
Web site project planning

INTRODUCTION

As a veteran designer, developer and project manager on more sites than I can count, I've identified a common problem with many web projects: failure to plan. As the same issues come up repeatedly in my work, I've written this guide in order to help my clients, other designers, businesses and organizations plan and realize successful web sites.

Who this guide is for

Written in relatively non-technical language, this guide provides a broad overview of the process of developing a web site, from the initial needs assessment through site launch, maintenance and follow up. It is appropriate for:

- + Small and medium-size businesses
- + Organizations
- + Institutions
- + Web designers, developers, and design/development firms

Who this guide is not for

While you may benefit from applying the ideas within, if you're building a four page site for your family reunion or a 5,000 page site for a Fortune 500 company, this guide may be too detailed or way too short, respectively.

Why plan?

Planning is essential for most businesses and organizations. Unfortunately, when it comes to web sites there is often a failure to plan. Sometimes this is due to the ever-busy, dynamic nature of running a business—there so many operational demands that proper time is not allotted to the project. But often it is because people fail to recognize that planning for the web is just as important as planning for anything else associated with your business.

THE DECK EXAMPLE

Consider the example of building a deck. If you want a deck for your house, you probably won't call several carpenters and ask "How much is a deck?" If you do, the smart answer is "it depends." In order to provide you with an estimate, a carpenter will need some details about the project.

- + What kind of wood? Cedar? Treated? Or do you want synthetic?
- + Where exactly will the deck go, and are there any obstacles to work around?
- + What height will it be, and how many levels?
- + Do you want benches, railings, built-in planters?
- + Is there clearance to bring special equipment in to your yard?

Then there are the host of other things for the carpenter to consider: scheduling, building permits, inspection, maintenance, etc. That's why a smart carpenter will answer your simple question with "it depends." Obviously, it makes sense to meet with one or more contractors to address the questions above and more. When you choose a carpenter, they should provide a detailed plan that you both sign. As they're building, they should check in with you periodically and discuss any potential snags in the project.

Surely all this makes sense, but consider another scenario where there is no clear plan.

"Hi, Jennifer Carpenter, it's Juan Homeowner. I need a 20X30' cedar deck in my backyard. I want it built in two weeks."

"Okay, Juan. I'll pick up the materials and get started tomorrow. If you have any questions, just see me in your backyard while I'm working."

Jennifer Carpenter gets started, drilling post holes for each corner of the deck. She assumes Juan Homeowner has secured a building permit from city hall, since that's the way most of her previous jobs functioned.

There's no building permit.

As Ms. Carpenter starts framing the deck, she notices Mr. Homeowner has put a large hose reel against his house and connected it to the faucet. Based on where the deck will sit, the hose reel will have to go. But she's not sure if he will want to move it somewhere else, or have his outdoor faucet replumbed so he can re-connect it and put it on the deck, which is two feet off the ground. She stops building, and plans to ask Mr. Homeowner when he gets home.

He's on a business trip for three days.

When he's back, Ms. Carpenter reaches him by phone. He's not happy that he'll have to have his faucet moved, which now adds unplanned expenses to the project. But that's not Ms. Carpenter's fault, she's not the plumber. She's just putting the deck where he asked.

Once the deck is framed, she starts building a railing for one side. This wasn't discussed, but she sees Mr. Homeowner has small children around and thinks this is a good safety feature. Mr. Homeowner comes home one day and is happy to see great progress on his deck, but he noticed the railing.

"What's this?"

"I added a railing to this side, since you have kids. It's a good safety feature."

"I don't have small children."

"But I saw them playing in your front yard."

"Oh, those are the neighborhood kids. My kids are in high school."

"Well, a railing is a good feature."

"Yeah, but can you make it shorter, and put a bench next to it?"

"I didn't buy enough wood for a bench, and the railing is already drilled and attached. I'd have to remove and recut it. Also, we didn't talk about a bench."

"Well, I'd like a bench here."

"That will take more time. I won't be able to get this done by your two week deadline if we add the bench. Plus, I'd have to charge you for the extra wood."

What began as a “simple project” becomes a series of headaches due to failure to plan. And from a web professional’s perspective, a developing a 50-page web site for six unique stakeholders is far more complex than building a rectangular deck. Also, a deck is a physical structure built in stages. You can look out the window and see the progress. By contrast, a web site has a number of technical and administrative steps that aren’t visible to all.

A CAVEAT ... AND THE “WATERFALL” METHOD OF DEVELOPMENT

When I worked at an insurance company, business analysts, part of the IT (Information Technology) department would write project charters—long, painfully boring documents which attempted to outline every possible aspect of a web site. I really hated these documents. I preferred to work much more seat-of-the-pants. In part, this was because unlike print material, web sites are flexible. That is, their content can be changed at will. The idea that every aspect of a web site could be pre-planned on paper was ludicrous.

