Planning and Developing the Site

In this chapter you will learn about:

◎ The beginning stages of Web site development

◎ The importance of understanding a site's target audience and how that understanding can affect site development

◎ Methods for getting a site developed

◎ Baseline considerations for every site, including navigation, organization, graphic design, and content development

So, here is it—the meat and bones of site development. You have gotten the in-depth analysis on just about every social media tool in popular use and have read more on branding than you ever thought you would as a Web programmer. Finally, we get to the part we have all been waiting for—developing the site.

Sort of.

Before any code gets written, the site owners and developers need to decide on the overall concept for the site—what it will do, why it will exist, and what elements will be needed to make it come to life. Many of these questions can only be answered by undertaking research to develop an understanding of who the target audience is, what they want, and what they will respond to. Furthermore, companies that own and operate a site need to weigh the pros and cons of internal site development versus outsourcing to a third party. Finally, all parties involved need to carefully plan all aspects of the site prior to construction—including how the site will be organized, how it will look, and how the content will be developed.

Getting the Site Started

Web site developers need to take many steps before programming can begin. They must come up with core idea behind the site, and they must develop a general concept for the site. In addition, developers need to have a full understanding of their goals and the required resources in advance of actually building the site.

Developing the Idea

Web sites don't start with a line of code, a body of copy, or even a graphic design. Regardless of the Web site's purpose, all sites start with an idea. Whether it is a B2B site that promotes a company's products or services, a social networking site, an e-commerce site, or a site that supports an advertising campaign, each site stems from a concept or idea that one or more people believe in.

Developing a successful idea for a site can be trickier than you might think. To create a successful site, a developer should start with a concept about which he or she is passionate and knowledgeable. The idea should relate to a subject of interest to the intended audience. It also must be easily translatable into a Web site (given the budget and resources available).

The Web is a rich canvas on which developers can get carried away. It is important that site owners put into action ideas that are exciting and of interest to the target audience while also being realistic for the scope of the project.

Defining the Site Objectives

Every site has a reason for being. Once the developers have finalized the concept, they must establish the objectives of the site. The objectives need to be clear so that the site can be developed to reach the desired goals.

Objectives for a Web site could include one or more of the following:

- To generate direct revenue through e-commerce capabilities

- To generate indirect revenue by enticing visitors to contact the company and engage in a business relationship

- To build brand recognition (which ultimately leads to generating revenue)

- To build traffic for the purposes of generating advertising revenue

- To gather like-minded people

- To express opinions

- To share one's creative talents relating to music, art, etc.

Needs Assessment

Successful Web developers conduct a thorough needs assessment for their projects prior to beginning development. What each site needs in terms of resources ultimately depends on its objectives. The skills and resources required to build a site can be numerous, and can include:

- Graphic design

- Programming

- Marketing

- Content development

- Product inventory

- Site hosting

Graphic designers, programmers, and other staff all need to be paid and have a place to work. Each needs a computer, software licenses, scanners, printers, and other office equipment. Owners must also finance the cost of any necessary product inventory, site hosting services, and a variety of other expenses associated with site development. The level of financial resources needed to develop a site largely depends on the idea behind the site and the level of programming complexity involved. More complicated sites can

require multiple servers, sophisticated databases, and other tools. Sometimes, companies can keep costs down through what is known as **boot-strapping**—a slang term that means a company tries to do most of its site development in-house in order to keep costs as low as possible.

Companies with development plans that require heavier financial aid usually seek funding either through a bank loan or from a venture capitalist. Acquiring funding through a venture capitalist usually involves writing a **business plan**, which outlines the site concept, market, anticipated revenue structure, marketing, strategy, and technology plans. Basically, business plans lay out the reasons why the site will work, how it will serve the market, and how it will reach its goals.

Understanding the Audience

Part of establishing a successful brand is promising something that people want. An underarm deodorant that promises to make people smell worse than they already do might be able to live up that promise, but is it a promise that people are interested in? Similarly, in order to develop a successful Web site, developers need to understand the potential audience, what they want, what they are likely to respond to, and what will make them take action.

To develop that understanding, companies work to define their **target market**—the market segment most likely to visit their site and purchase their products or services. In defining the target market, marketers gather as much information as they can about the audience, painting a picture by gathering both demographic and psychographic data:

- **Demographic data** provides information on large groups by specific population characteristics such as:

  - Age (median age and predominant age group)

  - Marital status

  - Family size (marital status, number of siblings, number of offspring, etc.)

  - Education level

  - Income (median income and income range)

  - Gender (percentage male versus percentage female)

  - Occupation (type of work and number of years with same employer)

  - Nationality

- Race

- Religion

- Geographical residence

- **Psychographic data** further defines audiences by personality and lifestyle characteristics, including:

  - Types of hobbies

  - Vacations (places traveled and number of trips taken per year)

  - Recreational sports played

  - Luxury items owned

  - Number of general-use items (cars, sneakers, etc.) purchased last year or over the last three years

  - Hours per day/week spent on the Web

  - Web use location (percentage work versus home)

  - Types of sites visited

  - Top five favorite Web sites

  - Dollars spent on online retail over the last six months and over the last year

  - Social media tools used (blogging, video sharing, social networking sites, etc.)

To appeal to the target market, marketers study the demographic and psychographic data as a basis for developing appropriate content. For example, the personalities and lifestyle similarities of people that would go to a Web site on car racing are likely very different from those of people who would visit a site about opera. Knowledge of the target market translates into a site's ability to devise an effective **marketing strategy** (the strategy that a site or company employs in order to gain more customers and revenue). A successful marketing strategy translates into increased product sales and/or increased **visitor retention** (the measure of how long a visitor remains on your site and how often he or she returns). Further, market research of this nature often provides insight that might not be obvious on the surface. For example, consider an e-commerce site that sells clothing and accessories to an audience of 14- to 19-year-old females. Without doing any market research, site developers might design the site using colors, text, images, and content that they assume would appeal to girls and women in that age category. However, more in-depth research of the target market would likely lead developers to build a site that would appeal to 20- to 25-year-old

women, because 14- to 19-year-olds want to look and feel like they are 20 to 25 years old. In addition, the research might also show that the one sure way to lose the audience completely would be to focus too much on the product line. Hard sales won't work with this demographic. Instead, the site needs content and tools that appeal to this market segment, like updated celebrity gossip, product reviews, and relevant blogs. The sales of product will come with the broader appeal of the site. This, in turn will come by creating an emotional connection between the brand and the target market. This connection is nurtured as marketers cultivate a better understanding of who the market is and what they are likely to respond to.

Gathering the Information

Researchers use a number of different methods to collect market data, including conducting personal interviews (either existing clients or random people in a highly populated area, such as a shopping mall), telephone surveys, or **focus groups**. Focus groups are meetings in which a group of individuals (usually between 15 to 20 people) that represent the target market are gathered together and engaged in a discussion about a topic of interest to the marketer. Often, the group is unaware of what company or brand is conducting the meeting.

As the Web has grown, newer methods of research have become popular. Surveys, for example, which used to be conducted mostly over the phone, in person, or via mail, are now made much easier thanks to the Web. Sites like SurveyMonkey (shown in Figure 8-1) have made the creation and distribution of surveys quick and efficient. These sites allow marketers to easily create online surveys that can be posted on a Web site or included in an e-mail. Further, marketers can create surveys that retain the logo, colors, and style of their brand. All of this can be done without users having to program a single line of code.

