copy will also attract links.

Encourage quality links

If you already run a website, you will have probably received an email from somebody wanting to 'exchange links'. The email may have explained that Google ranks pages by the number of incoming links. There is some truth in this claim. Google does *partially* rank pages based on the number of sites who link to you. This is not the whole story.

In reality nobody but Google knows how they rank sites. Links are a factor but it is not just the quantity that matter. Google states that:

> *The quantity, quality, and relevance of links count towards your rating.*

Google looks at a number of factors:

- The subject matter of the site linking,
- The copy that appears in the link,
- The popularity of the site linking,
- The reputation of the site linking.

Linking to sites that are not relevant to your subject matter rarely provides SEO benefits.

It is rarely worthwhile responding to link requests unless they come from a high profile website with appropriate content. It is however worth seeking links from relevant sites. Which sites would you like to appear on irrespective of the benefits to your ranking? Which sites do your target audience frequent? Getting featured on such sites provide benefits of their own. Later in the chapter we discuss ways of being featured on these sites.

Although these techniques we have discussed will help improve your ranking, search engines should not be your sole focus. In fact, search engines have a lot of drawbacks.

The problem with search engines

Search engines are not the most effective marketing tool. If it weren't for the large number of users they can potentially reach, I doubt people would bother.

Their unpredictable nature is thoroughly frustrating. You can spend time and money refining keywords and optimizing pages only to receive a poor ranking. There are no guarantees in SEO and that is unusual. You wouldn't buy advertising in a newspaper without knowing how prominently your advertisement would appear. Also SEO is not a one-time cost. With new sites coming online everyday and existing sites jostling for position, maintaining your ranking is a continual battle.

In addition SEO brings with it usability concerns. The more one focuses on search engine rankings, the less you are focusing on users' needs. This can lead to copy and navigation becoming stuffed with keywords and hard to read.

You wouldn't buy an advertisement in a newspaper without knowing the where it will appear, but when you spend money on SEO you have no guarantee as to where you will be listed.

To justify this aggravation, you would expect search engines to be a remarkable marketing tool. However, SEO is actually a very passive form of marketing. SEO relies on users' recognizing their need for a product or service. Unless they are aware of that need they will not search for it and discover your site. Other forms of marketing both fulfill and *create* need. In this regard search engines are weak.

They also rely on the user typing in keywords you have included in your site. Unfortunately, people are unpredictable and enter keywords you do not expect. Part of the problem is that we have all worked in our respective industries too long and use jargon unfamiliar to our users. Despite our best efforts we lose potential visitors because they use different search phrases.

It can take months for a site to become listed and almost as long for SEO work to take effect. This makes it hard to tweak and improve your marketing campaigns. It also means that sites with short life spans (such as an event) may not appear at all.

Despite all of these frustrations, search engines cannot be ignored. One way to relieve the pain is to use Pay Per Click advertising.

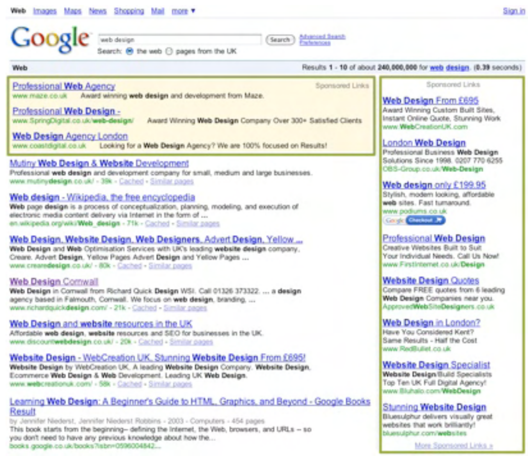
Pay Per Click advertising

A number of organisations offer pay per click advertising, but Google Adwords dominates. Adwords appear on Google's search results and thousands of other websites. Any website owner can add them to a site as a way of generating income.

The ads consist of a short title, a two line description and a link. Each is associated with a set of keywords. The ad is displayed when a user searches for an associated keyword or visits a site that has Google ads and is considered relevant.

Ads are paid for on a 'per click' basis. You only pay when the ad is clicked and the user visits your site. The amount you pay is dependent on the popularity of the keyword entered by the user.

Although Google search results can display many ads, the top 3 slots are more likely to be clicked and so competition can be fierce. The more you are willing to pay, the higher your ad appears. Each advertiser specifies a maximum they are willing to pay per click, and the system ranks the adverts accordingly.



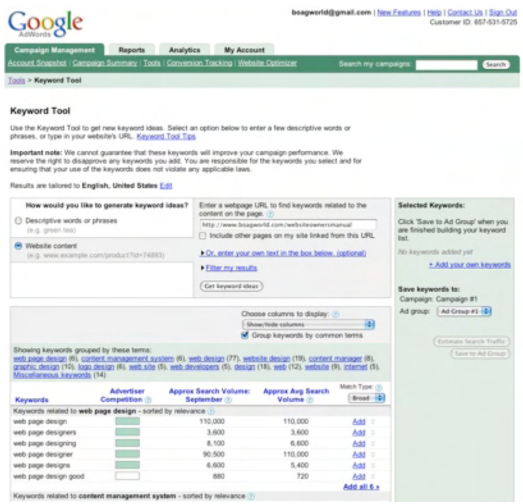
Google Adwords are small text ads that appear above or to the right of search results on Google.

Depending on the level of competition, you may be charged less than your maximum bid. You can further limit your spending by setting a daily budget. Once this limit has been reached your ad will be removed.

With prices starting as low as 10c per click and the ability to control precisely your spending, Adwords is an attractive method of advertising. It also overcomes the limitations of normal search engine listings:

- You have guaranteed placement,
- No adjustment to your site is required, thereby avoiding usability concerns,
- Return on investment is much more predictable,
- Your ad appears in a matter of minutes,
- You can even target non relevant keywords if you wish to create a need that does not currently exist.

Getting started with Adwords is easy, but mastering it requires some experimentation. Although it will drive traffic to your site straight away, you may overpay for each click initially and the quality of traffic could be poor.



The Google Keyword tool is invaluable when selecting keywords for your campaign. It will make suggestions based on phrases you enter or using the content of your website.

A common mistake is targeting broad keywords such as "men's fashion." Competition for broad keywords is fierce and prices are high. Also, broad keywords generate lower quality leads. Those responding to ads on broad keywords are less likely to want your product. Instead be specific with your keyword phrases. Instead of "men's fashion" use multiple keywords naming specific brands.

Broad keywords are just one of the many mistakes first-time advertisers make. Read the help section on Google Adwords. It provides advice on selecting keywords, writing an effective ad, optimizing conversions and tracking performance. It also offers several tools to help run campaigns, like their keyword suggestion engine.

So far this chapter has focused exclusively on search engines. However, search engines are only a small part of your site's marketing strategy. What makes up the rest?

Beyond the search engine

The opportunities for promoting your website are endless. With so many options you must decide which approach is right for your site. This is dependent on your audience and objectives. However, there are three strategies that all websites should consider:

Each approach has their pros and cons but most campaigns incorporate at least some of each. Let's begin by examining the most neglected of the three, offline promotion.

Offline promotion

It is amazingly easy to overlook the obvious. This is especially true for website owners who spend so much time focusing on the web. They eventually develop tunnel vision when it comes to marketing. In their haste to improve search engine rankings or get on Facebook they overlook offline methods of promoting their sites, even though offline promotion can be quite powerful in certain circumstances. It is particular effective when trying to:

- reach an audience in a specific geographical area,
- encourage repeat traffic from existing customers,
- move customer interactions online

If you use any of the following forms of communication they should also be promoting your website:

- Business stationary
- Traditional media
- Miscellaneous marketing material
- Word of mouth.

The most obvious of these is business stationary.

When promoting your website offline, always place your website address alongside your logo.

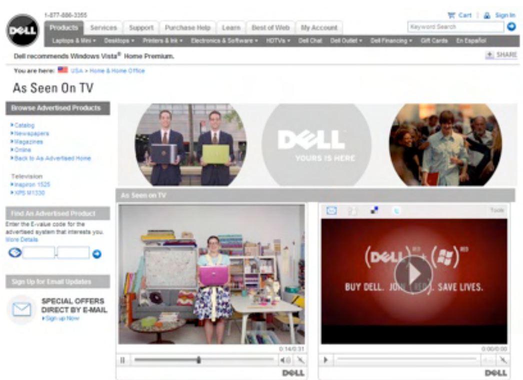
Business stationary

A good rule of thumb when promoting your website offline is to place your website address wherever your logo appears. Nowhere is this more true than with business stationary. Business stationary includes business cards, letterheads, envelopes, leaflets, brochures and any other form of documentation or paper based promotional material. If you have a marketing style guide, amend it to mention the inclusion of your website address whenever possible.

There are also opportunities to promote your site in more overt traditional advertising.

Traditional media

In 2001 I worked for an internet startup who had raised significant capital through a flotation. Flush with newfound wealth, it embarked on an aggressive marketing campaign developed by a top London advertising agency.



Dell's TV advertisements encourage viewers to visit a specific page on their site. This page builds on the messages communicated in the TV spot.

The first fruits of this campaign was a nationwide radio advert. Although it communicated very clearly our offering it failed to mention the website address!

Things have come a long way since 2001 but still I see organisations missing the opportunity to promote their websites on TV, radio and newspaper advertisements. A website can be the perfect call to action that many adverts lack. Consider how you can tie the web and traditional media together. How can your site support your advertising and vice versa?

Although business stationary and traditional media encompass the majority of marketing opportunities for your website, there is still a plethora of other smaller opportunities.

Miscellaneous marketing material

Your branding appears on a whole host of items including company vehicles, uniforms, conference stands and point of sales material. There is also the marketing collateral many companies give away. These include T-shirts, pens, mouse mats, calendars and an abundance of other miscellaneous items.

These are all opportunities to put your website in front of potential customers. There is one more means of offline promotion that is overlooked: word of mouth.

Word of mouth

Word of mouth is an effective means of promoting your site, and it begins with you. You need to convince your colleagues that your site has value and to spread the word.

Encourage your call center to point people at the website when possible. Sales people should be using the website as part of their sales process. Even account managers, partners and suppliers can refer people to the website.

Until you promote your website within your organisation, staff will not tell customers about it.

You need to ensure the site is a useful resource. If you followed my advice in Chapter 2, then you should have spoken to these people about how the site can be developed to accommodate their needs. Now you need to show them the benefits and encourage them to tell others.

Consider offering staff training or throwing a launch party when the site goes live. Send out a regular newsletter to employees, telling them about new site features. Maybe even make everybody's browser default to your site. Anything to bring attention to the site.

Offline promotion needs to be accompanied by online marketing. This can be done using the 'scatter gun' approach of viral marketing or using a more targeted strategy.

Targeting your audience

One of my problems with search engines is that they are passive. They rely on users recognizing a need and actively looking for it. Waiting for users to turn up is not enough. You need to search them out and encourage them to visit your site.

One way to actively pursue your target audience is to frequent websites they visit. These sites could be about anything, as long as they attract the right audience. For example if you sell mobility scooters to the elderly, try looking on sites which cover retirement or health. Ask yourself what the audience is interested in, and find sites on that subject. Once you have found some possible sites, identify the ones that offer promotional opportunities. There are two types of sites that can be used in this way:

- **Social** - Sites where your target audience meet to discuss common interests or share information.
- **Editorial** - Sites that post articles, reviews and other information appropriate to your target audience.