IT departments that handle large projects often use something called the “waterfall” method of development. That is, specify absolutely *everything*, down to the point size of the type, the line length of page headers, and exactly how a simple photo gallery will work. This is my view of the waterfall method: if you’re building a banking application that transfers money in and out of customer accounts, you’d better be sure your code is perfect. When dealing with debits and credits, there is zero allowance for error. For projects this critical, it makes sense to specify everything you’re going to in great detail before writing a single line of code.

However, as I said earlier, web sites are flexible. So how do we reconcile the need for clear and detailed specifications with the inherent flexibility of the medium? We can split the difference. Following the process I’ve outlined below, we can create a set of content and design specifications that greatly reduce the potential for mid-project glitches, while creating a framework that allows the site to grow with time. In fact, we can plan for expansion, allowing, for example, a news section to handle ten news items or two hundred. When properly implemented in a Content Management System (CMS), a web site will allow site editors the flexibility to swap out key photos, change titles, headers, reorder content, etc.—but all within the framework established by proper planning.

THE VALUE OF PAYING FOR PLANNING, NEEDS ASSESSMENT

I am often approached by clients who want an estimate to build their site. Sometimes they will have a general idea of what they want to do and possibly a simple site map. Others, especially organizations, will offer an RFP (Request for Proposal). In most cases, none of these items are enough, by themselves, to allow us to generate an accurate proposal. Even in the case of a multi-page RFP, there is often not enough detail from which to create a proposal and estimate. If a client just wants a very broad ballpark figure, we can usually do this. But to arrive at an accurate cost, more much information is needed.

Ideally, we would like clients to either hire us or a project manager to do a thorough needs assessment **before** they request a proposal. However, clients frequently don't understand the efficiencies gained by this upfront assessment. Ten hours spent on a needs assessment can later save thirty hours of development time. Discovering the true needs of a client **halfway through** a project is a recipe for headache, extended development time, cost overruns and missed deadlines. As you'll read below, failure to recognize and pay for proper planning creates big problems.

COMMON RESULTS OF FAILING TO PLAN

- ✦ The designer or developer is forced to make assumptions, which may or may not be correct, as to how certain content will appear on the site.
- ✦ The amount of back-and-forth communication about trivial matters can be multiplied many times over.
- ✦ Backtracking causes delays and missed deadlines.
- ✦ Work outside the original scope of the project creates cost overruns.
- ✦ Confusion and client dissatisfaction are the byproducts of the shoot-from-the-hip process.

NEEDS ASSESSMENT

Important things to remember:

- ✦ Unless you're building an intranet, the site is not for you—it must meet the needs of your client.
- ✦ A web site is not an event. It is a flexible, extensible communications tool which reflects, negatively or positively, on your business.

This is where we can potentially start using business-speak, i.e., “assemble your key internal stakeholders.” That’s another way of saying “get everyone together who has something valuable to contribute.”

The site must work in concert with the overall marketing

A web site needs assessment may overlap with other efforts and approaches of your marketing department. That’s fine. Though outside the scope of this writing, established branding and marketing of your business should certainly inform the structure and design of the web site.

ROLES: WHO’S DOING WHAT?

While each project is different, here are the typical participants and roles in a sizable web project.

- + Internal stakeholders (a.k.a. “the client”) representing all primary aspects of the business
- + Project manager
- + Copywriter/Editor
- + Web designer (Graphic design, illustration, web design)
- + HTML Coder (HTML, CSS, JavaScript, Flash)
- + Web/CMS Developer

Keep in mind that one person may play multiple roles. The number of participants does not necessarily reflect the quality of the end result. In some cases, a series of one-on-one meetings between company principals and an experienced designer can yield a great site.

DETERMINE SITE CONTENT

Who’s responsible?

As you determine content for the site, you should also be thinking about who will contribute it. In a five-person business, it may be just two of you, and that’s fine. In a larger business or organization, there may be five, ten, or fifteen people contributing content. Keep in mind that the time required for editing and proofing copy and visuals grows exponentially with the number of people contributing content.

Content is not just text

Unless you are creating the dullest, most technical site imaginable, your content should consist of more than just plain text. By using one or more of the following multi-media elements, you'll greatly enhance the appeal and usefulness of the site:

- + Photography
- + Documents (usually PDFs)
- + Audio
- + Video (i.e., YouTube, Vimeo, or self-hosted)
- + Adobe Flash files
- + Content feeds from other web sites, for example
 - + Photos from Flickr
 - + Twitter stream
 - + Facebook "friends" list
 - + RSS Feeds

THE VALUE OF QUALITY PHOTOGRAPHY

As with other elements of the web site, photos reflect the image of the organization. If you've just moved into a beautiful new building or storefront, you may have snapped some pictures of the building and staff on your \$150 digital camera. In most instances, unless you have bona fide photography skills, you will not turn out quality photos. Try to budget for professional photography. You don't necessarily need a lot of photos, just good photos. Twelve professional images are always better than fifty amateur snapshots.