Marketers also conduct research through careful review of the blogosphere, customer reviews, and social networking sites. These techniques allow brands to see far more than just who is in their market. These alternative methods give brands insight into how the people who make up their target market speak, what they say, and how they feel in a setting where people feel more free to express themselves; freedom they may not feel during an interview or focus group.
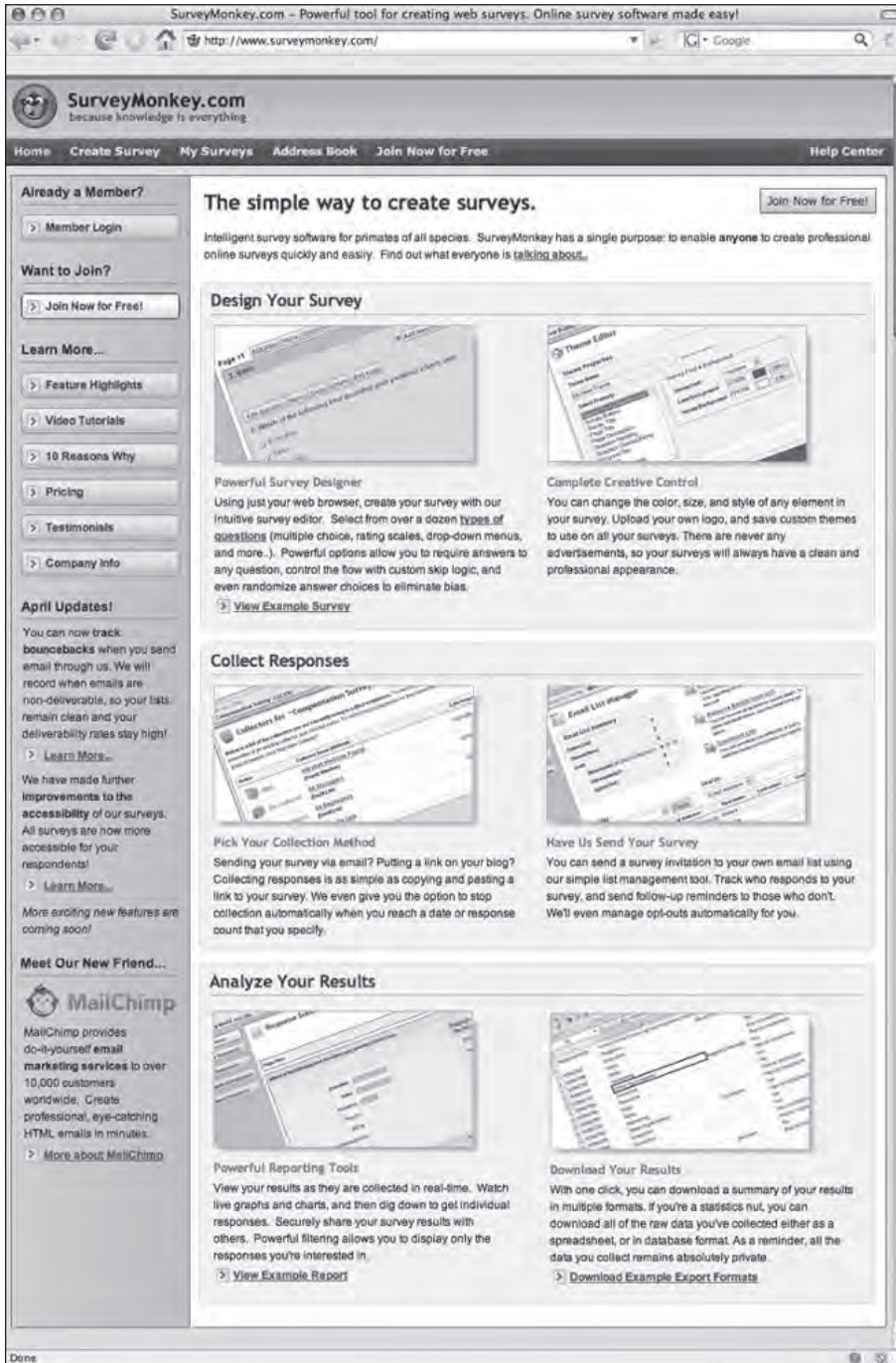
Figure 8-1 Sites like SurveyMonkey make market research over the Web easy and efficient.

How the Target Market Affects the Development of a Web Site

Once gathered, data that defines a target market can be used to shape the choices made during a Web site's development, such as appropriate colors, graphics, photographs, and social media applications. Most importantly, understanding the audience will help shape the core message and personality of the brand for long-term market penetration. In the final analysis, it is the brand's job to sell the product or service, and it is the site's job to help build the brand.

As we first saw in Chapter 1, the current Pepsi Web site (see Figure 8-2) provides an excellent example of a brand that has built its site based on a deep understanding of its audience.
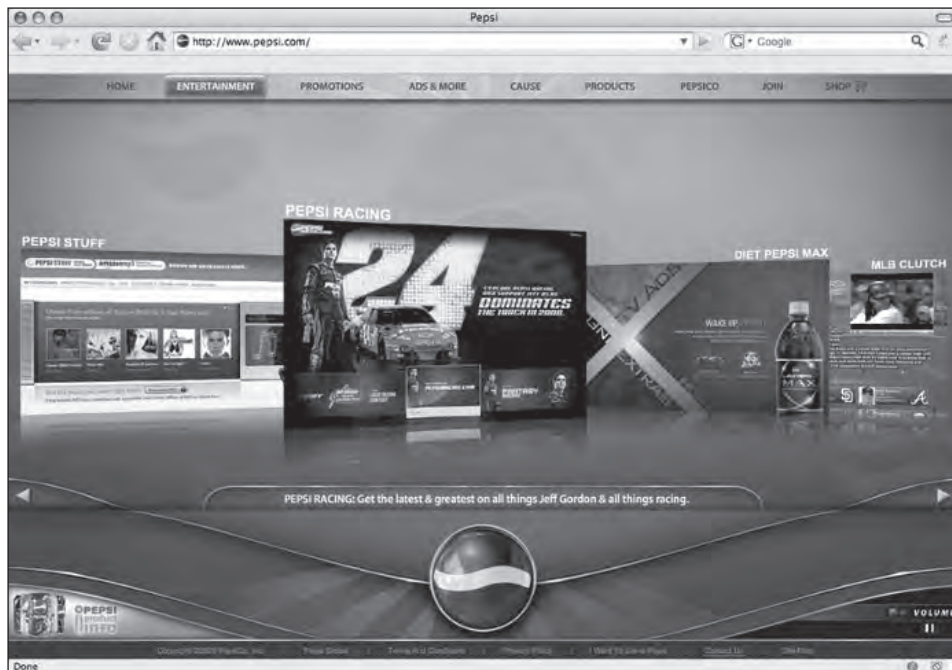

Figure 8-2 The Pepsi Home page acts as a gateway to Pepsi's many other sites and to external sites with whom Pepsi has a relationship. The various links tap into the personality of their target market and reflect interests that Pepsi has come to understand through significant market research.

Pepsi is always focused on reaching out to a core of younger customers. Pepsi knows that its site will not retain visitors for very long or keep them coming back if the main feature of the site is the calorie count for a 20-ounce bottle of Diet Pepsi. Instead, Pepsi has developed a site that serves as a launching pad to sub-sites, including music sites, social networking sites, and a series of sports-related sites.