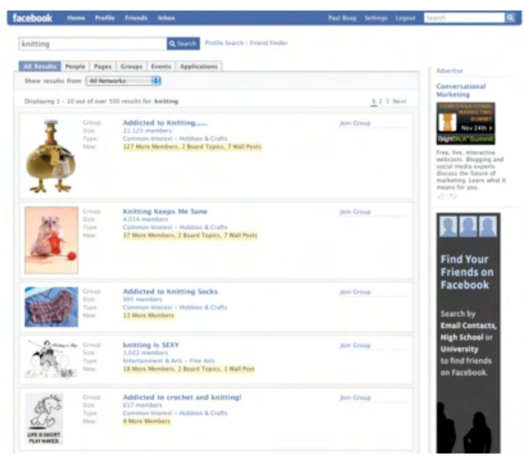
The way you use these two types of sites is very different. Get it wrong and you can damage your brand and drive visitors away. This is especially true of social sites.

Social sites

Community websites are intrinsic to the web. They include forums, chat rooms, and mailing lists. Recently the web has seen an explosion of community websites, serving every conceivable niche. From sites discussing politics or religion to hobbies such as knitting and hiking, the options are endless.

This explosion is partly due to sites like ning.com that make it easy for anybody to create a social site. Whatever your target audience, there will be a social site where they meet.

How do you promote your website through these social sites? The answer is carefully! Increasingly website owners are recognizing the marketing value of social sites and spamming them with blatant promotion. This only serves to anger users and damage the perception of your brand.



Facebook has groups catering for every possible interest. These groups can be an effective way of targeting your audience.

To effectively market to a social site a more subtle approach is required. Always adhere to the following guidelines:

Shouting at people on the street is not an effective way to promote your website. The same is true online. Never post blatant adverts for your site on social websites.

- **Build a reputation -** Never just start shouting about your site. You must earn the right to promote it. People need to know and trust you. This involves a long term commitment to that community.
- **Use your profile -** Most communities provide profile pages. These allow you to post basic information about yourself and link back to your site. Completing your profile shows other users you are committed to the community.
- **Do not self promote -** Never post about your site directly. Instead add a small link at the bottom of your post in the form of a signature.
- **Follow the rules -** Be sure to read and follow any community rules on self promotion or risk being banned.
- **Contribute value -** Avoid posts that add no value. Posting 'Yeah I agree' or 'good point' followed by a link to your site is just spam. Build respect by posting useful responses and contributing value to the discussion. Once you have done that people will be more responsive to what you have to say and more likely to visit your site.
- **Admit mistakes -** If you overstep the line and users complain, apologize quickly. Never become defensive and avoid confrontation.
- **Don't spam -** Finally, never spam a community. Do not visit a community, post and never return. Do not post repetitively and indiscriminately.

Marketing through social sites is a long term commitment, but it is worth it. Because of the commitment you will only be able to target a small number of communities. This will not drive large amounts of traffic. However, the quality of those users will be high. They will know and respect you. They will be interested to hear what you have to say. Social sites are an excellent marketing opportunity for organisations trying to sell high value services. In such cases the quality of lead that matters more than the quantity.

Social sites provide one promotional opportunity, but editorial sites allow for a different approach.

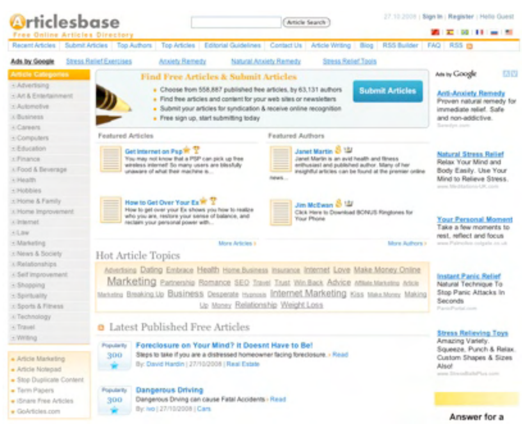
Editorial sites

Editorial sites are article based. They includes news, reviews and magazine sites, as well as blogs. They tend to be topic oriented (such as sports) or lifestyle focused (like content for the over 50s). Some are run by large professional organisations such as national newspapers, others by enthusiastic amateurs normally in the form of a blog.

Don't dismiss blogs. Some blogs have massive audiences that exceed those of traditional sites. Some blogs are highly influential with a loyal subscriber base who take their opinion very seriously. These influential blogs are also monitored by mainstream media who occasionally pick up their stories.

It can be tricky getting mentioned on these editorial sites. However, there are three possible avenues:

- **Write for them** - The best option is to write for these sites. They are always looking for content and most are willing to consider submissions. When submitting articles make sure they are relevant and interesting to the audience. Self promotion is unnecessary because the publisher normally links back to your site.
- **Commenting** - Many editorial sites allow readers to respond to an article in the comments. If you



Sites like articlesbase.com distribute your articles for others to use. Potentially this will lead to links back to your site. However, a more effective approach is to contact specific sites that you would like to write for.

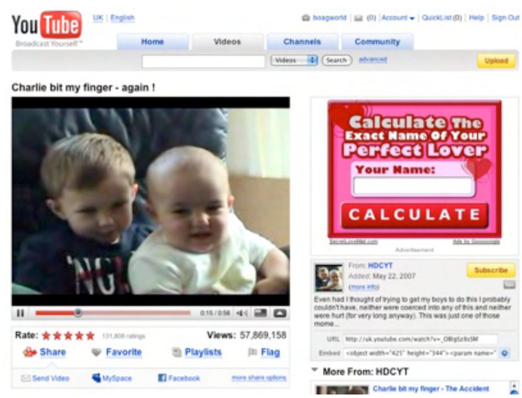
cannot write for the site begin posting comments on other articles they publish. As with social sites, it is easy to fall into the trap of spamming so make sure your comments add value and aren't self promotion. Comments allow you to add a link, so that is your opportunity to promote your site.

- **Email -** The final option is to email the publication and tell them about your site. Explain why the site is of interest to their audience and suggest how they might wish to write about it. Provide a story or angle that the publication can write about.

Editorial sites are a highly targeted way of reaching users, but there is another approach that can potentially drive many more users - viral marketing.

Viral marketing

Users turn to the web for entertainment as well as information. Sites like YouTube, Digg, Facebook, Myspace and Twitter have exploded in popularity because they offer social interaction, amusing videos and entertaining content. Content on these sites is user generated and gains popularity through peer to peer recommendation. If people like the content they pass it on. 'Going viral' can generate a lot of traffic.



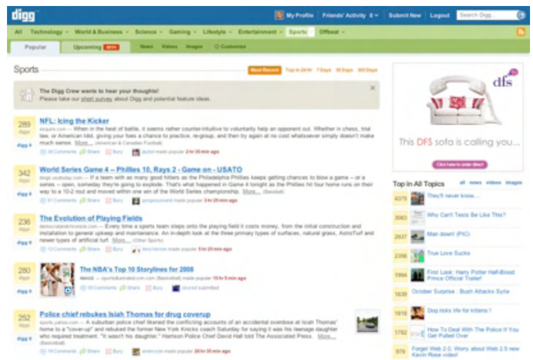
Although unpredictable viral content can attract huge audience. This video of a baby biting his brothers finger has been viewed 57 million times.

Popular content on YouTube can be viewed by millions of users. Equally Digg has become known for the 'digg effect' where entire sites collapse under the weight of the traffic they send. With the ability to generate high levels of traffic, viral marketing can appear very appealing. However, these figures can be misleading. The quality of traffic generated through viral marketing tends to be poor. This is for a number of reasons:

- **It is much harder to target specific audiences.** With viral marketing you have little control over who is exposed to your content. Although the nature of the content has some influence, it is not as refined as other methods.

- **They do not care about your site.** Users are interested in the content of your viral marketing, not what your site can offer. This significantly reduces conversion.
- **They are unlikely to remember you.** The typical user who views viral marketing sees a lot of similar content. Unless yours is exceptional, they are unlikely to remember you. Even if they do, they are more likely to remember the marketing itself rather than your site.

Does this mean you should avoid viral marketing? Not at all. If your campaign is successful, the large number of eyeballs will generate enough good leads to justify the investment.



Social news website digg.com has gained a reputation for forcing websites offline because they can drive so much traffic to a site.

Producing the kind of content that stands out is challenging. Unless you hire experts in viral marketing, it is a high risk strategy with a low chance of success. Here are some tips which will give your campaign the best chance of 'going viral':

- **Aim to create a reaction** - Whether you shock or make people laugh out loud, it is important to get a reaction. If you don't they will not pass it on to a friend.
- **Be unexpected** - With so many funny videos or clever blog posts vying for attention, you need to stand out from the crowd. Be original.
- **Never directly sell** - People do not want an advertisement promoting your site. They want to be entertained or engaged. People do not pass on advertisements.
- **Enable passing** - Make it easy for users to pass your campaign on. If possible, allow them to customize or comment on it too.
- **Utilize trends** - If something is cool or in the news, use it to your advantage. Build a campaign around what people are already talking about.
- **Followup** - Viral marketing is pointless without a call to action. What is it and what happens when people respond? Do not just send users to your homepage. Consider something more tailored to the campaign to lead them into your site.

A case study in viral marketing: Dexter

An example of good viral marketing is for the TV show Dexter. Dexter follows the story of a mass murdering vigilante. It is a quirky and sometimes humorous drama whose viral marketing campaign expertly picked up on this 'vibe'.

The campaign allows you to play a prank on friends using a personalized video. You enter a few basic details about your friend including their name, occupation and age. A link is sent to your friend referring them to a spoof video news site. This includes a video of a police press conference about a serial killer. The police indicate they have evidence identifying the next victim. They mention the victim's occupation, age and other details you entered earlier. It concludes with a piece of paper containing a series of crossed-out names and the name of your friend, implying that your friend is the next victim.

It became a successful campaign for a number of reasons. It was shocking and received national coverage. It was also funny for those in on the joke, easy to pass on, and nothing like it had been done before.

There are no guarantees with viral marketing, which makes it risky. But get it right and the rewards can be considerable.

By combining the various promotional approaches we have discussed it should not be long before you are driving traffic to your site. But how do you know which campaigns are being successful and whether your site is doing its job?

Measuring success

In chapter 2 I explained how free web log analyzers like Google Analytics could be used to gather quantitative data on your existing website. However, they can also:

- monitor your marketing efforts
- find and resolve problems with your site
- identify popular content

Why then do most website owners fail to follow their web stats regularly? One reason is that they are unsure what to look for and how to interpret the results.