If your budget doesn't allow hiring a pro, contact your local art school or community college and ask for a recommendation. A budding student photographer with a good eye will work cheap in order to build their portfolio. If you have no budget at all, take photos yourself. Pay special attention to lighting, framing and focus, and hope for the best.

In some cases stock photography may be used for more generic images. But there is no substitute for quality photos of your staff, storefront, products or services.

THE VALUE OF QUALITY WRITING

As with photography, good writing is a skill not possessed by all. Writing for the web is a different endeavor than crafting memos, policy papers or technical writing. You or your colleague may be great at writing operation manuals for precision machining tools, but that doesn't mean you can write well for the web. If you don't have someone in your organization who can write clear and concise marketing copy, hire an expert. If you can write reasonably well but need some guidance, consider hiring an editor to polish your output.

Writing for the web: quick guidelines

- + Consider your audience and write accordingly. Try to see your business from the customer's perspective. What do they care about?
- + Avoid business-speak, confusing acronyms, dry details. Your customers do not work at your shop, office or widget factory—they purchase your products or services. Speak to them accordingly. When appropriate, put generalities in your web pages and save the hardcore details for multi-page PDFs available for download. This approach is especially useful for product information, whitepapers and any copy that approaches, or exceeds a thousand words.
- + A useful approach when writing for the web:
 - + Write your first draft
 - + Cut it in half
 - + Cut it in half again
 - + Now add bulleted and numbered lists where possible
 - + Send it to the editor
- + Reading on a screen is fatiguing. A screen, whether massive 26" monitor or diminutive smartphone, projects tiny points of light at your eyes. Consequently, reading large amounts of text can be very tiring. Because of this, readers will scan for key points within your text. That's why short blocks of copy and bulleted or numbered lists are so helpful, because they're easy to spot.

- + Don't style your content. Most writers will prefer to work in Microsoft Word or similar program. This is fine, but Word is notorious for creating very messy code when its text contents are moved to a web page. Don't worry about colors, fonts, alignment. Just write well. Style will be applied later at the level of each web page.