These Pepsi-branded sub-sites engage visitors far beyond the Pepsi products and connect with consumers on a more personal level. Figures 8-3 through 8-5 shows a number of these Pepsi sites, built to create a community to strengthen brand loyalty.
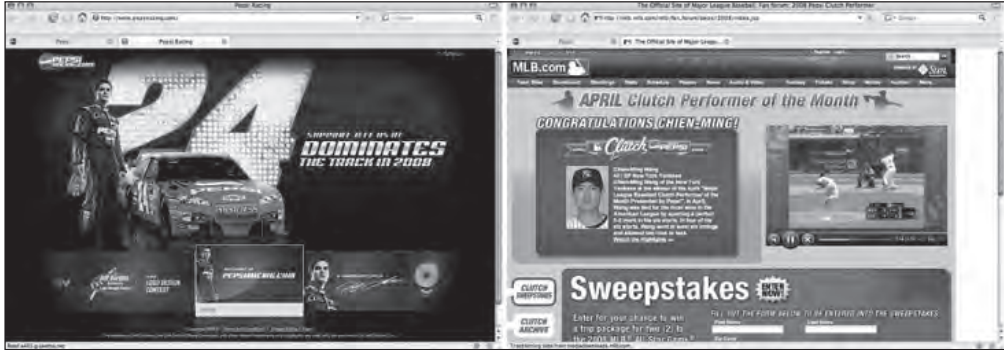
Figure 8-3   The Pepsi sites that promote the brand through its affiliation with NASCAR racing (left) and through baseball (right).
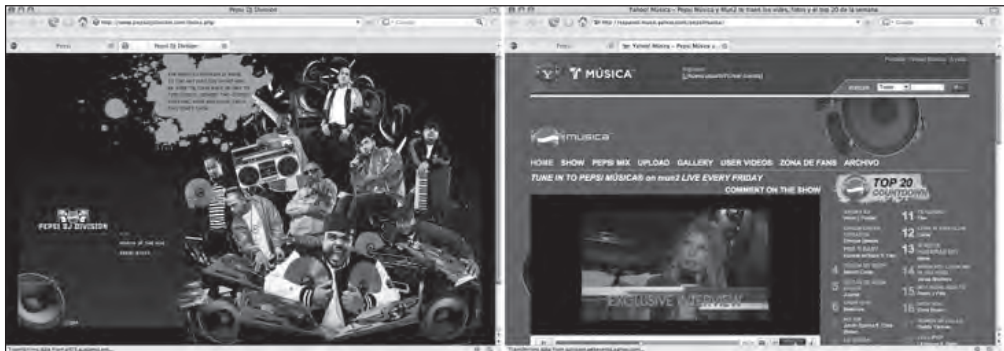
Figure 8-4   Other Pepsi sites focus on rap music (left), and the Hispanic market specifically (right).
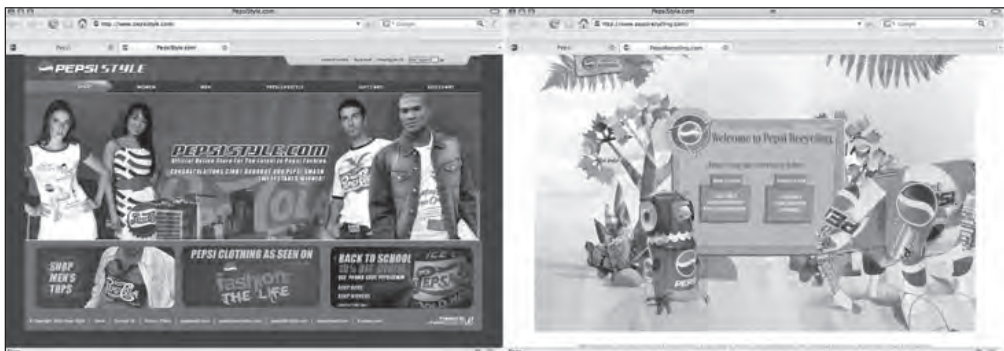
Figure 8-5   One Pepsi site sells clothing. Notice the ages of the people pictured (left). Another site taps into the green movement, and gives information on environmentalism and recycling (right).

INTERVIEW WITH…
Lee Rainie, Director, Pew Internet & American Life Project

The Pew Internet & American Life Project is one of the most oft-quoted research entities on Internet trends, usage, and demographics. A non-profit entity, Pew explores the Internet's impact on families, communities, and more. It has become an authoritative source on the evolution of the Internet.

I was fortunate enough to interview Lee Rainie, the founding director of the Pew Internet & American Life Project, and former managing editor of U.S. News and World Report. In a very open, enthusiastic interview, Lee provided wonderful insight into some of the new demographic categories that marketers need to be aware of when trying to sell to a plugged-in audience.

Jason: Throughout your research, what have you found to be the most remarkable shift in terms of how the Internet has changed society and our personal lives?

Lee: The most striking overall story is the degree to which in the past 12 or 14 years the Internet has gone from being at the periphery of a small number of people's focus and has moved into the center of most American lives. Right now our latest data shows that 75% of adults use the Internet and more than half of Americans now have broadband connections at home. Ninety-four percent of teenagers use the Internet. If you asked those questions 15 years ago the numbers would have been in single digits. So, it's a technology that has been rapidly adopted by the population, and the consequences of that have affected how we live our lives. First, it's changed the communication patterns people have with each other through e-mails and instant messaging. People use the Internet to supplement, complement, and add on to the volumes of communications they already have. The second consequence is that it's changed people's relationship with information. Massive amounts of material have been made available online, and the Internet has enabled people to create their own media and publish information. It's become a go-to place for people who want to learn new things and find out facts.

Jason: In a report you filed on the Pew Web site, you talk about three groups of users: high, middle, and low end. Tell me a little bit more about those groups and how they are distinguished.

Lee: We did a major survey about people and their gadgets. We looked at the kind of technology they had, how they used it, and how they felt about it. When we clustered those three elements together we came up with some very interesting distinctions among people

about what they like and don't like, what they do, and what they don't do. There are interesting distinctions based on people's sense about whether they like being connected all the time or whether they disliked it.

We found that the heaviest consumers and users of technology blog, post videos, and use their cell phones to browse the Web and get news updates. These users make up about 8% of the population. It's not a terribly big cohort, but it's an important cohort because these are the early adopters. They lead the way for everybody else, and they are in love with everything about the new technology.

Below them is the group of people who aren't necessarily into blogging or new media tools in general, but they love the communications features of the Internet like e-mail, IM-ing, and the fact that they can interact with others and stay linked to the people that they care about using these methods.

But there are some people who are just annoyed that they have to be online at all. They have technology, and their family members or bosses are encouraging them to use it. But, they don't like it. They don't like always being on the grid, and they don't like the implied pressure that they are at somebody else's beck and call or that they can be interrupted at any moment and any time. So even though they have a lot of this gear, they are not true to it.

About 15% of the population lives on the other end of the spectrum, and are completely off the grid. They don't have cell phones, they don't use the Internet. That's primarily older folks, poorer individuals. It's sometimes hard to remember, in an environment where there is so much "gee whiz" coverage of new technology and so much enthusiasm among heavy users and adopters, that there is a big portion of the population who just isn't into this stuff in the same way that we are.

Jason: Moving forward, will marketers and advertisers have to consider those types of groups and traits as part of their traditional demographic breakdowns?