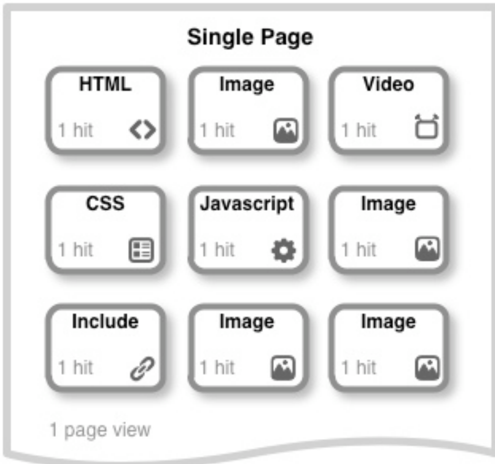
Monitoring website statistics can be confusing if you do not know what it is you are looking for.

The best approach is to identify what you want to learn and then find the tool that gives you this information. For example, one of our aims is to monitor marketing efforts. How can website statistics packages help us achieve that?

Monitoring marketing

In Chapter 2 I suggested you monitor the number of unique users as this was a sign of healthy marketing initiatives. Note that I referred to *unique users* and not hits or page views. Contrary to some website owners' beliefs, these metric are not worth following. Hits refers to the number of individual files downloaded from the web server. As a page could consist of many files (HTML, CSS, images) it is unrepresentative. Page views are not much better. Just because a user is viewing a lot of pages does not mean they are finding the information they require. It could mean they are lost.

The number of unique users *does* provide useful information. For example an increase in the number of unique users demonstrates that your marketing efforts are proving successful. What you really need to know is the success of each individual marketing activity, allowing you to focus on the successful ones. This can be achieved in two ways.



A single page could consist of any number of hits depending on what elements the page includes.

One option is to create a 'landing page' designed to 'follow up' on each particular marketing campaign. For example if you run a TV advert you might have a webpage at:

```
www.yourDomain.com/TV
```

This page supports the commercial, allowing users to make the transition from ad to site. Extra work is required to build the landing pages, but once built you can track users arriving at that page and be confident they have come via a certain campaign. The alternative is to 'tag' your links with additional information. So instead of linking to:

```
www.yourDomain.com/index.html
```

You link to:

```
www.yourDomain.com/index.html?campaign=tv
```

Your website will ignore anything after the question mark but the whole address will be recorded in your website stats. This means you can track any users with campaign=tv and know they have come from that particular campaign.

This approach requires no additional pages, but the addresses are not user friendly. This doesn't matter online because people are clicking links, not typing addresses, but it should be avoided for offline promotion.

This technique has become so popular that it is supported by many stats packages including Google Analytics. Once set up, Google can tell you much more than how many visitors a campaign generates. It can also provide information on leads and conversion rates.

Monitoring conversions

Most website have a call to action they want users to complete, such as signing up for a newsletter, completing a contact us form or buying a product. Whatever the goal you need to track how many users have completed it and which marketing campaign generates the most responses.

A ‘lead’ refers to people who complete a call to action. However, your ‘conversion ratio’ is a more interesting figure. This compares the number of people who have arrived at your site and those who complete the call to action.

Google Analytics provides a URL builder to help format web addresses in a way that allows you to tracking marketing campaigns.

This helps when comparing individual campaigns. For example, Google Adwords will generate a higher conversion ratio than viral marketing, because those who respond to viral marketing do not have an existing need. Those clicking on a search advertisement do.

Track the conversion ratios of campaigns to establish which offer the best return on investment. However your site can also affect conversion ratios. If a site is hard to use fewer visitors will complete a call to action. That brings us on to the next role of statistics.

Finding and resolving problems

If your conversion rate is low across all marketing initiatives, this could reflect a problem with your site. This could be due to:

- **Usability -** The user is unable to find the call to action due to poor navigation or other usability issues.
- **Accessibility -** For example a particular browser does not render the site correctly and so users cannot complete the call to action.

- **Content** - The site does not provide adequately convincing content to encourage users to complete the call to action.

What constitutes a low conversion ratio depends on your call to action. An e-commerce site could have a ratio anywhere between 0.5% and 8% depending on the sector and product. On the other hand, a call to action that does not cost the user money should be higher. The best approach is to compare a conversion ratio against itself over time. As you make adjustments to your site does that harm or improve conversion rate?

Website statistics can also suggest what changes will improve your conversion rate. Start by looking at where users exit your site.

Dropout points

Immediately exclude those who only view one page, otherwise the homepage will be at the top of your list. This is because people click through from a search engine, discover this is not the site they wanted and leave immediately. Now take a look at the remaining pages. Why are users leaving at these points? Is the content relevant and clearly presented? Is the navigation usable? Are you suggesting a next step to the user or are these dead-end pages?

Look at the history of users who drop out at a particular page. How long have they been on the site at this point? What other pages have they viewed? How long did they spend on the exit page before leaving? Does this reveal trends which help to identify the problem?

Clicktale.com allows you to anonymously record users interacting with your website.

Sometimes the problem will be obvious, other times it will not. In such cases try usability testing. This will uncover potential issues. If usability testing is not an option, try using a tool like Click Tales.

Clicktale.com picks up where traditional analytical packages leave off. It records user sessions anonymously, showing you what they click on, hover over and how far down the page they scroll. Although a technology like Clicktale is impressive, it cannot replace traditional usability testing. It does not provide the opportunity to question the user. For example, it will not explain why users abandon shopping carts.

If you are the owner of an ecommerce site you may have been horrified by the dropout rate on shopping cart pages and thought there was a fundamental usability problem. However, in many cases that is not true. Questioning users reveal that they abandon baskets for a host of reasons ranging from 'I was saving the items to buy later' to 'I wanted to compare the price on another site'. Shopping carts will always have a high exit rate and no amount of statistical analysis can change that.

However statistical analysis will allow us to improve the content and products we provide on our sites.

Identifying popular content

There is an obvious benefit to understanding what users want from our sites. From what content they want to what products they will buy, understanding users requirements allows you to mould the site to meet their needs.

Website statistics can help identify popular content but not in the way you might expect. Looking at the most visited pages will not provide answers. Popular pages can be misleading for three reasons:

- Pages can be visited by mistake
- Page can be popular because they're prominent
- Pages can be popular because they are gateway pages to deeper content

The homepage is a good example of these problems. I have already explained that it is

Users do not always behave logically or predictably. There are situations where statistics will not reveal their motivation.

visited by mistake from search engines. It is also a prominent page and used as a navigational tool for finding other content.

Looking at how long users spend on a page helps to weed out 'false positives,' but it can only give a partial indication of the popular content on your site. A better approach is to look at the search terms users entered into search engines to reach your site. Almost all website analytical packages provide this information and it helps define users' priorities. However, this is only going to show content that already exists on your site. If a user entered a search term for content you do not have, your site would not have been returned. The user would never come to your site. What you really need is a way of identify content that you do not offer but users want.

This is possible by examining the phrases users enter into your *own site's* search engine. As I wrote in Chapter 8 approximately half of your visitors will use internal search. Every time they use search, they are telling you exactly what they want from your site in their own words. That is incredibly valuable. You need access to these search terms, particularly the ones that return zero results. Users are expressing an interest in a piece of information you do not have or your search engine does not recognise.

If you fail to use the same terminology as your users, they will be unable to find your content and will go away frustrated.

Once you have access to these search phrases, start tailoring content around them. If the content does not exist, add it where appropriate. If it does exist but is not being found, introduce the exact phrasing your users are searching for.

Analyzing your web stats can provide a valuable insight into your site and how users interact with it. However, do not let working with web stats replace meeting with and testing real users.

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Next Actions

Your website is a part of a broader marketing strategy. You cannot launch a website and sit back while visitors pour in. Equally, you cannot rely on search engines alone for the answer. You need to utilize existing offline marketing material to promote your site and engage with users wherever they are online.

If your fledgling website is going to be a success you need to take action now:

- **Action one: Start tracking** - Ensure you can track the stats on your site. Unless you already have a stats package, install Google Analytics. It's free and only requires copying and pasting some code into your site.
- **Action two: Get listed** - Next you need to ensure you appear on search engines. Start by adding yourself to Google (www.google.com/addurl) and other search engines like Yahoo! and MSN. Do this straight away as it can take several weeks to appear. In the meantime consider using Google Adwords. It will get you instantly listed and you have complete control over the cost. Adwords campaigns also appear in Google Analytics so you can easily track the success of these campaigns.
- **Action one: Target your audience** - Finally, identify one or two community sites where your target audience congregate and start to participate. Alongside this, approach as many blogs and magazine sites as is appropriate to your audience. Offer to write on a subject of interest to them.

This should be more than enough to attract a new audience and ample to keep you occupied now the build stage of the site is over.

Once you have attracted your new visitors, you need to keep them engaged. They are unlikely to complete your call to action on their first visit so you will need to attract them back again. That is the subject of our next chapter.

In this chapter

- **The power of community**
    - Improving your offering
    - Changing brand perception
    - Promoting your site
    - Reducing your costs
- **The right tool for the job**
    - Broadcast tools
    - Feedback tools
        - *Email feedback*
        - *Surveys and questionnaires*
    - Interactive tools
- **Successful communication**
    - When to communicate
    - How to communicate
        - *Know your voice*
        - *Be open and honest*
- **Fostering a community**
    - Controlled growth
        - *Surviving the early days*
        - *Demand based growth*
    - Feeding the community

[1]

11 Engaging your visitors

When most organisations launch their first website it is nothing more than a online brochure. Customers do not have the opportunity to respond in a meaningful way or communicate with one another. It was a model born out of years of mass marketing.

However, the web is changing and you need to alter the way you communicate with your users. The web is becoming an ever more community-focused medium. High profile sites such as YouTube, Wikipedia and Facebook are built around communication between those running the site and individual members.

This ‘community spirit’ is also spilling over into the commercial sector as organisations such as Dell and Microsoft recognize the benefits of transforming its users from a mass of individuals into a living community. These companies have seen the power of community revitalize damaged brands, improve products and even reduce costs, but it has come at a cost.

Many marketeers struggle with the idea of open two-way communication with customers. It is a model in which the ‘message’ cannot be controlled and is sometimes unpredictable. Why then should you make your site more than brochureware? What are the benefits of cultivating a community?

The power of community

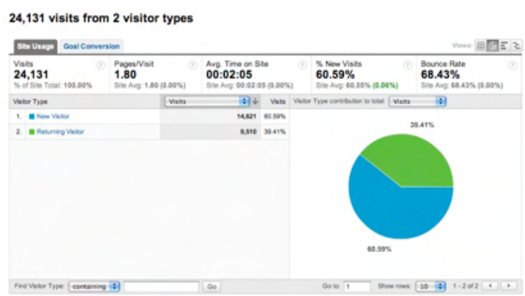
For many, the Holy Grail of a successful website is ‘stickiness’. How do I keep users coming back for more?

Repeat users are incredibly important. These are the people who develop brand loyalty, complete calls to action and regularly purchase. According to data from WebSideStory Inc. repeat users are eight times more likely to make a purchase on an e-commerce site. Repeat users are the lifeblood of most websites.

One of the best ways to keep users coming back is to foster a community. A thriving community also provides a lot more benefits than repeat traffic. An online community can also:

- Improve your offering
- Change brand perception
- Promotes your site
- Reduce your costs

Let me explain how.



Google Analytics allows you to track how many repeat visitors your site attracts.

Improving your offering

A good community is not just about users speaking to one another through a forum or chat room. It is also a two-way dialogue between you and your users. It is an opportunity for you to hear from your users and discover what they want from your website.