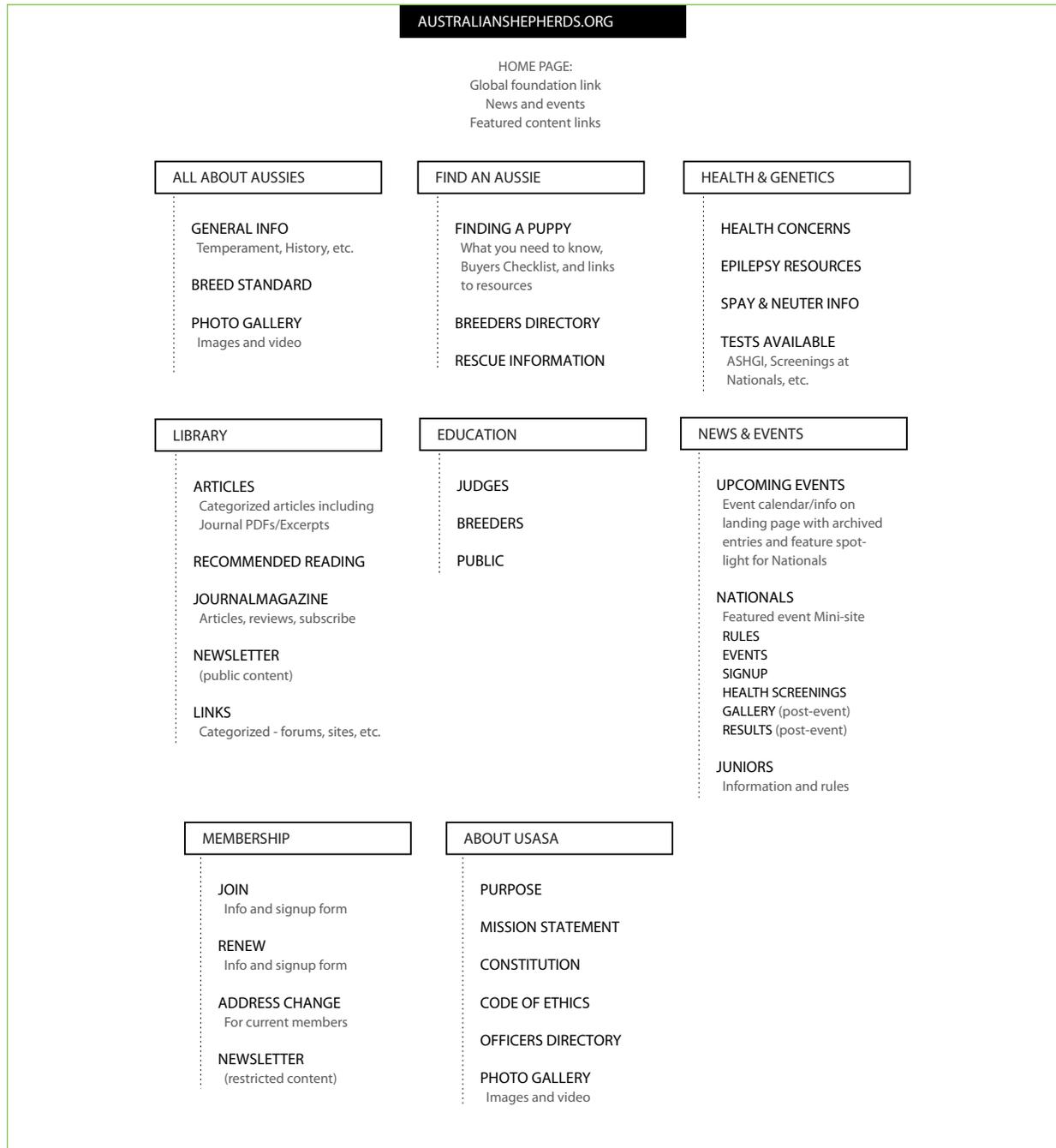
DETERMINE YOUR SITE STRUCTURE

Here are the key elements of your site, in structural terms.

SITE MAP

Your site map can be structured like a flowchart, built with software such as Visio or a free tool like [Gliffy](#). Alternately, you can use an outline with bulleted lists and indentations indicating pages, subpages, and other structural breaks.

Here is an example site map for the United States Australian Shepherds Association.



Content definition

Some content will be easy to define. On a contact page, for example, it's generally understood that you'll need to list business name, location, contact information, hours, if applicable, and often, a simple contact form. Other types of content will take more consideration. This is another point where failure to carefully define your content will cause headaches later.

For example, you may want to include a photo gallery on your site. Good idea, but what, exactly, will this photo gallery entail? Is it twenty images in a grid of thumbnails, with a nice pop-up overlay when you click them or a multi-page gallery with 1,000 photos, individually categorized and meta data tracked? Should users be able to rate the images? Comment on them? Download hi-resolution versions? Email them to a friend?

This is but one example of why it's so important to define each type of content. Otherwise, you'll receive the developer's best guess at what each type of content should be. Content elements like an events calendar, staff directory or blog may provide a general frame of reference, but require clear definitions of what, exactly, they need to accomplish and how they will be used.

One way to help define content is simply to observe the functionality of existing web sites and see what might be effective for your purposes.

CONTENT CHECKLIST

Here is a non-exhaustive list of common types of content. Keep in mind these are just types, not definitions.

- + Articles
- + Blog
- + Banner advertising
- + Discussion forum
- + Documents
- + E-commerce
- + Forms for contact, quote request, or other purposes
- + Physical products (how many?)

- + Digital content (what kind and how many?)
- + Email newsletter
- + Event calendar
- + Event registration
- + Image gallery
- + Link management (dozens or hundreds of links, ordered by category)
- + RSS Feeds, incoming (external, pulled from other sites in to yours)
- + RSS Feeds, outgoing (your site's content, syndicated to other sites)
- + Search
- + Social media sharing links, i.e., Tweet, post to Facebook, etc.
- + Staff directory

Content relationships

Some of your content will relate to other content. For example, the same content details may appear in different parts of the site. Map these relationships carefully. Keep in mind that when content is changed in one area of the site, it may need to be changed in other areas for consistency and accuracy.

Separating design from content

Design and content are intimately related, but they are also separate. This may be confusing at first. The idea of separating design from content means that site content is completely free of any design elements. So we're not talking hypothetically, let's consider a simple example. Let's say your site has articles. For each article, there is:

- + Title
- + Meta title
- + Meta description
- + Author(s)

- + Date of publication
- + Categories to which it is assigned
- + Summary
- + Article text

These pieces of information comprise everything that constitutes an article. At this point in the process, it doesn't matter what design you apply to the copy—fonts, layout, colors, author photo thumbnails, etc. The content is valid even in the absence of design. It may not look pretty in plain text, but it reads correctly.

This separation fits neatly with Web Standards, a project that advocates for a set of standards for web design which make content accessible to the broadest possible range of people and devices.

Ultimately, when it's time to redesign your site, you may apply an entirely new design to your existing content, because you've maintained the separation between content and design.

The value of good content meta data

WHAT IS META DATA?

Meta data is content about your content. In the case of an article, everything besides the title and article text may be considered meta data. When some people hear "meta data" they immediately think "Oh, for search engines." That's correct, meta data is included in web pages so search engines will index your site effectively. However, some meta data you may collect initially just for your own records. You don't have to display it on the web site.