Lee: It hasn't produced a shift as much as it's added to the complexity of marketing. In other words, there are new things to worry about while understanding that classic demographics still matter. Men are different from women; young people are different from old people; the well-to-do are different from people who have fewer resources; the well-educated are different from people who don't have a lot of education. All those distinctions still hold true in the online world, but our research suggests that there are more market differences to consider.

For example, people who connect to the Internet wirelessly are different from broadband users who are different from dial-up users who

are different from non-users. So there's a new cluster of demographic characteristics—sort of techno-demographic characteristics—that now overlay classical demographics and make the job of marketing much harder, because you have to deliver a message to people in ways that they expect it. It's a completely different way of dissecting an audience.

JASON: How are consumer habits being altered by the Internet?

LEE: There are a couple of things to say about that. The first is that there is at least one more step of the consumer experience that didn't exist pre-Internet, and that is the post-consumer moment. We're beginning to see that when people make purchases now, they think that their duty as consumers hasn't ended until they've told other people about what they bought. So they'll post a product review on their blog or on a consumer-oriented Web site or at least post it to a listserv. They'll harass the tech support staff of the company that they just bought the item from if it doesn't serve them right. They'll tag material, take pictures of it, and post it on Flickr. They might even create and post a how-to video on YouTube. So there's sort of this creator-consumer who is different from the industrial age passive consumer that bought a product, hoped that it would work, and didn't have any type of interaction with other consumers or even the company in many cases. Now the Internet facilitates a lot more ongoing communication, conversation, and critiquing of products and services.

That's just one brand new thing that the Internet has introduced to the world of consumer affairs. But, every other step of the consumer process has also changed at least to some degree. The window shopping experience changed, for example. We see a lot of people who do a significant amount of research online before they show up at a brick and mortar facility to make a purchase or to close the deal by talking to a person on the sales staff. The point of sale is even changing, as more companies introduce technology that allows shoppers to interact with live salespeople over the Web, altering the whole purchasing experience from the way it use to be.

At each stage of the process, and clearly at the marketing stage, there are new ways to get information in front of consumers, from the use of specific keywords, through viral campaigns and Web sites that give you information about products, product review sites, recommendation systems, and sites like that. I mean, you go to Amazon, you buy a book and a little screen pops up that says there are other people who bought this book and it tells you what other products they like. So from the beginning to the end of the consumer process, the Internet is a potential actor now in ways that were inconceivable 20 years ago.

JASON: And last thing, tell me what you think is the future of the Internet.

Lee: More. Bandwidth is going to grow, storage capacity is going to grow and become less costly. All of the things that we do online will become even more abundant in the future. There are going to be new applications that come and exploit that.

The virtual world will also grow, though it's hard to know what the future of the virtual world is. People are excited about Second Life right now, but I can't see around the corner enough to know whether that will really be a big deal or not. I think it's safe to say that virtual worlds are going to get more compelling over time as we increase bandwidth, and they begin to look more 3D. They are going to be immersive in ways that they aren't now, and I suspect that it will be compelling to people. I don't know that masses of people will march into Second Life and live in a virtual world, but I do know that we'll start looking there for the creation of new advertising.

Getting the Site Developed

A business can handle development of their Web site internally, meaning that their own employees plan, design, and program the site, or a company can hire another firm to build the site for them. Common sense might suggest that B2B and B2C companies would hire third parties to build their sites, but that companies, such as Amazon or LinkedIn, whose sites represent their entire business, would do the programming themselves. While this seems logical, it is not always the case. As you recall from the interview with Catherine Cook, in Chapter 3, MyYearbook.com outsourced all of the programming to India because the cost of programming there is significantly less expensive.

In other cases, large companies with considerable budgets might have full- or part-time programmers on staff for ongoing needs but still use outside companies to develop sites for them. For example, a B2C company might run an advertising or marketing campaign which needs an accompanying campaign-oriented site. Chances are the ad agency running that campaign will also be responsible for developing the site. After all, they understand and have access to all of the creative concepts, graphics, copy, etc.

Because programmers understand computers and languages on a higher level than most company owners or marketing managers, they are often asked for their opinion as to whether an outside company is needed for a particular site and if so, which company to choose. Once a selection has been made those programmers are often relied upon to interact with the programmers at that company to ensure that all the required tasks are completed.

There are pros and cons associated with developing a site internally, just as there are pros and cons with using an outside agency to develop a site. Table 8-1 outlines each of these. It is important to take a close look at each project and balance all of the benefits and drawbacks before deciding whether to use a third party or keep the work in-house.

Development Option	Pros	Cons
In-house development	• Potentially lower costs. • You have the subject expertise. You know your products and services better than anyone. • You maintain control over all elements, which can be more comforting.	• Building a site takes more than just programming. You must to write copy, design graphics, and organize all of the information, which can be time consuming. • If you have other projects to work on, the site could take a backseat, resulting in an extended launch time. • Sometimes an outside agency is better at developing a message that is clear to your market.
Outsourced development	• Faster time to launch—outside companies are more likely to make you a priority than you might make yourself. • Your site and message will get developed from an outside perspective. • Expertise in all areas, including programming, organization, design and copy writing.	• Potentially more expensive than building the site in-house • Loss of direct control over all aspects of the site. • Outsourced company will not know your company, product, or service as well as you do.

Table 8-1   The pros and cons of building a site internally versus outsourcing development to a third party.

Working with an Outside Company

Both companies involved in a third-party Web site development project have different priorities that they need to ensure are addressed in order for the relationship to work. Marketing or site development agencies often bring unique talents and experiences to the table, and choosing the right partner is vital to getting the site in question built quickly and correctly. We will look at the dynamics of the relationship

from the perspective of both the client (the company that wants the site built), and from the third-party developer, as career paths often lead programmers to explore both sides of the marketing divide.

Outsourcing from the Client's Perspective

Successful site development through a third party requires ensuring that the most appropriate third party is selected to complete the project. For the client, there are three main goals that an outside vendor needs to accomplish: get the site done as quickly as possible, get the site done within budget, and get it done right. Accomplishing these goals requires trust between the client and the vendor. This trust comes with time, open communication, experience, and the client's careful selection of the vendor they hire. Once a project has been started by one vendor, it can be difficult and expensive to move the project to another vendor (plus it can set a project back by days, months, or more), so it is important to choose the right resource from the outset.

Because good communication and trust between the two companies is vital, selection of a vendor needs to be based on more than just talent, price, and experience. As with any personal relationship, a client and vendor need to like each other to a certain extent, as they will be working closely together for an extended period of time. A very corporate client that is buttoned up, requires weekly status reports, and wants all communications to be professional and official may not work well with a Web development firm run from a gutted warehouse where the employees wear concert t-shirts to meetings and start each sentence with the word "dude." Usually, these issues will come up during interactions throughout the interview process, and not necessarily from specific or pointed questions.

Among the questions that a company looking to develop a Web site needs to ask when selecting a development partner:

- *What is the extent of the agency's experience?*

  This can be measured in terms of years as well as the number of Web sites on which they have worked. Established companies that have been around for a while may offer benefits in terms of experience, while newer companies may be "hungrier" for the work and pay more attention to your project.