In an attempt to refine their products or hone their marketing message, many organisations spend substantial figures on focus groups and customer survey. Yet a healthy community is constantly providing feedback on your offering. This gives a superior insight into how your product or service should develop, at little or no cost.

Listening to your users also improves their perception of you.

Changing brand perception

People like to be heard. They like to feel their opinion matters. Engaging with your users and *really* listening to what they have to say about your products and services is incredibly powerful. It is even more powerful when they see their suggestions acted upon.

Lone blogger (Jeff Jarvis) created a groundswell of negative opinion about Dell after frustrations with their customer service. Dell acted to engage with the community and went (in the words of Business Week) from 'worst to first.'

Both Dell and Microsoft have significantly improved the way their brands are perceived by talking to customers and engaging the community around their products. Often this involves nothing more than a speedy response and apologetic tone. Openness and transparency with a community can also go a long way.

It is possible to both undo a negative brand perception and nurture a positive one. Once users feel positive about your brand, they start to recommend it to others.

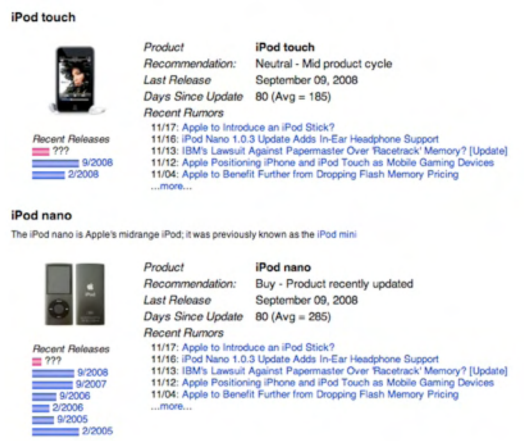
Promoting your site

A community that is enthusiastic about your site or products can be one of the most powerful promotional tools available. Sites like Digg.com have become popular largely because of their passionate community. Equally, Apple's success is at least partly reliant on their obsessional 'fans' who promote their products with friends and family. Nothing is as valuable as personal recommendation.

If you include your users in the process of developing your site they feel invested in it. They feel the site is as much theirs as yours and so will promote it as their own. A successful community will always be seeking to draw others in, so growing and promoting your site. This 'evangelistic' tendency in a community can also lead to substantial cost savings.

Reducing your costs

A passionate community can provide free advertising and save money on focus groups and product development. They can also save money in customer support. This is particularly true if your site already provides customer support. Rather than users sending queries directly to you, they can post them in support forums and allow others in the community to answer their questions. These forums also become a repository of knowledge others can draw upon. This reduces the support burden (and cost) on your organisation.



Apple recognizes the reduced costs of selling to existing customers, which is why they constantly update their product line. There is even a site dedicated to tracking these updates.

Finally, communities have a lower cost of sale. Because they are already enthusiastic contributors to your community, they are easier to reach. This is especially true for repeat ordering. How then do you build a successful community? A big part of that process is choosing the right tool.

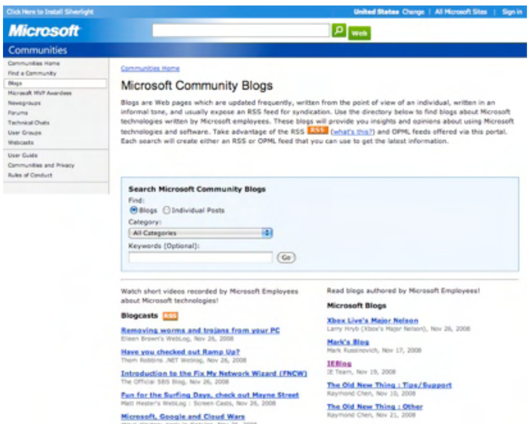
The right tool for the job

Community is about more than technology. Too often website owners think that if they add a forum or blog to their site, they will have a community. Adding the technology is easy. Nurturing and growing that community is the challenge.

[5]

Yet tools do help shape the community. Different tools fulfill different roles. If you use the wrong tool, no amount of nurturing will make the community grow. It is therefore important that you understand the tools available. In essence there are three types of community tool:

- Broadcast tools
- Feedback tools
- Interactive tools



Microsoft has improved its image by encouraging individual employees to blog about their work. This openness has helped humanize the company and improve customer relationships.

Let us look at how each works.

Broadcast tools

Broadcast tools allow you to communicate with your community but do not allow your community to respond. They generate interest, but don't nurture community.

Some use these tools because they are fashionable, without a real understanding of their role. It is important to be aware of each tool's strengths and weaknesses as well as the job they perform. These tools include:

- **Blogs** - Most organisations fail to grasp blogging. Many corporate blog posts are nothing more than press releases and do nothing to nurture community. An effective blog should build personal relationships with users. It should be personal, engaging and encourage feedback via comments (see feedback tools below).
- **Podcasting** - Podcasting can be more time consuming than blogging . It also has SEO and accessibility issues. It is still a powerful way of engaging with visitors. As with radio or television, the consumer feels they know the presenter and experience

a personal connection. Most successful podcasts have a substantial number of passionate followers who naturally form a community. Podcasts are also less common than blogs, so it is easier to stand out from the crowd. Finally, podcasts can be accessed away from the PC via MP3 players. This allows users to listen on their commute or at the gym. This attracts an audience other broadcast methods may not reach.

Gary Vaynerchuk produces a daily wine podcast that receives 100,000 downloads per episode and promotes his wine retail business. Gary attributes the success of the show to his community.

- **Email newsletters** - Organisations have been sending email newsletters for years. However, because of their proliferation and the growth of spam, they are becoming less effective as a broadcast tool. Often they are ignored or worst still deleted by spam filters. That said, they should still be apart of your strategy for encouraging repeat traffic. They have a proven track record for bring people back to your site.

Web feeds (also known as RSS) have begun to replace email newsletters. They are also an integral part of both blogging and podcasting. Users can subscribe to a web feed of a blog, podcast or indeed any other number of information sources. This feed is then delivered to a feed aggregator. These aggregators are integrated into all kinds of software including Microsoft Outlook, Internet Explorer and web applications. This allows users to see updates from numerous sources without having to visit each site individually.

Web feeds are an excellent way of 'pushing' content to interested parties without relying on them to checking your website regularly. The downside of web feeds and all the tools mentioned so far is that they are focused on pushing content to users. To create a community we need to hear from users.

Feedback tools

As we have already established, the power of community is in hearing from users. Feedback tools make this possible. Feedback comes through a variety of mechanisms. However I want to focus on just two; email and surveys.

Do not allow user enquiries to get lost in the system. Every email needs to be responded to quickly and efficiently.

Email feedback

Whether it is a user clicking a 'contact' link or completing a feedback form, eventually the message ends up in somebody's email inbox. What happens then is crucial to the way users perceive your website and organisation.

Take time to consider how you are going to handle email feedback. Who is going to respond to the emails? How are you going to track your conversations with users? How are you going to prevent emails falling between the cracks?

Responding to email in a timely manner is important especially when it comes to making users feel appreciated. Make sure you have a process in place and individuals who are responsible for ensuring email is answered.

The drawback with email is that although the feedback is valuable, it is hard to analyze. Sometimes you require something more structured.

Surveys and questionnaires

Many websites use surveys and questionnaires as a way of gathering feedback that can then be analyzed. There is no shortage of companies offering the ability to add a questionnaire or survey to your site. Yet surveys and questionnaires are harder to implement than you might expect. Although the technology is easy, getting quality feedback is hard. Some ways to improve the effectiveness of your surveys include:

uservoice is part of a new generation of customer feedback tools. More open ended than a survey or questionnaire, it allows users to request new features and vote for the suggestions of others.

- **Keep it short** - As I said in chapter 2 the longer your survey, the less likely a user will complete it. Focus on gathering specific information.
- **Show appreciation** - Recognise that users' time is valuable. If a user completes your survey, offer them a reward or at the very least say thank you!
- **Keep it simple** - Avoid questions that require too much mental effort. Start with easy questions (such as name) and build up to the more challenging ones.
- **Be specific** - Asking questions that are open to interpretation can lead to unhelpful feedback. For example, asking 'what do you think of the site' could lead to comments about security when you want design feedback. Providing context for a question or using an example can bring clarity.
- **Avoid non committal answers** - If you ask people to rate something between 1 and 5 many will answer 3. Such non-committal answers provide little value.
- **Watch your language** - Wording can substantially affect results. For example using the word 'should' instead of 'could' can alter results by up to 20%.

Be careful how you interpret results. Users are unlikely to complete a survey unless they either like or hate your site, leading to polarized results that need careful interpretation.

Email, surveys and questionnaires are not the only tools for gathering user feedback. Interactive tools are even better suited to building a community and encourage multiple way communication.

Interactive tools

Combining broadcast and feedback tools helps create a dialogue with your users, but they do not build a true community. That requires a dialogue between users. Once users start

Community does not just take place on your site. Barack Obama engaged with his community of supporters via social networking tool Twitter in the last US election.

communicating with each other, you gain the benefit of repeat visitors and community interaction.

There are many interactive tools that help build community. The right tool depends on the size and maturity of your community. For example, if you launch a chat room it does not mean a community will appear. This is because a chat room requires a critical mass of users before it is effective. If this critical mass does not exist, users will find the chat room empty and so will not return.

The following table shows a various of interactive community tools and explains when it is appropriate to implement them.

Type (size)	Description
Ratings (small - large)	Allowing users to rate pages, products or other elements of your site is a good way to begin building your community. It requires little effort from users and yet provides real value to others. It also provides valuable information for you the website owner.
Mailing list (small - medium)	Mailing lists are a great way to get users talking to one another and to you. They are ideal for small communities because all users see every message. Be warned, mailing lists do not scale well and large number of messages from a bigger community can become annoying.
Reviews (medium - large)	Reviews require more mental effort than rating a product between 1 and 5. As a result fewer users will complete them and so a bigger community is required. However they provide more value to the community and create better communication between users.

Type (size)	Description
Comments (medium - large)	The ability to comment on articles, blog posts and other content is extremely popular. Like reviews, comments require a degree of effort on the part of users. They also require more people to maintain a sufficient level of activity.
Forums (medium - large)	Forums are the most popular community tool, but they only work effectively for medium to large communities. Often forums lay dormant if they do not have sufficient users to remain active. Nobody wants to be the only person at the party!
User generate content (large)	Many high profile communities such as YouTube, Facebook and Wikipedia are reliant on their users for content. Replying on and allowing users to create content is the ultimate expression of community. It does require a large number of dedicated users to be successful.
Chat room (large)	You need a large community of visitors regularly visiting your site to support a real-time chat room. If you do not then chat rooms can lay empty most of the time. Users will stop coming because they presume the community is dead.

If you are looking to build a new community, begin with ratings and slowly progress through the interactive tools until you have enough committed users to support forums and eventually even chat rooms. Of course, having the right tools is only a part of the battle. The important part is knowing how to communicate with users successfully.