When deciding what data to collect for each type of content, there is a benefit to erring on the side of collecting more meta data rather than less. For example, what we're collecting for articles above, you could collect a lot less and have a valid article. The bare minimum you need for something to qualify as an article is:

- + Title
- + Author
- + Article text

You may think this is enough, that you're not writing very many articles, they're short, so they don't need a summary, or that site visitors don't care about date or categories. This may be true today, but what about next year? If you write good content, it will be useful well into the future.

COLLECTING GOOD META DATA: PLANNING FOR THE FUTURE

Over time, the value of collecting good meta data increases. When you have 10 articles, tracking the authors and categories may not seem useful. In two years, when you've built up a library of 150, you'll be glad you took the time to collect this. Now you can sort by author, date and category. Since you've collected summaries, you can make a version of your site for mobile devices where the article summary is all that will fit on the screen at once.

URL structure

Whatever Content Management System (CMS) you ultimately use to build the site, your pages will require a specific structure. Plan this in advance so you will have logical URLs for every type of page within your site. This will need to be done in cooperation with your CMS expert. For example:

- + mysite.com (Home page)
- + mysite.com/blog (Blog main page)
- + mysite.com/blog/post/here-is-the-first-blog-post (Single blog post)
- + mysite.com/services/widget-repair (Internal pages under "services")
- + mysite.com/articles/item/fixing-your-model-5-widget

Notice that these URLs are human-readable, and also tell you at a glance what you should expect to see when you visit them.

Where it comes together: SEO (Search Engine Optimization)

Assembling these previously noted elements properly:

- + Quality writing
- + Well-defined content
- + Good meta data
- + Logical URL structure

is the most effective way to achieve good SEO for your site. These are not the only points that matter, but they are the most important. Your CMS should provide the framework for entering these elements.

WIREFRAMES

Once you've determined the structure of your content, you can move to the first step in the design process. Building wireframes is mostly about the layout aspect of web design, because wireframes are done in grayscale and are not designed to be pretty, but rather to show, broadly, the layout of pages within the site. There are many great tools for this. Photoshop, Illustrator or Visio work well, as do specialized tools like Balsamiq Mockups.

Our tendency (especially designers') is to make things look appealing from the beginning of the process. In the wireframe stage, this should be avoided completely, as it distracts from the purpose of wireframes, which is to decide where things go, not what font size to use or what color the navigation should be.

Generally speaking, one wireframe should be made for each unique page layout within the site. If you have downloads, photo galleries, it is also useful to mockup these additional pages.

The examples that follow are for a home page and two internal pages, respectively.

Search | Contact Us | Member Login 2



United States Australian Shepherd Association 1

3 Rotating Slideshow Images

Home ABOUT AUSSIES FIND AN AUSSIE HEALTH & GENETICS LIBRARY & RESOURCES EDUCATION NEWS & EVENTS MEMBERSHIP ABOUT USASA

New & Noteworthy 4

SPOTLIGHT:
2010 USASA Nationals
April 23 – 30, 2010
Purina Farms
Gray Summit, MO

Check out the new tentative schedule for Futurity, Obedience and Rally Judges. We still need sponsors for the Class Sponsorship, and check out the great logo items.

Closing Date for all events is April 7, 2010

[Read More...](#)

American Kennel Club United States Australian Shepherd Association Proposal

Bringing NAMASCUSA into AKC's Foundation Stock Service; Important Questions & Answers for NAMASCUSA Members.

[Read More...](#)

2011 USASA Nationals Judges Nominations

It's time to nominate the 2011 Nationals judges. You can [download/print the nomination form here](#). It will also be available in the July Newsletter and in the July/August edition of the Journal. Deadline August 31st.

[Read More...](#)

The Journal 5

Current Issue Promo
(text and cover image)

Member Newsletter

Newsletter Promo

Welcome Message 6

[JOIN USASA](#) ▶

[RENEW MEMBERSHIP](#) ▶

Breeder Directory Promo

Puppy Checklist Promo 7

Home / About Aussies / Find and Aussie / Health & Genetics / Library & Resources / Education / News & Events / Membership / About USASA

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United States Australian Shepherd Association

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ABOUT AUSSIES
FIND AN AUSSIE
HEALTH & GENETICS
LIBRARY & RESOURCES
EDUCATION
NEWS & EVENTS
MEMBERSHIP
ABOUT USASA

1

About Aussies

- Breed Standard
- Breed Characteristics
- Breed History
- Health Concerns

Title and Hero Image

All About Aussies

2

This is an example overview "landing" page. This can be an introduction to a section with overview blurbs to deeper content, and could have a more unique layout depending on the section, for example, the [news and events](#) section might have an event calendar design or feature area for the nationals instead of a large hero image. Certain sections may not need an overview page at all, and in that case can just be a standard content page.