- *What is the agency's general type of experience?*

  In other words, has it generally worked on B2B, B2C, or B2E sites? For what markets has the agency built Web sites? Are these markets consistent with those you are looking to reach? Reviewing their URL list is the best way to determine their experience—more

so than having agency representatives answer this question themselves. Remember, agencies are looking to gain business, and it is not uncommon for the seller to exaggerate their experience in the pursuit of new business.

- *What is the agency's proficiency with various programs and languages?*

  Can the agency easily accomplish tasks using multiple language types, or does it have expertise in only a few programming languages? Has the bulk of the agency's experience been with static sites, e-commerce, database-driven sites, or other specialties?

- *Does the agency understand all of the social media tools available and how audiences interact with each other and the marketer through these tools?*

  Many site developers, even those with past site-building experience, may not yet understand the power of social media and how to harness it as they develop new sites.

- *How large is the agency?*

  Large agencies may have more resources but might not give you the attention you require. Small agencies might give you a lot of attention but not have as many resources to handle the job.

- *Does the agency handle all aspects of the site in-house, or does it have to outsource certain tasks, such as the graphic design?*

  Ideally, the resource selected will be able to handle all aspects of your project in-house. There may be times, however, when the agency that is sourced may themselves need to outsource a portion of the project to another firm. Often this does not create any issues; however, the more companies involved in building a site, the greater the likelihood that something will go wrong or the message will be compromised.

- *What is the agency's primary business objective?*

  Is it strictly a Web site development shop, or is it a marketing agency that builds Web sites as one of its marketing services? Different needs call for different types of agencies.

- *Will the agency provide you with client referrals?*

  Whenever possible, it is helpful to speak with a vendor's other clients. You will get a better understanding of how easy it was for the client to work with the vendor, how well the vendor adhered to schedules and budgets, and how creative and proactive the agency was in providing solutions.

- *Has the agency had experience in the same industry as the company hiring it?*

  More experience in a given industry gives an agency greater insight into that market, which can be helpful in developing an effective site.

- *How much will the project cost, and how is that figure derived?*

  Each agency has its own way of setting their prices. Some charge by the hour; others provide a set project fee. While it is the agency's desire to get the highest possible price for a site, it is in the hiring company's best interest to keep prices down. Having the agency break down its pricing into as much detail as possible is typically the most effective way to keep costs down. Agency clients must be vigilant to ensure that their bills do not include "hidden costs" (costs not detailed prior to the agency being selected). Companies utilizing an outside agency also need to pay close attention to the payment terms (when payment is due). Every vendor is different. The way that one vendor structures its payment schedule may conflict with how a company can or wants to pay. For example, some vendors may require a certain percentage of the final price paid before the project starts, with the balance due in equal monthly installments throughout the life of the project or in a lump sum upon completion of the project. Others may allow more flexible terms, such as allowing the client to pay a certain amount 30 or 60 days after the site is complete (expressed as "net 30" or "net 60," respectively).

- *Will the agency fix the site if something goes wrong with it after launch?*

  Even though most sites are thoroughly tested prior to launch, it is not uncommon for problems to be uncovered after the launch. A company needs assurances that the agency it hires will fix problems quickly, even after the last invoice has been paid.

Further, it is a good idea for a client to visit a potential vendor's facility to see firsthand the environment and atmosphere before making a decision.

Outsourcing from an Agency's Perspective

Agencies approach site development and client relationships from a different perspective. Programmers and marketers working on the agency side need to consider different issues before beginning any project. Third-party vendors hired to build a site for a client often simultaneously act as planner, programmer, designer, consultant—and

educator. It is not unusual for clients to be sorely lacking any real understanding of the Web, how sites work, what can be done, and what is realistic for certain timeframes and budgets. It often falls to the agency's programmers to explain much of this and field questions throughout the development process.

While conventional wisdom might dictate that agencies should accept any clients that come along in the pursuit of profit, the reality is that not all clients will prove profitable. Some may offer so little money for a project that the project is simply not worthwhile. Other clients might offer a sufficient budget at the outset but cause so many problems throughout the process that eventually they are not worth the money they are spending. Because of this, and because some projects simply might not fall into an agency's core competencies, agencies need to carefully scrutinize the clients and projects they take on.

Among the questions that an agency needs to ask when deciding whether or not to take on a development project:

• *What is the purpose of the client's Web site?*

It is important to understand what the proposed site's needs are. Does the site include e-commerce, social networking, an underlying database, **static pages** (pages that stay the same regardless of the person visiting the page or the time of visit) or something else entirely? After getting a full understanding of the requirements of the site, agencies should honestly assess whether the project is within the agency's capabilities and can be successfully completed.

• *What is the industry and market that the client is serving?*

It is often easier to complete sites in industries where there is agency has previous experience. Agencies need to assess on a project by project basis if they have sufficient experience in a potential client's industry. If not, they should carefully evaluate if it is a project they feel comfortable taking on.

• *What is the client's understanding of the Web?*

As mentioned earlier, clients often do not know much about the Web. They may not have a good understanding of the Web's capabilities, including what is realistic and what isn't. This can translate into many hours spent by the agency and its programmers explaining minor details and answering an inordinate number of questions. Although it may seem trivial, these hours add up, and often go unbilled, eating away at the agency's profits.

• *How creative will the client allow an agency to be?*

An agency needs to understand the boundaries in terms of creative design and features that may be included.

- *Does the client have an organized brand that can be incorporated into the site?*

  An agency needs to learn about a client's brand and how to translate its personality into design. Agencies should also request a style guide to ensure that fonts, colors, and other details are adhered to.

- *Does the client already have some content created?*

  In many cases, the developing agency will not have to start from scratch. Clients often already have some content ready for use, such as a database from which the site can pull information, copy from a printed brochure, digitized photographs, etc. It is important for an agency to ask clients about the availability of these resources because a client that does not have a good understanding of the Web well may not realize how helpful this material can be.

- *Does the client have an established budget for the site?*

  Typically, if a client knows what they want, they can communicate their needs succinctly enough for an agency to provide a price quote. In other instances, clients, especially those who do not understand the full capabilities of the Web, may not know exactly what they want. In these cases, the agency is better off asking the client if there is a budget available and then proposing options that can completed within that budget.

- *How is the client's credit?*

  It goes without saying that regardless of the agreed upon price, it is important for an agency to know that it will get paid. If the agency extends any kind of terms to the client (such as allowing them to pay some of the agreed upon price at a later date), they should also take the time to ensure that the client is credit-worthy.

- *How does the client typically pay?*

  Clients often have predetermined rules for how they pay their bills. Large companies may be mandated by their accounts payable department not to provide down payments for any project and require terms of net 30 or net 60 for all invoices. Smaller companies might not be as strict, but they also may not have the liquidity to pay much up front. Before deciding to take on a new client, vendors need to determine whether or not they can realistically accept the terms by which the potential client is willing to pay. New projects often require the vendor to cover initial costs (such as the purchase of photography or air travel) that might not be reimbursed by the client for a while. If the vendor cannot cover these costs, or has cash flow issues that would make it difficult to function or survive on an extended payment schedule, they should be very careful as to which clients they accept.

Baselines: Design and Development

Learning all of the skills necessary to design a Web site, including developing an understanding all of the intricacies of navigation and graphic design, requires many classes on topics not covered in this textbook. For the purposes of moving ahead with a more marketing-oriented conversation of the Web, we will quickly review the basics of design, content, and organizational issues relating to site development.