Successful communication

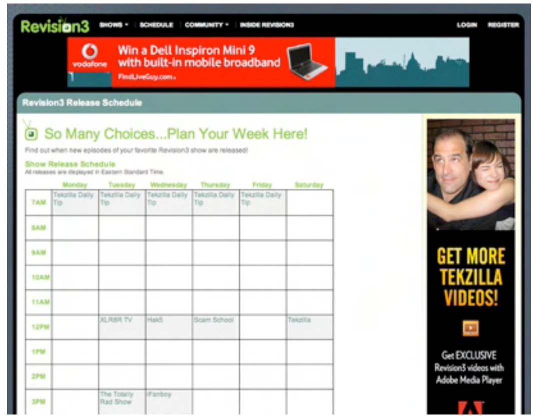
It is important to set the right tone for your community through the way you communicate with your users. Successful communication is trickier than it first appears. It is dependent on two factors:

- When you communicate
- How you communicate

Get this wrong and you risk seriously damaging the relationship with your users.

When to communicate

The schedule of your communications is always important, whether posting to a blog or sending out a newsletter. Send too many communications and it becomes irritating, too few and they forget about you.



Internet media company Revision 3 recognises the importance of regular release dates, which is why they have set broadcast times for all their shows.

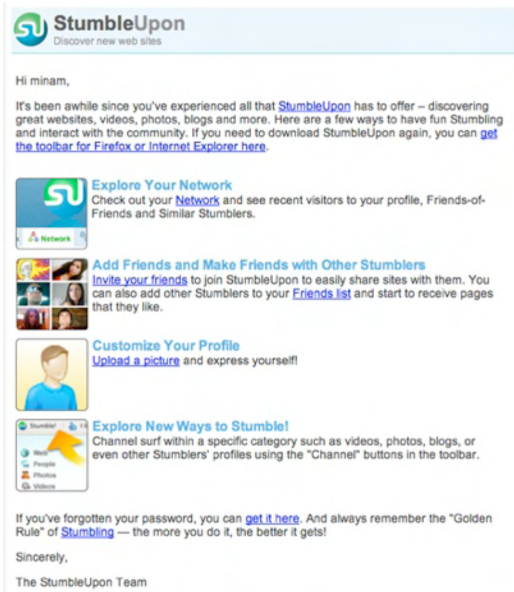
This frequency depends on the nature of your site. If your site sends out stock tips then users may expect updates every few minutes. If you sell a service that is purchased once every couple of years then sending out communications every few weeks will be enough.

The key is regularity rather than frequency. Users should come to expect your communications. Communicating on an ad-hoc basis becomes frustrating, especially with blog posts, newsletters and podcasts.

However, communication does not have to be completely dictated by a schedule. You can also have trigger-based communications. These are normally emails sent to a specific individual rather than the whole community. They are sent in response to a specific event rather than a schedule.

A common trigger-based communication is the emails sent to users who have just purchased from an e-commerce site. These typically include an email confirming the transaction but also one when the goods are dispatched. These emails are extremely important and yet are often overlooked in the development process.

Trigger-based communication also encourage repeat traffic. Most website communities have a large number of 'sleepers'. These are individuals who have signed up for your site but have stopped using it. It is possible to monitor user activity, so if they stop using the service an email can be automatically sent tempting them back with incentives or new content.



Stumbleupon.com try to tempt lapsed users back by reminding them of the sites key features.

Never forget the golden rule of user communication: do not contact users without their permission. Nothing will damage your site's reputation faster and destroy your community than spam.

Take a few moments to consider your communication strategy. When might it be appropriate to send out trigger emails? Are you collecting users' contact details and is it legitimate to contact them? What methods you are going to use to communicate and on what schedule? Your communications with users needs the same attention you gave your site's copy. This includes not only when to communicate, but how.

How to communicate

We have already talked about the mechanisms for communication such as blogs, podcasts, email and RSS, but these are just technologies and do not get to the heart of how to communicate. Communication is about what you say and how you say it.

Always remember when communicating with users to make it personal. Whether it is in a forum or posting to your blog, people like to talk to people not faceless corporations. Whenever possible write as 'Jim from Marketing' rather than as 'Acme inc.' People are less critical and more receptive when dealing with a individual rather than an organisation.

Although your aim is to demonstrate that your organisation is made up of 'real people', you still need a unifying voice.

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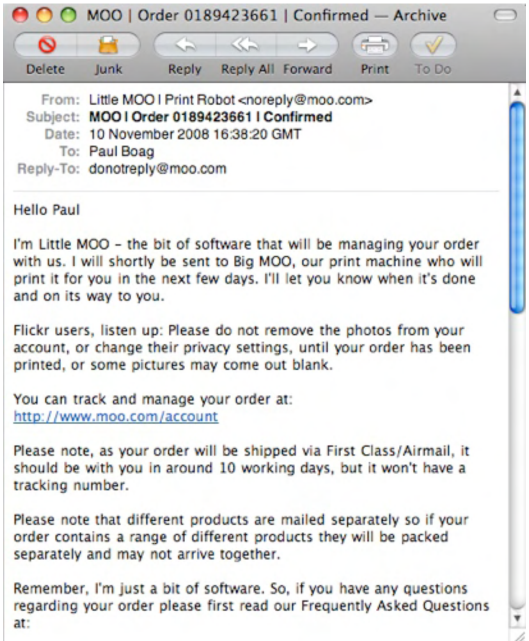

MOO | Order 0189423661 | Confirmed — Archive

Delete Junk Reply Reply All Forward Print To Do

From: Little MOO | Print Robot <noreply@moo.com>
Subject: **MOO | Order 0189423661 | Confirmed**
Date: 10 November 2008 16:38:20 GMT
To: Paul Boag
Reply-To: donotreply@moo.com

Hello Paul

I'm Little MOO – the bit of software that will be managing your order with us. I will shortly be sent to Big MOO, our print machine who will print it for you in the next few days. I'll let you know when it's done and on its way to you.

Flickr users, listen up: Please do not remove the photos from your account, or change their privacy settings, until your order has been printed, or some pictures may come out blank.

You can track and manage your order at:
http://www.moo.com/account

Please note, as your order will be shipped via First Class/Airmail, it should be with you in around 10 working days, but it won't have a tracking number.

Please note that different products are mailed separately so if your order contains a range of different products they will be packed separately and may not arrive together.

Remember, I'm just a bit of software. So, if you have any questions regarding your order please first read our Frequently Asked Questions at:

All emails from print company moo.com are written as if sent by a piece of software called ‘little moo’. Although somewhat gimmicky this persona is strangely appealing.

Know your voice

The danger of individual employees engaging with your users is that your organisation sends out mixed messages about its identity. All copy should have a consistent tone, from the content on your website to the emails you send existing customers.

This may seem contradictory. On one hand I demand a consistent identity and on the other I want users to see the people behind your organisation. Yet this is actually an approach newspapers have been employing for years.

Most newspapers have recognizable columnists. However, each newspaper has an overall identity. For example in the U.K. tabloid newspaper “the Sun” has a very different persona to that of “the Times”.

Deciding on your persona will underpin all communications with users. Ask the question - if your site was a person, what type of person would it be? Would it be a young hip teenager or a boring, middle-aged business man? These characteristics help define how you communicate and the tone you set for your site. Whatever persona you create should always be open and transparent.

Be open and honest

Many organisations feel they need to maintain a flawless facade with users. This serves to create a barrier, reinforcing the feeling that the user is dealing with a faceless corporation.

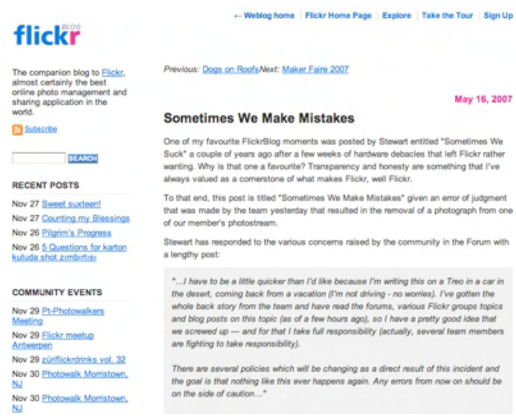


Photo sharing site Flickr.com is always quick to acknowledge when they make mistakes.

A better approach is to be honest and fallible. Nothing is more effective in getting users' trust than admitting when you're wrong. Take the photo sharing site Flickr.com. Their site suffered a series of outages in which users were unable to access their photos. Unsurprisingly the mood in the Flickr community was pretty negative. However, Flickr was able to turn that negativity around with a simple blog post entitled "Sometimes We Suck." They acknowledged the problem, apologized and promised to do better. They did exactly that and before long Flickr was seen as a shining example of how an organisation should run a community.

It *is* possible to turn a critical user into an evangelist for your site simply by responding in a timely and open manner. Users can instantly broadcast their frustrations via blogs, social networks and other methods of online communication, so you cannot afford to ignore them. However, if you respond in a positive and open fashion those same users will be broadcasting their pleasure at your response.

Of course to respond to a user in a timely and open manner, you first need to encourage that user to communicate with you by fostering a sense of community.

Fostering a community

The sad truth is that most website owners only hear from users when there is a problem. "I can't get this to work!" "Where is this piece of content?" "Why don't you offer this?" Although it is possible to nurture community out of such negative correspondences, it is not community in itself. There is no sense of loyalty to your site and certainly no interaction between users.

How do you move from superficial interactions to something that provides the benefits of community?

Controlled growth

Creating and running a community is like gardening. You must seed and nurture it, especially in the early days when it is vulnerable. As it grows the work becomes less and you reap the harvest. Yet care is still required and you may need to prune to stop it growing in unwanted directions.

Most website owners only hear from users when they have a problem.

Setting aside the analogy, let's look at some practical ways you can grow your community in a controlled manner.

Surviving the early days

The early days are the toughest and require a lot of work. Get things wrong and the community will be stunted and may die. Fortunately there are four things that will increase your chances of success:

- **Start small -** Many website owners are too ambitious when creating a community. As I explained earlier, some community tools needs a large community to support them. However, it is not just about the type of tool, but also the way you set it up. Take forums for example. Start with only one or two categories to concentrate your users in one place. If they become spread across multiple categories they are less likely to connect. It is like a party. It is better to have all your guests packed into a small house than rattling around in a large empty hall. By keeping people together you help generate buzz.
- **Seed the discussion -** It falls to you as the host for your community to encourage conversation. You can do this by 'seeding' discussion. Ask open ended questions,

Nothing is more awkward than being the first at a party. The same is true with an online community. Make sure your 'guests' are packed together so there is some buzz and interaction.

request feedback and show a genuine interest in what people have to say. Too many bloggers complain that nobody comments on their blogs and yet never ask people their opinion.

- **Nurture the conversation -** Once users have started engaging, you need to maintain the momentum. Conversation can easily run dry if you do not nurture it. Respond quickly to comments with follow-up questions. Even if you disagree with a comment thank the user for their input and encourage more posts. Do not disagree directly. Instead ask whether they have thought about your alternate view and what their opinion is. This encourages more conversation and avoids belittling them. Responding to comments is time-consuming in the early days, but it is required for successful growth. Responding is worthless if users are unaware of your response, so always ensure users can be notified of responses either by email or RSS.
- **Set boundaries -** All communities require rules to maintain healthy discussion. Having a set of guidelines on acceptable behavior is important, but not enough. A community is defined by its leadership and users learn the way to behave from the example you set. If you are cheeky and irreverent then they will respond in kind. Leadership by example is particularly important when resolving conflicts. Whether the conflict is between two community members or involves you, never respond aggressively. This will only escalate the conflict. Responding in a considered and calm fashion will encourage others to do likewise. Finally, never respond to conflict in an open forum. Deal with it discreetly via email so limiting the fallout.
- **Avoid moderation -** Many organisations are hesitant to introduce a community for fear of what users might do or say. They are torn between the benefits they see

in a community and the fear of not being able to 'control' the community. This leads to excessive moderation where contributions are checked before release.