More example text, lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum inure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue dui dolore te feugait nulla facilisi.

Related Section Promo
(example: puppy checklist)

3

Join or Related Promo

[Home](#) / [About Aussies](#) / [Find and Aussie](#) / [Health & Genetics](#) / [Library & Resources](#) / [Education](#) / [News & Events](#) / [Membership](#) / [About USASA](#)

United States Australian Shepherd Association
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United States Australian Shepherd Association

🏠
ABOUT AUSSIES
FIND AN AUSSIE
HEALTH & GENETICS
LIBRARY & RESOURCES
EDUCATION
NEWS & EVENTS
MEMBERSHIP
ABOUT USASA

About Aussies

Breed Standard

Breed Characteristics

- » Colors 1
- » Temperament

Breed History

Health Concerns

Breed Characteristics

This is an example standard content page. More example text, lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum inure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi.

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Subheading Goes Here

More example text, lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

RELATED LINKS: 2

- » Finding a Breeder
- » Health and Genetics
- » Care and Training Articles

Article Image

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Once wireframes have gone through your review process, it's time to move to the design stage.

THE VALUE OF GOOD DESIGN

Consider the iPod. Apple Computer has been wildly successful selling products with exquisitely refined design, both physical and UI (User Interface). The iPod doesn't have any particular capabilities that its competitors lack. In fact, by some measures it is less full-featured than others. For example, out of the box, it doesn't record audio. You have to attach an additional piece of hardware to the iPod before it can do this. Nonetheless, the exceptional physical design of the product, combined with a highly intuitive interface (and great marketing) make the iPod a far more coveted item than any competing product.

When it comes to web sites, however, the value of good design and attention to detail is often discounted. Often, the thought is that if something works, it doesn't really need refinement. This is misguided thinking. A web site, along with logo, business cards, signage, letterhead, direct mail and other visual expressions of a your brand are critical to the way customers perceive the business. The experience users have on your web site is part of this impression. When a web site is harmonious, pleasing to the eye and easy to navigate, this leaves a positive impression on site visitors. Conversely, when a web site is just passable, this may annoy customers, leave a bad impression and discourage further visits to the site. And importantly, they often won't tell you about it. The web isn't very old, but here's a key question that has applied since the first business web site went online.

Q. If a customer goes to your site, searches for specifications on a product they know you sell, and finds nothing, what will their next step be?

A. Leave.

Often, when a web user gets frustrated, they don't search further, they don't call or email, they just leave your site. You can get a sense of this by reviewing your web site visitor statistics (see upcoming section for "bounce rate"), but these stats don't allow you to know what a visitor was thinking when they left your site. And unless you're selling something wonderful and unique, customers may well go elsewhere to find a similar product or a different service provider.

INITIAL DESIGN

Commonly created in Adobe Photoshop or Fireworks (and sometimes Adobe Illustrator), initial design will consist of a visually accurate image (“mockup”) of the home page and at least one internal page. Your business’ visual branding elements should be applied here. If you have well-defined graphics in addition to your logo, they will dictate the design of the site. However, if your brand lacks extensive graphics, the designer should do their best to create work that accurately reflects the business. Here is a short list of key points for successful mockups. We’ll assume the designer is working in Photoshop, however, these guidelines apply to other design programs.

- ✦ Start with a pre-made template with pre-drawn, pixel-accurate guides. Some designers create their own, while others may adhere to a system like 960 Grid System. Whatever the case, it’s important to have a clean template to start. Make your canvas wider than the width you’re designing to, so you can add notes on one side.
- ✦ Add the color palette and basic branding elements (i.e., fonts) in the margins of the canvas so you’ll have it for reference when viewing on screen or in print.
- ✦ Draw everything to exact pixels, and draw clear guides and/or slices around design elements. This becomes critical when you later execute the design in HTML.
- ✦ Organize all design elements with a logical folder/subfolder structure, and label each item clearly. If the designer will be handing off their files to an HTML specialist, this is especially important. “Sidebar—events header” is clear, “Layer14 Copy” is not.
- ✦ Make clear notes as to fonts, alignment, repeating background elements, gradients and anything that will need to be implemented with CSS techniques. In Photoshop, the sticky note feature is good for this. If unclear, ask the person who will be converting your design.
- ✦ This applies further along in the design process, once mockups have been approved. If using a common style for headers, navigation, or other design elements that appear throughout the site, consider making separate templates for them.

- + Use realistic content. Designers often use greeking (“lorem ipsum”) to fill space, which is ok for body copy. However, for headlines, titles, events, etc., try to use real copy. Consider the two following headlines. Layout considerations are different for each.
 - + Widgets, Inc. Wins Green Manufacturing Award
 - + Widgets, Inc. Employees Win Landmark Court Case Affirming Employee Right To Petition For College Tuition Reimbursement When Training Is Relevant To Work Role

Design approval and revisions

Initial design mockups are submitted for approval, and there may be a revision process where the designer and key stakeholders go back and forth a few times, trying different edits to the design until it is approved.