Web Site Navigation

Most media tends to be fairly linear. Sunday newspapers have different sections, and news is found by turning from one page to the next. Television is similar. A show is selected, and the viewer watches, scene by scene, in the order that those scenes are presented.

Web sites are quite different. Aside from the interactivity that the Web provides, Web sites allow visitors to review information in a non-linear fashion, jumping from one page to another in any order that they would like. In doing so, visitors are able to find the information in which they are most interested. However, the information that visitors are most interested in does not always coincide with the information that the site's owners most want them to view. Typically, the information that will most assist a company in meeting its goals relates to sales, and it is important that site visitors can easily view that information.

Because of the non-linear nature of the Web, developers face a dual responsibility:

- Create a navigation and hierarchy of content that makes finding information easy for site visitors

- Serve information in such a way that visitors are led to pages that the site's owners most want them to view

Developers must spend a significant amount of time planning a site's navigation prior to design and programming it in order to ensure that these two responsibilities are met. Navigation, however, should not be thought of simply as a menu bar with links from one page to another. While navigation certainly does act as a linking mechanism, the word **link** can refer to any word or image that, when clicked, brings a visitor to a new page. **Navigation** refers to the specific and planned organization of certain links, which provide the organizational structure of a Web site.

Navigation can be provided through a number of different methods, most commonly links within text, graphic buttons, or Flash buttons.

Because navigation is so vital to finding content within a site, buttons are typically found either across the top of a Web site or down the left hand side. These two areas of the site are visible as soon as a page loads, and viewers are most likely to see those areas regardless of how large the browser window is.

Each button within the navigation represents one category within a site. Depending on how many categories will be included on a site and how much content there will be, developing sound site navigation can get confusing. To alleviate this confusion, developers typically establish a **schematic**—a visual map that shows how the content of a site will be organized. Further, sites are broken down into **tiers**—levels of information and sub-categories within a larger category. Figure 8-6 shows a relatively basic schematic with categories of information directly accessible from the Home page. The names of these categories, which represent the top tier navigation, are the names that will later appear on the buttons when the site is designed and built.
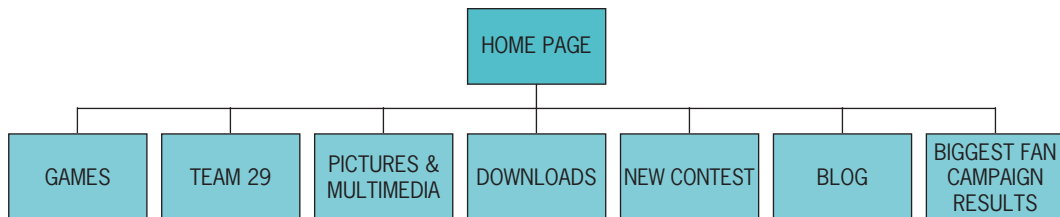

Figure 8-6   A basic schematic that shows the categories of information that are directly accessible from the Home page.

To ease visitor usage, you should include top tier navigation on every page of the site, allowing users to easily leave one category and view another. It is important to maintain consistency in navigation. Best practices dictate that once established the navigation structure remains in exactly the same place with exactly the same size, shape, and color on all pages, to avoid user confusion.

Within each category, other topic-related pages may be required. Figure 8-7 shows the basic schematic as presented earlier, this time presenting each of the pages that are accessible within each category—considered the second tier of the site. In Figure 8-8, the schematic is expanded even further as some second tier pages provide access to a number of pages of their own, considered the third tier.
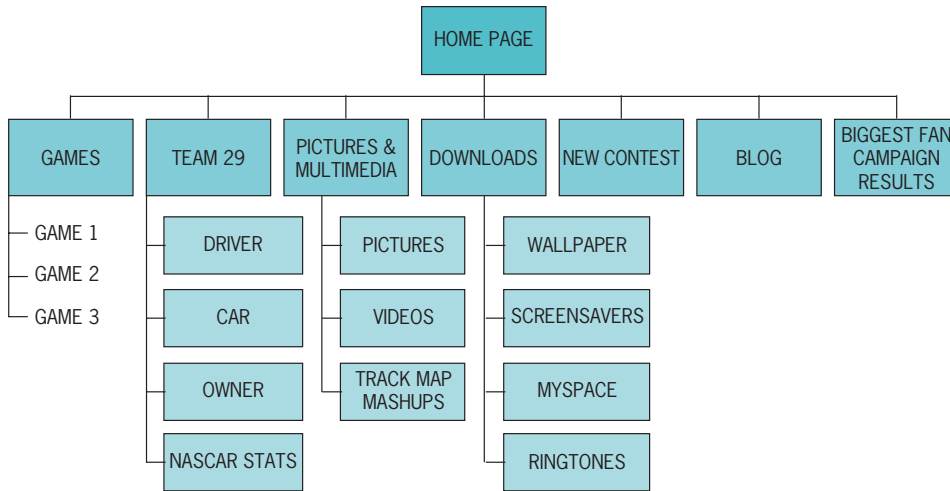
Figure 8-7 The schematic has expanded to show the pages that are accessible from some of the main categories. These are second tier pages.
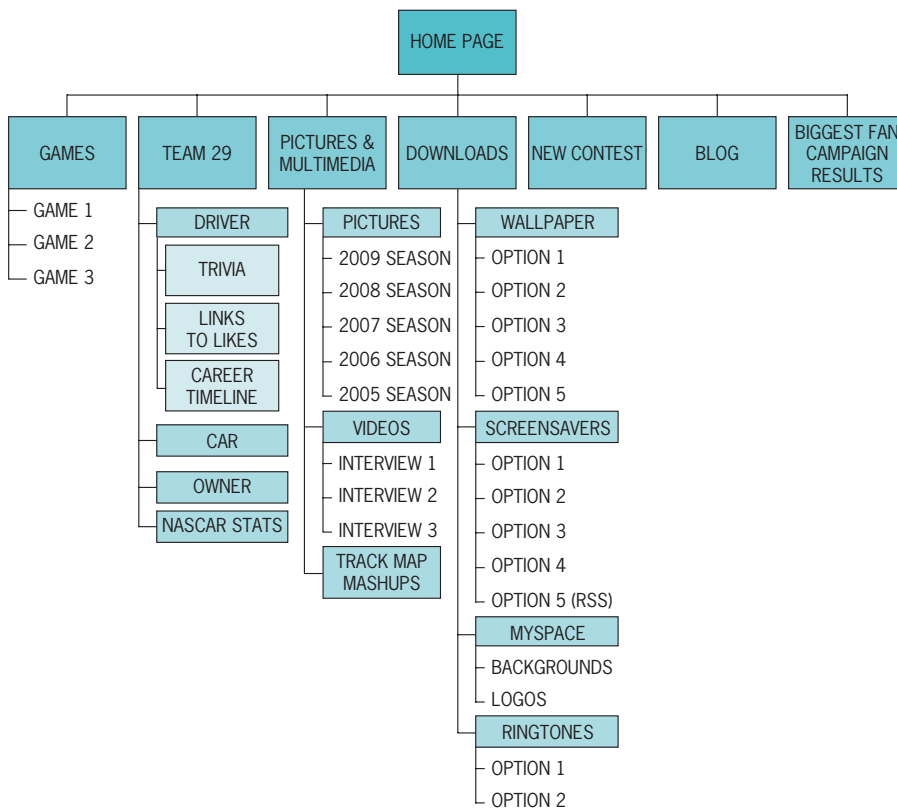

Figure 8-8 The schematic has been expanded even further to show the individual pages that can be accessed through second tier pages. These pages are considered third tier.