If users feel like you have bound and gagged them, they won't contribute to your community.

Some organisations also fear the legal ramifications if a user posts something inappropriate. Others fear negative comments about their organisation. Both fears are unjustified. Although there are legal responsibilities, the risk is minimal if you respond to complaints by removing the offending content. As for negative comments, these can increase the credibility of your site. They prove you do not 'edit' user contributions and reinforce the authenticity of positive comments. If the number of negative comments outweigh the positive then your community has helped identify a problem which needs fixing. By fixing the problem you demonstrate that you care about your users.

Both of these perceived risks are less damaging than 'censoring' user comments. Censorship stunts community growth by slowing communication and generating mistrust in your audience. User contributions should only be removed if they are offensive or libelous.

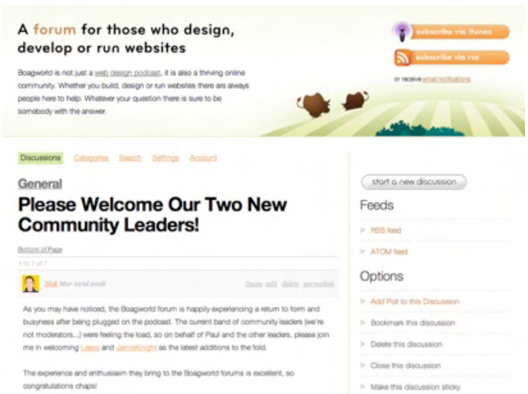
If you follow these guidelines, your community has every chance of growing. However, sustaining that growth long term is challenging.

Demand based growth

As your community grows the risks begin to change. The emphasis now shifts to maintaining growth.The biggest temptation is to grow too quickly.

[18]

A handful of users request a forum and so you create one. Others ask for more categories in the forum and so you add them. The problem is that a handful of users is not always enough. There needs to be a significant demand for new features before you implement them. Without that demand, new features will not be used and your community will appear to be dying. It is the party analogy I gave early. Better to have users concentrated on one or two community features than spread thinly across several.



The Boagworld.com forum relies heavily on community leaders to encourage new members, stimulate discussion and police community rules.

Knowing when to expand is difficult. Do it too early and you give the impression your community is unpopular. Do it too late and you frustrate users because their ideas are not being implemented. No matter how hard you try you will make mistakes.

Do not be afraid to remove features which are not working. Pruning is an essential part of a successful community. It is especially important for older communities where numbers are beginning to decline. If you do not have enough people to support a forum, be willing to move to a mailing list which is better suited to smaller numbers. You will find that this stimulates new growth.

A growing community also brings scaling problems. When a community gets large it becomes difficult to follow everything. It becomes hard to nurture new members and the community feels like a full-time job. Although the benefits of community are high they do not normally justify that level of commitment.

The solution is to utilize your community. As the community grows enthusiastic members will emerge, regular contributors who are full of suggestions and ideas about how the site could be improved. Ask these people if they want to be community leaders and effectively help run the community. Their role will be to moderate content, resolve disagreements and encourage conversation.

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In my experience they normally agree, volunteering their time for free. They see it as an acknowledgement of their commitment and a chance to help shape the community. It also tends to deepen their commitment to the community, turning them into evangelists. It makes them feel important which is one reason people participate in communities to begin with.

Feeding the community

It is easy to focus on the benefits a community can bring to your organisation and fail to consider what it offers users. Why will they participate? Unless you can provide an incentive they will not bother to participate and your community will never grow.

When I mentioned the word 'incentive' one's mind turns to some form of financial incentive. This is one way of encouraging users to participate. Competitions, vouchers, discounts and prizes do help draw people in. But it does not build long-term loyalty and if handled badly it can create problems.

One such example was when Netscape offered $1000 per month to top users on Digg.com if they posted to Netscape instead. Although this generated a lot of press it backfired and reflected negatively on their brand. The site ultimately closed.

Netscape's attempt to 'buy' users loyalty ultimately failed and the site was closed.

Fortunately, the motivation behind participating in a community is more subtle and less expensive than material incentives. Much of it is sociological. Users are motivated to participate because of four basic desires:

- **The desire to associate -** We are social creatures. We desire to associate with like minded people and those we admire. This is major motivator and you need to ensure that need is met. Welcoming new members is important as is makes them

Innocent Smoothies has a vibrant community who are actively involved in the development of the product. Their "family" even raises money for charity by hand knits 500,000 wooly hats to go on the bottles. With some creative thinking and a friendly persona, any brand can build an active community.

feel valued. Encourage their contributions and listen to what they say. Most importantly build a community persona people want to associate with.

You may be fortunate enough to have a strong brand like Apple that people like to associate with. In most cases you will not. Fortunately, communications full of personality can take your brand a long way. This is perfectly demonstrated by Innocent Smoothies. Innocent sells fruit drinks, which don't naturally generates a strong sense of community. Nevertheless they were able to build a vibrant community through passionate personality and some clever little ideas.

▸**The desire to impress -** We all want five minutes of fame and the web make that possible. Online communities in particular offer an opportunity to stand out from the crowd. Many contribute to communities to demonstrate their knowledge or have their say. Although this egotistical motivation can be problematic, it is a powerful driver in getting people to contribute and it should be encouraged.

As mentioned earlier, asking people to become community leaders is one such way, but there are others. Allowing users to vote on content submitted by others can be a motivational tool. It encourages users to post quality content. Equally, providing users with titles or badges if they post often encourages quantity.

- **The desire to reciprocate -** A lesser motivation is the desire to give back to a community that has helped. Where users have received help and support from a community they sometimes feel motivated to offer that to others. This is a feeling that needs to be encouraged. Ensure an outstanding first experience in the community by responding quickly to contributions and making users feel welcome.

- **The desire to express -** Many people are initially drawn to a community because they have a strong opinion they wish to express. They are either happy or displeased with their experience of your site/company and have the desire to make those feeling known.

  If you want to make users into regular contributors, it is important to do two things. First, ensure that their comment is not moderated or edited in anyway. If they feel censored they will go away angry and frustrated. Second, respond to their comment quickly and no matter how unjustified it is recognise their feelings. Make them feel you have taken their comments onboard.

By responding to these needs, you will encourage participation and combined with controlled growth your community will flourish.

Next Actions

Community is a powerful business tool. It is a great way to retain customers, promote your site, improve your product and reduce your costs. In this chapter we have explored the tools of community and the techniques for launching and maintaining that community.

However, understanding the principles of creating an effective community and putting that into practice are two different things. It can feel like an overwhelming task but you can begin the process in three simple steps:

- **Action one: Establish the potential** - Before you begin to invest in community tools establish whether there is a need. Do you already receive regular requests for community features? At the least you will need a large newsletter subscriber base to work with. If you have neither, consider adding a survey to your site to see if users are interested. If nobody completes the survey then they are unlikely to contribute to a community. If they do and are positive then there is potential.
- **Action two: Gather the resources** - Once you have established potential, you need to secure resources. A community needs a leader who is committed to checking the site regularly and responding to users contributions. It is a big job and so it is important to find somebody who has the time and people skills to carry it out. Second, you will need to implement the tools of community. Remember to start small. Ratings and comments are a good place to start.
- **Action three: Commit to the long term** - Finally, realize that building a community is a long-term commitment. It will not happen overnight. You will need buy-in from your organisation if the community is going to survive. The return on your investment will take time to materialize.

Building a community is not your only long-term commitment. The site itself and indeed your entire web strategy is a long-term commitment. You should always be looking to the future and thinking about the next step. That is the topic of our final chapter.

In this chapter

- **A broken model**
  - Adopt continuous development
- **A broken relationship**
  - A better client/designer relationship
- **Targeting emerging trends**
  - Creating a richer experience
  - Building on the shoulders of giants
  - Looking beyond your website
    - *Building web services*
    - *Computer friendly content*
- **Targeting emerging platforms**
  - Looking beyond the PC
    - *The importance of environment*
    - *The limitations of the device*
  - Move to the desktop
- **Staying informed**

[1]

12 Planning for the future

Before becoming a web designer I trained in print design. Although I enjoyed it, I always hated the finality. Once something was sent to press, there was no turning back.

The web doesn't have these constraints. You can launch a site on Monday and tweak the design or content on Tuesday. This is both a blessing and a curse.

A curse because it feels like the work will never end (and it won't). A blessing because your site can dynamically change and adapt with your business and user requirements.

It is your job as website owner to shape this evolution.

How do you plan the future of your site? How do you ensure it is flexible enough to adapt to the rapidly evolving web? What exactly are the emerging trends and where do you look when keeping an eye on the future?

The key to planning for the future is accepting that most of us have the wrong attitude towards web design.

A broken model

Most organisations have a throw away mentality that works like this: A company commissions a rebuild of their website. The new site is launched and everybody is excited. As time goes by, it begins to age. Content goes out of date. The design does not reflect changes in brand or audience. Technology becomes obsolete. Eventually the website is seen as an embarrassment.

Everybody in the company knows the site is a problem, but nobody is responsible for solving it. Finally, somebody in senior management decides the site must be prioritized and a new version is commissioned. The old site is thrown out, and the cycle begins again. This is wasteful for two reasons:

- **It wastes money** - Completely replacing the old site every 2-3 years is a waste of money. You replicate work already done, rather than build on what was there.
- **It wastes potential** - The website spends much of its life sits unused because those within your organisation are ashamed of it. Your site should be working hard to generate leads, support customers and fulfill other functions throughout its entire life cycle.

It damages the way your organisation perceives the web. Instead of seeing it as a powerful tool that supports your business, it is seen as a significant expense.

Users visiting your site midway between redesigns will see something out of date and unreflective of your organisation.

It is time to move away from this broken approach to one of continuous development.

If your site is left untended it will become out of date. Eventually it will be seen as a liability.

[3]

Adopt continuous development

For your website to have a long-term future, you need to stop periodic redesigns and embrace continual development. This is a significant cultural shift, especially from a financial perspective. Most organisations perceive their website as a periodic capital expenditure (like buying a new photocopier) rather than an ongoing investment (like their marketing budget). This needs to change.

In chapter 3 I explained the benefits of phased development and those same benefits apply here. Continual development provides a financial benefit because:

Periodically redesigning your website almost always results in the previous website being discarded. This is a wasteful approach.

- **Work is not being 'thrown away' -** Instead of replacing previous development work you enhance it.
- **Cash flow is improved -** You replace a major capital investment every few years, with a smaller ongoing commitment.

The redesign model is partly born out of the way organisations engage with their web design agency. This relationship also needs to change.

A broken relationship

Unless they have an in-house web team, most organisations do not regularly speak to their web designers. Instead they hire an agency on a per-project basis. Many believe it is good practice to change supplier every couple of years. It is not.