Design by committee: don't do it.

A common problem at this stage is the consideration of too many opinions. While some project stakeholders may be absent later when they have to put in solid hours sifting through content for the web site, they are quite vocal when it comes to design critique. Certainly, it is important to solicit feedback on design, and project stakeholders have valuable critique to offer, helping guide the design process so that the end result accurately represents their business. And in some instances, review by legal and/or technical staff is needed. However, considering all feedback equally can lead to no one being satisfied.

Generally speaking, in small businesses or organizations, having more than five people provide design feedback is a recipe for gridlock. It will be helpful for these five (or fewer) people to solicit feedback from their subordinates or department colleagues, but this should be compiled by each stakeholder. In other words, don't invite fifteen people to a design review meeting.

Design tension: designer vs. client

Designers often deal with tension between their informed concept of design and clients' sometimes uninformed design critique. This is best illustrated by the “bad idea” conundrum. The

client will request a design feature that's either ugly, unworkable, or just a bad idea. There are entire web sites that chronicle clueless clients. The designer will respond somewhere on the continuum between "that's horrible, we won't do it" and "well, if that's what you prefer...". This response is dependent on a variety of ever-shifting factors, including:

- + When designer hopes to get paid.
- + How emotionally invested designer is in the project.
- + How much time the designer has invested in the design phase, and how much delay will result from implementing the bad idea.
- + Clients' willingness to take constructive counsel about their ideas.

Every project is different. When designers deal with clients who continually request features that are ill-advised, at some point they may write off the project professionally. It's just too exhausting to continually explain why centered, bold paragraphs in red, crazy Flash animations or poor-quality photography make an ineffective web site. Their attitude shifts from "let's make something really great that we're proud of" to "let's just get it done." Designers won't tell this to clients, but it happens frequently.

While considering the above, also realize that the work of some designers may not be up to par or they refuse to listen to valid criticism of their work. A good way to avoid this is by getting good references from designers' past projects.

Consider the content

Think about expansion. For example, you may have a news section. To start, you have six news items. That's fine. You'll make a main news page with summaries and link the summaries to a detail page. But what happens when you have ten, twenty, or fifty news pieces? Now there are other considerations. Do you want to archive old news? Create pagination? Only show the last ten items? This should be considered in the design process.

For sites with ever-expanding content such as news items, press releases or reports, there's a good rule to follow when creating mockups: **you can never have enough mockups.** In other words, if you think the layout or design of a page or section of the site will differ significantly from other pages, it's always worthwhile to make a mockup of the rogue page. This step normally comes after approval of the initial mockups.

WEB STYLE GUIDE

A style guide is where proper planning shines. A style guide will consist of all the design, layout, interactive (i.e. JavaScript, Flash) and type elements used throughout the site. These include, but are not limited to:

- + Navigation styles
- + <h1> through <h5>, also known as header tags
- + Paragraphs
- + Lists
- + Blockquotes
- + Italics, bold face, underlines
- + Links, including active, hover and visited states, that is, the appearance of links, including when hovered over with the mouse
- + Icons
- + Use of images and image style
- + Use of background images or “watermarks”
- + Common elements, i.e., side columns

Approved mockups and the style guide are used as the basis for the next steps of development.

HTML/CSS CREATION

Using the mockups and style guide, an HTML/CSS expert will create HTML templates which accurately represent the design as approved. In some cases, templates will appear identical to mockups, however, subtle differences between Photoshop and HTML are to be expected.

If mockups were created with attention to detail, there should be few questions or guesswork at this stage; work should be humming along.

INTERACTIVE ELEMENT CREATION

Interactive elements may be as simple as a drop-down menu, or as elaborate as a Flash-based pie chart creator. These elements are typically developed either with JavaScript, often using a script library like jQuery, or with Adobe Flash. At the most general level, this consists of assembling (and writing) a set of instructions that interact with pages on your web site.

CMS INTEGRATION

At long last your brilliant design has been converted to code, and is ready to be integrated in a Content Management System (CMS). The individual or team tasked with doing this will provide you with a login for the CMS which allows you to enter content, including text, photos, videos, and documents. Most writers will prefer to cut and paste from Microsoft Word. Depending on the specifics of the CMS selected, you may be able to do this without issue, retaining simple formatting like bold, italics, and lists. However, the CMS may strip out this formatting when you cut and paste, requiring you to add it back. While sometimes tedious, this insures your content remains neat and orderly, which makes it more easily indexed by search engines, more easily printed, cited and converted to other formats.