Typically these lower tiers are accessed one of two ways:

- They may have their own navigation system which is separate from the main navigation and appears only within the pages of a given category, as illustrated in Figure 8-9.

- They may be accessed as drop-down items from a navigation menu, as shown in Figure 8-10.

No matter which way the navigation is designed, the schematic will provide the architectural foundation for the site organization.
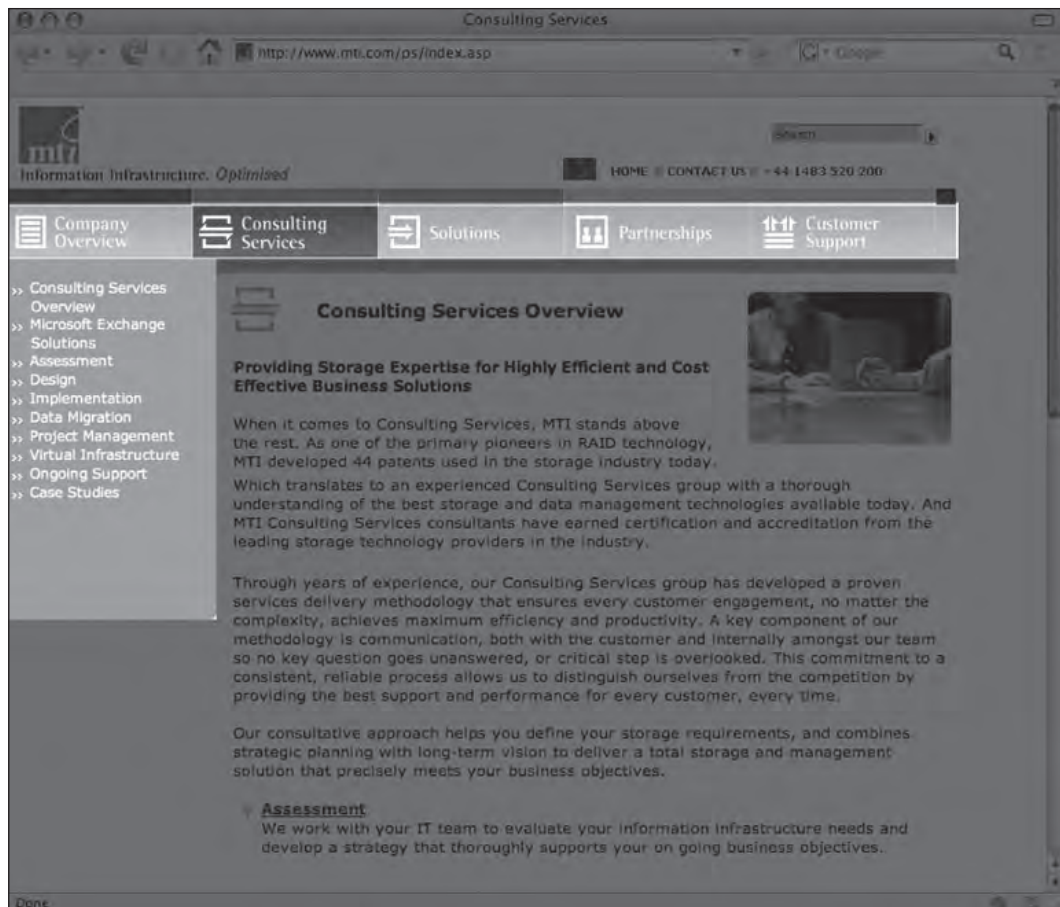
Figure 8-9 The main navigation for this site appears across the top. This page, on consulting services, presents second tier navigation on bar down the left hand side of the page.
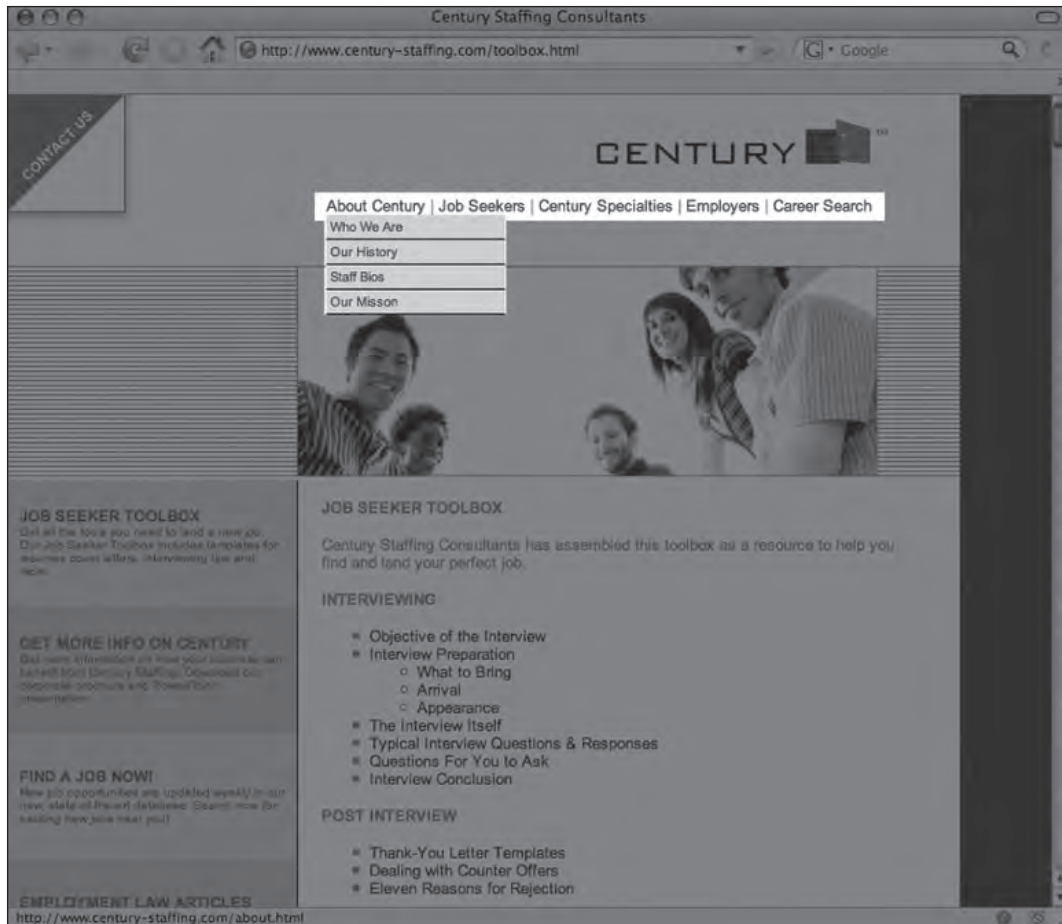
Figure 8-10 This site uses drop-down menus for the navigation, giving easy access to all pages within all categories, from anyplace on the site.

Navigation Elements: Search Engines, Site Maps, Tag Clouds, and Breadcrumbs

Along with the standard navigation, other means of finding information on a Web site are also used to help users find the information they are searching for.