Whatever the case, it is the website owner who normally defines the project, writes the brief and sets the scope. Although this approach is appropriate when commissioning an agency for the first time (or when replacing an incumbent) it it not ideal. It is flawed for three reasons:

[4]

- **It is time consuming -** Finding, choosing and briefing agencies takes time. Taking on these new agencies also perpetuates the redesign cycle, because each agency wants to stamp their own mark on the site.

It is important to have an ongoing relationship with the team that built your website.

- **There is a learning curve -** The new agency has a steep learning curve before they understand the business enough to deliver an effective solution. Even an incumbent agency has a learning curve. Things may have changed dramatically in the months (or years!) since they last worked on your site.
- **The agency's role is stifled -** Web designers should be more than implementors. Traditionally it is the website owner who defines the brief and the agency who responds. However, this provides no opportunity for the agency to contribute ideas to the site. The site fails to benefit from their expertise.

Surely there is a better way.

A better client / designer relationship

If the future is in the continual evolution of your site, then you must break down the barriers of the formal tendering process. You and your team need to *really* engage in order to move your site forward.

A good web design agency should be constantly suggesting new ideas to you. They should share what they have learnt from other projects and from the industry at large. You can then decide which of these ideas apply to your business.

Web designers are not just experts in building sites, they are also experts in the web. They are aware of what other sites are doing and what is possible. Use this knowledge.

[5]

If you use an external web designer, ask him or her to share ideas from other projects. You may find some of them are applicable to your site.

This kind of relationship takes time to develop. The agency needs to understand your business and objectives before they can make suggestions. This will not work if you regularly change suppliers or only talk to your agency every couple of years.

Arrange regular meetings with your agency. Encourage them to share what they have been doing on other projects and what innovations they have seen online. Encourage suggestions.

You may think that having an in-house team will foster this relationship. After all an in-house team will know the business and always be around to make suggestions.

There are many benefits to having in-house capacity (see chapter 3), but it has some drawbacks. An in-house team does not work on other websites and so cannot learn from those sites. Many in-house teams are preoccupied with day-to-day maintenance rather than long-term strategy.

Whether you have an in-house team or use an external agency, make sure they report trends they see emerging online. These trends are the future of your web strategy.

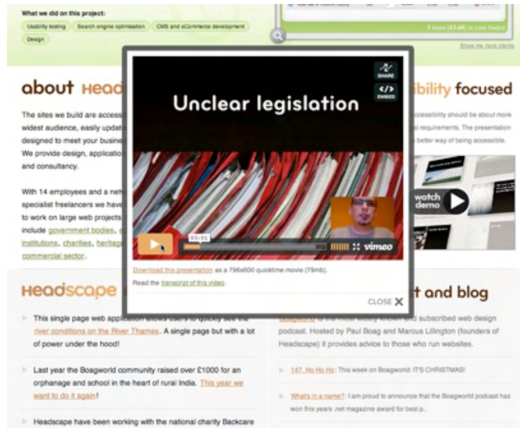
Targeting emerging trends

I started designing website in 1994 and back then it would have been impossible to imagine the web of today. It is foolish to predict the long-term future of your website. Things simply move too fast. However, it is possible to see the next big thing.

[6]

I could write on entire book on emerging trends, but there are three areas which I believe are relevant in the short term:

- The growing prevalence of rich media
- The rise of the API and widget
- Web strategies that look beyond the website



The combination of video hosting sites like Vimeo and the spread of broadband, mean an increasing number of sites are introducing video content.

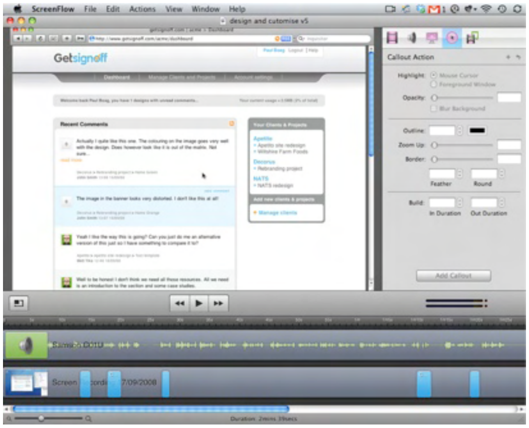
Deciding which of these trends is applicable to your site should be done in consultation with your web design team. Each involves emerging technologies more complex than the other topics found in this book. I will outline what is possible, but you will need further advice if you are interested in implementing these ideas.

Creating a richer experience

Audio and video have been on the web for years. Recently the widespread adoption of broadband and improved compression techniques have increased their prevalence.

From YouTube to iTunes, audio and video have become intrinsic parts of the web and yet many website owners have not integrated them into their web strategies. Some of the possibilities for using rich media include:

- **Starting a podcast** - In chapter 11 I explained the benefits of podcasting. Yet many believe it is too complicated. In reality podcasting can be done on a shoe string budget with very basic equipment. People are attracted to a podcast not for its production values but because of the content and presentation.
- **Using video demonstrations** - Often the best way to demonstrate your product or website is to show people. Whether it is a video of your product, a panoramic of a venue or a screencast about using your site, video can communicate a lot of information in a short time.



Screen capture tools like Screenflow make it easy to develop video tutorials that introduce users to your site.

- **Adding video testimonials to your site** - Customer testimonials are an excellent way of convincing potential converts. Traditionally these have been written, but video testimonials are more engaging and convincing than their text equivalents.
- **Engaging with users through video streaming** - With only a webcam and a computer you can speak directly to your users through services like ustream.tv. This provides a unique opportunity to build community and engage with users via text, video and audio.
- **Publishing to sites like YouTube** - In Chapter 10 I talked about using YouTube as a viral marketing tool and the challenges associated with that. YouTube can also be used as a communication tool for reaching existing customer, a method for publishing a video podcast, or a hosting platform. It was once hard to add video to your site. Now, sites like YouTube make it easy.

YouTube is not the only service that allow you to easily add functionality and content to your site. There are lots of opportunities to leverage the hard work of others to improve your own site.

Standing on the shoulders of giants

Isaac Newton said, "If I have seen further than others, it is by standing upon the shoulders of giants." As a website owner you have the opportunity to do the same.

So many people offer services and content that can integrate for free with your site. What would have cost a fortune to implement from the ground up becomes considerably more straightforward. These web services fall into three broad categories:

- **Web feeds** - RSS is by far the most prevalent way of integrating third party

feed.informer.com allows you to easily add an RSS feed to your website.

content into your site. This is because it is easy to create RSS feeds. An enormous number of sites provide RSS feeds you can use. There are feeds for weather, news, events, photographs, music and much more. Some coding is required, but it is not complex and there are third party websites like feed.informer.com which help with the process. Many sites allow you to upload content and use RSS to display that content on your own site. For example, instead of developing a costly events management system, you can use upcoming.org and their RSS feed to add events to your site.

- **Widgets** - Widgets are small pieces of code, that when added to your site provide additional functionality. Adding a widget only involves copying and pasting. There are literally thousands of widgets available despite being more complex to develop than RSS. Unlike RSS, widgets do more than display content. They also allow interaction. Widgets can be used to display interactive maps, order products, run surveys, post notifications and much more. Although widgets are powerful, it is often hard to customize their appearance and almost impossible to change the way they work. For that you need an API.
- **APIs** - An API is the most powerful method for integrating third party functionality. An API is a set of tools a web developer can use to interact with a web application at a code level. APIs are both powerful and flexible when compared to other options. It is possible to send and receive data from third party sites as well as manipulate and present that data in a large variety of ways. They are often used to provide the same functionality as a widget but in a much more customizable way.

These web services allow you to create functionality faster than building from the ground up. It is also possible to combine multiple web services to create even more sophisticate

[9]

applications called mash-ups. For example twittervision.com takes posts from social networking site Twitter and displays them on a map using the Google API.

widgetbox.com has thousands of widgets that you can add to your website.

The danger of web services is that your site becomes reliant on their functionality. If the site providing the web service goes down then your own may also experience problems. It is therefore important to be confident in the uptime of the service before integrating it. This is not a problem with services provided by organisations such as Google or Yahoo! However, you may wish to be more hesitant with smaller sites.

That said, web services can save you a lot of time in development, and allow functionality normally beyond your budget. The challenge is to keep up with the growing number of services being released. You can often reinvent the wheel simply because you do not know what is available. That is why you need an ongoing dialogue with your web design team.

Web services can also reach those who never even visit your site.

Looking beyond your website

Websites are a passive way of engaging with potential customers. They rely on users coming to the site and initiating contact. Relying on this as the sole means of online engagement is a failure to utilize the potential of the web.

Whether users see your website is irrelevant as long as your web strategy achieves it desired aim.

It is not your website that matters but

your *content*. For example, let's say you run a conference and have a website that encourages people to attend. What matters more, that people see your site or attend your conference? The answer of course is the latter.

In Chapter 10 we talked about engaging users through emerging social networks such as YouTube, Facebook and Twitter. However, these are techniques you should be implementing *now*! As you look ahead, you need to be planning ways not only to take the conversation to your users, but also deliver your content to them as well.

Building web services

The secret to distributing content is to use web services. Where previously I encouraged you to use those produced by others, now I suggest you create your own.

RSS, widgets and APIs are all excellent ways to reach a wider audience. They do this by releasing content from the constraints of your site.

As you plan for the future, consider how these technologies can spread your message. Do you have content or functionality that other website owners may want?

Amazon allow website owners to earn revenue by adding widgets to their sites. They recognise that widgets allow them to reach a larger audience.

For example, Amazon provides tools that allow website owners to add products to their sites. These range from commission earning links to a full embedded shopping catalogues. Amazon, recognizes that these services reach a wider audience than that of their website.

This approach is not limited to selling products. Everybody from news organisations to TV channels are beginning to 'push' content beyond their website.

Some web services are more difficult to build than others. Adding an RSS feed that sites can use to syndicate your content is straightforward. Implementing an API is more challenging. Creating a basic widget can often be a good middle ground. Although building a widget take time, it is easy to add to a site which encourages adoption.

Depending on your audience, you should consider building 'applications' for social networks like Facebook or MySpace. These sites provide 'frameworks' that allows third parties to build 'applications'. Users can then add these applications to their profiles. Building applications can be time consuming, but if your audience uses these sites regularly it may be worth the effort.

In the future, web services and applications will not be the only way to extend the reach of your website.

Computer friendly content

Tim Berners-Lee (the creator of the world wide web) has been working towards the next evolution of the web: the semantic web.

The semantic web will enable computers to understand web page in a similar way to us. They will be able to complete many of the tasks that consume our time online. For example, they will be able to find content more efficiently than we are able using services like Google.

The semantic web doesn't need to be part of your short-term plans. The technologies involved are still evolving and are some way from being mainstream. Nevertheless there are some small steps that you can take right now, like building your site using Microformats.

MapQuest uses Microformats to display longitude and Latitude, as well as the events it lists.

Microformats provide a standardized ways of marking up content in HTML, allowing computers to better understand what that content is about. For example, if the information about a conference was marked up using Microformats, then it would be possible for a computer program to extract that information and display it on another site.