PUTTIN' IT ALL TOGETHER

Following the preceding steps, you should be sitting on a pretty solid web site. Regardless the size of your project, now is a good time to:

- + Review your content once again, checking it against the points listed under 'writing for the web' above.
- + Ask a third party to proofread all your content. This is not the task of the designer or the original writer. It's best to bring in someone with a fresh perspective. Don't proofread your own work.

Beta testing

When you feel your web site is almost ready for the public to see, it's time for beta testing. Consider this checklist, at minimum:

- + Does the site look correct in all targeted web browsers? Web browsers include the usual Internet Explorer, Firefox and Safari, as well as, depending on the spec of your contract, less common browsers like Chrome and/or mobile devices (iPod, Blackberry, etc).
- + Interactive features work smoothly.
- + Contact or other forms work predictably and generate the correct response to the user and recipient of the information submitted.
- + Internal and external links function.
- + Images are sized properly.
- + All placeholder content has been replaced by the final copy.
- + Links to third party software, such as email campaigns, are working.

LAUNCH!

Once you've thoroughly beta tested the site, it's time to launch.

POST-LAUNCH

Web statistics

Reviewing your web site visitor statistics can give you vital insight in to how people are using your site. You'll need at least a month or two worth of data to make any determinations. Here are a few key points to consider:

- + Where are visitors coming from? Search engines, direct traffic (i.e., someone just typed your site's URL in to the browser), ads, links from other sites, etc.
- + Where do visitors live? Are they mostly local, regional, national, international?
- + What pages are the most popular?
- + How long are visitors staying on the site?
- + What is the bounce rate, that is how many users visit only one page on the site before leaving it entirely?

Google Analytics is among the most commonly used web statistics software and you will easily find answers to these questions in the high-level data it presents. Other web statistics software should readily provide these answers as well.

Documentation

Much of your documentation will simply consist of the different elements discussed earlier in this document, including Wireframes and Photoshop documents. You'll also need detailed notes on how various parts of the site are implemented on the CMS. Think about what information would be needed if you brought new people in to maintain the site, people who were not at all familiar with it. What do they require to pick up the project? This is your proper documentation.

Backup

Schedule regular backups of the site's files and database. Daily is ideal. Your hosting company may provide an automated way to do this, so if your files or database get hacked, erased, corrupted or otherwise damaged, you can restore them with copies from the previous day. Depending on the size of your site, frequency of updates and some technical matters that vary with each site, you may want to schedule more frequent backups.

Maintenance plan

Your maintenance plan should clarify roles and responsibilities for every aspect of the site. For example, if two articles per week are to be posted, who is responsible for this, and who is that person's backup? If your site requires photos or graphics to be created regularly, make sure this work is assigned and understood. Determine who will check links.

Write a simple maintenance plan and share it with everyone involved in the site's care and feeding. Remember, a good web site isn't a one-time event, but rather an extensible communication tool that requires regular updates to remain valuable, relevant and compelling to site visitors.

Solicit visitor feedback

A great way to improve the impact of your site is to solicit visitor feedback. There are a variety of ways to do this, from simple online surveys to on-site focus groups. Site visitors often have trouble articulating what they like and don't like about their experience. With this in mind, it's

important to craft very clear and specific questions when soliciting feedback. And remember, if you're going to take a significant amount of visitors' time, offer something in return—a product discount, prize, or simply a handwritten note thanking them.

FIN

OK, one more time for posterity: a good web site isn't a one-time event, but rather an extensible communications tool. Once you've built a great web site, keep the momentum going. Devote resources to regular maintenance, and check in with your site visitors regularly to identify areas for improvement.

APPENDIX A: DEFINITIONS

Adobe Flash

A proprietary system for creating rich, interactive web site features such as charts, graphs, animations and streaming video. The Flash player, that is, the browser add-on that allows users to view Flash content, is free. Flash authoring software is sold by Adobe.

CMS

Software that provides website authoring, collaboration and administration tools designed to allow users with little knowledge of web programming languages or markup languages to create and manage the site's content with relative ease. Offers users the ability to manage documents and output for multiple author editing and participation.¹

HTML

Short for Hypertext Markup Language. HTML is a tag-based language which defined the elements of content on a web page. For example, surrounding content in `<p>...</p>` tags creates a paragraph, while `...` creates bold text.

¹ Adapted from Wikipedia.

Javascript (JS)

A programming language which runs inside a user's web browser, enhancing web sites with a wide range of features such as mouseovers, slide shows, moving and fading elements, and more. Commonly implemented through a library like [jQuery](#).

CSS

Short for Cascading Style Sheets. CSS is a set of instructions which define the layout and appearance of HTML elements. For example, CSS may specify that all paragraphs be 12 point Verdana, dark gray.

Lorem Ipsum

Placeholder text used by web and graphic designers to fill space in mockups and incomplete web pages until real content is provided. May be as old as [the sixteenth century](#).

THANK YOU

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