Although Microformats have yet to be widely adopted, they are still worth implementing. It is easy for your developer to build a site using Microformats and so there is no reason not to. As more sites use Microformats, more applications will emerge that use them. Eventually your content will become compatible with other sites at little cost to you.

So far I have focused on distributing content to other sites. But it is also possible to distribute content to other platforms.

Targeting emerging platforms

Traditionally the web has been accessed using a browser on a computer. However, websites are beginning to appear on the desktop and also on a variety of devices from mobile phones to games consoles. It is important consider whether these emerging platforms should be included in your web strategy. But, how do you make that decision?

Looking beyond the PC

Samsung have released a fridge with integrated touch screen, allowing users to watch television and access the web.

It is astounding how many devices can now access the internet. Mobile phones, games consoles, watches, personal organizers, even fridges can all display web pages.

Some of these gadgets can be ignored as too niche or as a passing fad. However some, like the mobile phone, are much more significant as I explained in Chapter 7.. With mobile devices accounting for 19% of web usage, it is an emerging market you should monitor.

Unfortunately, building your site using the best practices I described in chapter 7 is not enough to ensure it is effective on these alternative devices. The same website that serves desktop users will not necessarily help those with alternative devices. This is because of:

- The environment
- The device

Let's look at how these issues effect developing for these platforms.

The importance of environment

The majority of websites are designed for users sitting in front of a computer. This is a relatively controlled and predictable environment. The user is normally indoors, can use both hands and tend to give the computer most of their attention. However, that is not always true for other devices.

Somebody accessing your site from a mobile phone while standing at a bus stop has a very different experience to a PC user. Your site needs to accommodate these differences.

The environment can vary depending on whether you are walking down the street looking up directions on your mobile phone or relaxing on the couch watching YouTube on the television. These environmental (or contextual) differences affect the design and content of your site.

Take for example a user accessing your site on a mobile phone. He is likely to be out and about, with the associated noise and distractions. This environment demands both a simplified design and clearer more concise content. Users will not read large amounts of copy via a mobile device. Also the type of content they require is different. A user accessing a mobile device is much more likely to want information such as addresses or contact numbers, and less likely to want access to product demonstrations or visually intense content.

Accessing the web on a television introduces different environmental factors again. Unlike a computer we view a television from a significant distance and interact with it using a remote. Most televisions also have a lower resolution than your average computer monitor. These factors combine to have a significant effect on the design of your site.

Before deciding to support a device, consider how the user's environment is going to alter the design and content of your site. You may conclude that the content you provide on your existing site is not appropriate. You may even decide that supporting these devices is pointless because the situation or audience is wrong for your offering.

Opera has worked with Nintendo to produce a web browser for the Wii. This allows users to surf the internet from the comfort of their arm chairs.

If you do see potential in designing a site for mobile phones or other devices, also consider their limitations.

The limitations of the device

Alternative devices do not just differ from a PC in context but also in technology. Mobile phones, games consoles and other devices all have significant differences that impact the user experience. These include:

- **The rendering engine** - Not all devices display web pages as well as a PC. Mobile phones in particular have traditionally found it hard to display HTML pages correctly. Also, many devices struggle with audio, video and other media. However, these problems are diminishing as devices become more sophisticate.
- **The screen** - Devices come with an enormous variety of screens. Some are monochrome, others have low resolution and most come in non-standard sizes. A website that displays perfectly on most PCs will require horizontal scrolling on a TV and be unusable on a mobile phone. Fortunately, CSS can help but this does require additional coding.

An iPhone may be able to access traditional websites but the smaller screen, slower speeds and touch interface change the experience.

- **Input methods** - Where most PC users have a mouse and keyboard, those using other devices could have any number of input methods. Remote controls, motion sensors, touch screens, numeric keypads, the list could go on. This has a huge impact on how the user interface is built. Once again CSS can provide the answer by presenting different designs optimized for each device.
- **Connection speeds** - Increasingly the sites we develop with PCs in mind rely on broadband connections. They are graphically intensive and make use of audio and video. However, some devices have less robust connections to the internet. Mobile phones in particular have poor connectivity especially in rural areas. Sites designed for these devices need to be streamlined when compared to their PC counterparts.

Catering for alternative devices is not straightforward, but an increasing amount of web traffic will come from these devices. Mobile phones need to be a part of your long-term strategy.

In the short term focus on preparation. Build your site with the latest web standards, which can be easily adapted for emerging devices. Also, think about what content the users of these devices will want, and in what environments they will be using them.

However, amidst all of this planning for alternative devices do not forget the desktop.

Move to the desktop

A new breed of desktop application is emerging that is built using web technologies. These applications are:

- easier to build,
- do not require a different development team with different skill set,
- can reuse much of the technologies already developed for your websites.

eBay have built a desktop application using Adobe Air that allow users to monitor their bids.

Although there are a number of different ways to create web powered desktop applications, the most common is to use Adobe AIR. AIR allows you to build applications that run on all the major operating systems using HTML, CSS, Javascript and Flash.

This opens up some exciting possibilities. However, just because you can do something doesn't mean you should! Before incorporating a desktop application into your web strategy, ask whether it is appropriate. Do you need a desktop application or will a traditional website suffice? Ask yourself the following questions:

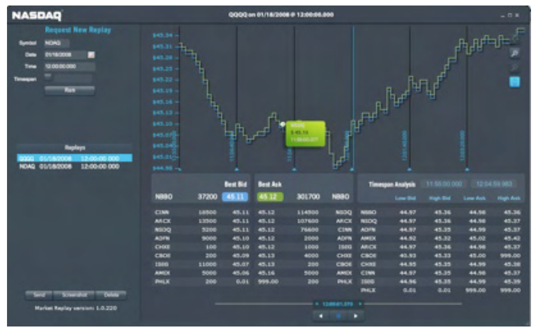
- **Do your users have intermittent connectivity?** - Those using desktop applications are unaffected if they have no connection to your site. This is ideal for those with dial-up connections or traveling. However, do your users really *need* access to your content while offline? In most cases they are happy to wait until they are connected again.
- **Is the user entering a lot of data?** - If you need users to complete long online forms then you may want to consider a desktop application. They tend to be more reliable and less likely to lose data in transit to your web server. There is nothing more annoying than loosing work because your connections times out.
- **Do users require fast access?** - Even AJAX driven websites do not respond as fast as a desktop application. Users who are continually using a portion of your site (such as a contact directory) may become frustrated by poor performance. In some situations a fast response is required for other reasons. For example, a customer services representative requires a faster response when looking up answers for a

customer who is on hold.

- **Do you need to integrate with the operating system?** - There are certain situations that may require you to integrate more closely with the operating system than a normal website would allow. For example, you may want to add a system tray notification that informs users when a certain event happens on your site (like a new article being published). Alternatively you may wish to have a more sophisticated file upload facility than that provided by the browser.

If your website is primarily content driven then you will probably not need a desktop application. However, if your site is a heavily used web application then it may be worth considering.

AIR applications are ideal for intranets, social networking and any site that requires regular notifications to be sent (such as a stock ticker). However, in most cases it will be unnecessary.



Information available through the NASDAQ site is also now available to traders in a constantly updating desktop application.

There are many more innovations that could be included in your web strategy. The challenge is to be aware of what is possible.

Staying informed

This book has taught you the essentials of running a successful website. However, I can only hope to start you on the journey. I have provided a strong foundation, but in order to truly harness the power of the web you need to stay informed.

This can seem like an overwhelming prospect, but it doesn't need to be. It is a matter of soaking in information from as many sources as possible. Much of it will be irrelevant to your circumstances, but occasionally you will read something that will take your site in a new direction.

How do you find those nuggets of inspiration when you have limited time? Here are some tips that will help:

- **Get an RSS reader -** If you don't subscribe to RSS feeds then you should start. Once you have a 'RSS reader', subscribe to a number of web design blogs. I can particularly recommend Gerry McGovern (gerrymcgovern.com/new_thinking.htm) and A List Apart (alistapart.com). For a round up of web design related stories, subscribe to my own feed at feedproxy.google.com/BoagworldArticles. Once subscribed, scan the headlines each morning and see if anything jumps out. This shouldn't take more than 10 minutes a day.
- **Subscribe to a web design magazine -** Magazines can provide an overview of emerging innovations. They also have the advantage that they can be read while away from the PC. I recommend you start with the .net magazine (netmag.co.uk).
- **Attend local networking events -** Speaking to other site owners or designers is both inspiring and educational. There are regular local meetings all over the world, so you should be able to find one in your area. A good place to start is the events site upcoming.org. From here you can search on web design in your area.

Subscribe to a web design magazine like .net

- **Listen to a web design podcast -** You can listen to podcasts while commuting or at the gym. This avoids cutting into valuable time but still keeps you informed about the web. Unsurprisingly I recommend my own podcast which is available at boagworld.com.
- **Get involved in a forum or mailing list -** Join an online community of website owners or web designers. There are a variety of forums and mailing lists full of people facing similar challenges and willing to share advice. You may wish to

For further advice on running a website and a news feed on latest innovations, visit my blog and podcast at boagworld.com

consider the boagworld forum (boagworld.com/forum) or those at sitepoint (sitepoint.com/forums)

- **Read just one book -** I do not want to overwhelm you with an extensive reading list, however I would like to recommend Steve Krug's book 'Don't make me think!' Usability is one of the most important aspects of running a website. Although I have covered the basics in Chapter 6 this is such an important subject that further reading is recommended.
- **Go to at least one conference a year -** Conferences are an excellent way of spotting emerging trends and hearing some of the most talented people in the web design world. Attending one a year will probably be enough to keep you informed. Unless you are fortunate enough to work in a sector that has its own web design conference, I recommend one of the 'Future of' conferences run by Carsonified (events.carsonified.com).

Running a website is a challenging role and hard to do in isolation. Wherever possible engage with others doing the same job and learn from their experiences.

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Next Actions

And so we reach the end of this book, but not the end of your journey. My underlying message has been the ongoing nature of your website and your role as website owner.

In this chapter especially, we have focused on the need to look forward. We have looked at emerging trends and platforms. However most importantly, we have looked at your relationship with your development team. Get that right and you stand a much greater chance of success.

So what now? Well, you could put this book aside and get on with work. However, let me suggest three final things you could do instead:

- **Look at your site with fresh eyes** - With all that you have learnt from this book buzzing around your brain, now is a good time to take a fresh look at your site. Put down your preconceptions and history. Allow yourself the freedom to 'dream'.
- **Arrange a meeting with your team** - Don't just limit brainstorming to yourself. Arrange a meeting with your design team and encourage them to share their ideas for the site. Don't worry about things like budget or timescales, just try to picture what your perfect website would look like. You can worry about practicalities later.
- **Visit boagworld.com** - Finally, I would encourage you to visit my website at boagworld.com. As well as the podcast and news feed I have already mentioned, the site contains hundreds of posts and articles on every aspect of running a website. If there is an issue I haven't written about email me and I will try to cover it.

Let me conclude with some words of encouragement. Running a website can seem a daunting task but it is also an incredibly exciting one. It is a medium where you can easily correct your mistakes and that brings amazing freedom. It is the new frontier of marketing, business development and indeed business strategy. The web is a wonder of human achievement and you get the chance to contribute to that. Enjoy the opportunity.