Search Engines

Search engines invite users to type in a word or phrase that they wish to search for within a site. After a search term has been entered into the search engine, the engine scours a database for matches to the word(s) being sought. If the engine does not find

any matching words, it returns a message to the user that no results were found. Poorly developed sites will simply display a message that the search was unsuccessful. Better sites will suggest alternative information that the users may be interested in. From a marketing standpoint, search engines also work to give users the impression that the site is quite large—a facade that can become transparent if a user's searches come back with no results too often. Figure 8-11 shows an example of a search engine that offers suggested product categories and individual items based on a user's search.
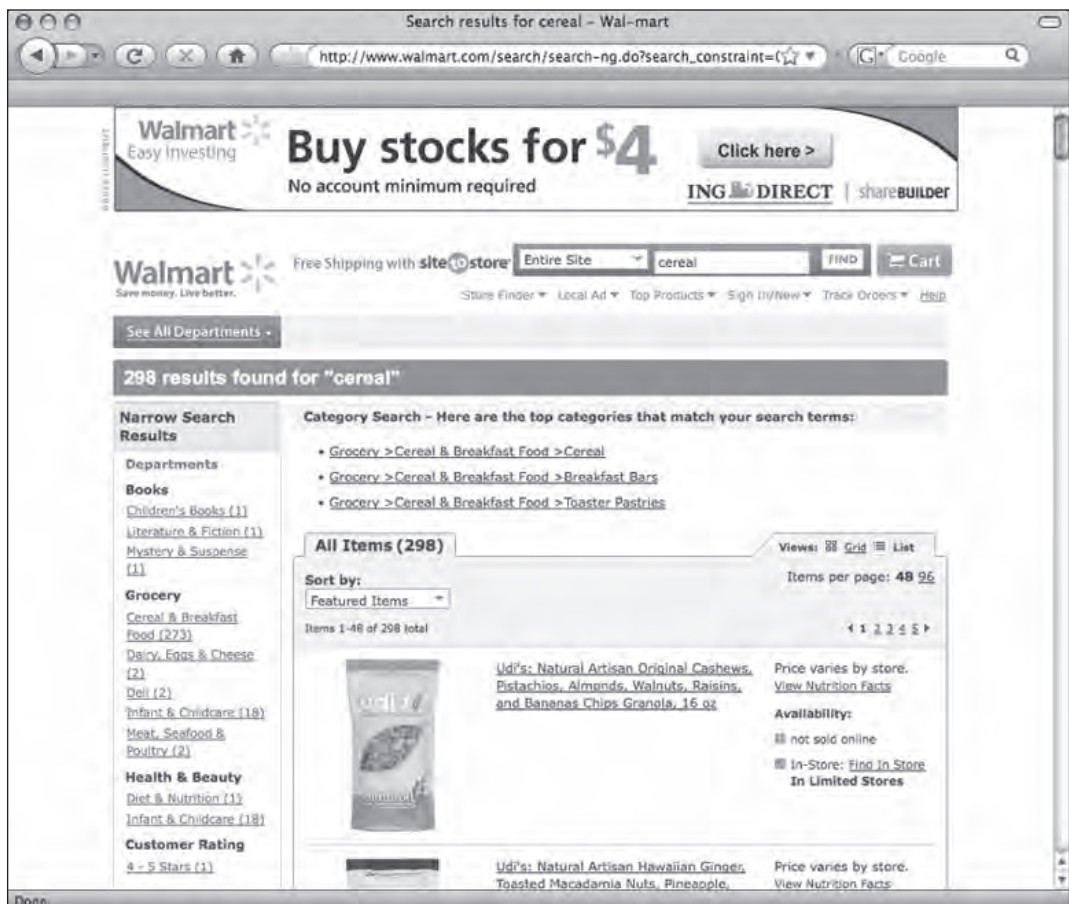
Figure 8-11 The Wal-Mart site provides a search engine for finding products on its site. In this search for the keyword "cereal," the results page includes suggestions on ways to narrow down the available products, and then provides a list of individual products that match the keyword.

Site Maps

Site maps are basically re-creations of the original schematic, existing on the site itself. Each of the pages within the schematic, or site map, are provided as a link for easy access to those pages. This tool can make large or confusing sites easier for users to understand. Figure 8-12 shows a sample of a site map.
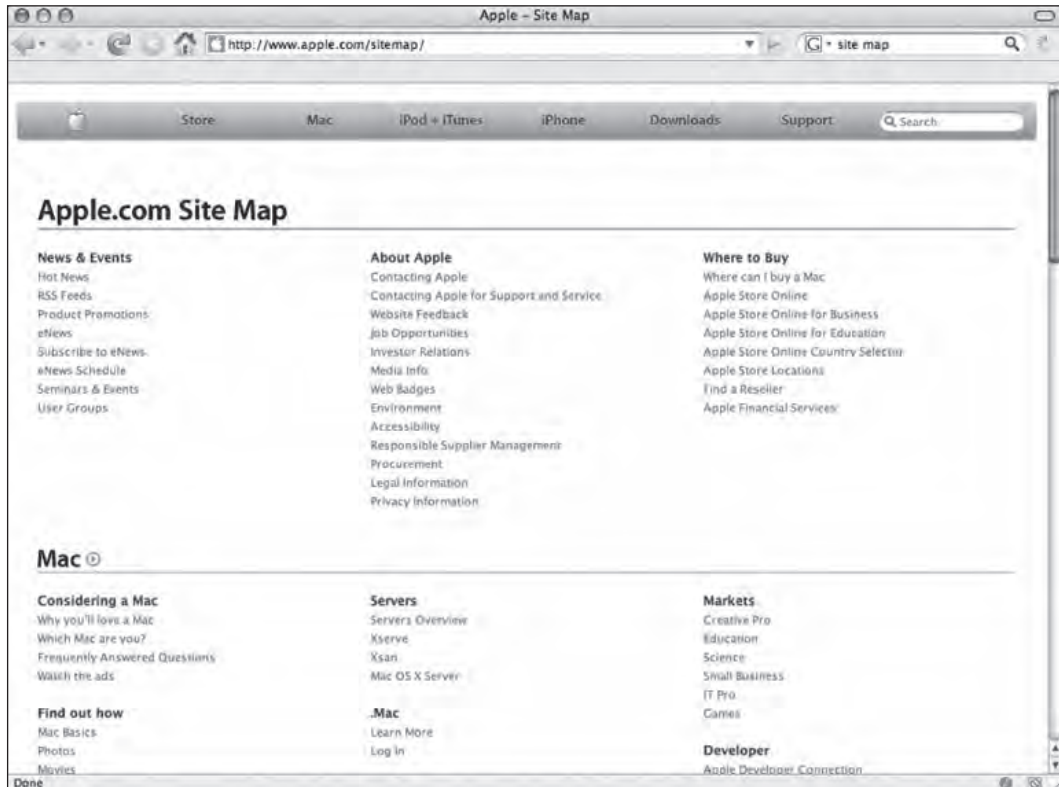
Figure 8-12   The site map on the Apple Web site.

Tag Clouds

Tag clouds are a new innovation born of the social media revolution. When blogs, videos, and other media are posted to a site either by the site developers or by users, they are often tagged with keywords that represent the subject matter of each post, so that they will come up in keyword based searches. A **tag cloud** (shown in Figure 8-13) is a collection of tags that are popular among visitors to a certain site. Tags within the cloud change in size, getting bigger or smaller as they are searched more or less often relative to other tags.

Figure 8-13 The tag cloud on the flickr site.

Breadcrumbs

As Figure 8-14 shows, **breadcrumbs** show the path of links the visitor took to get to the page they are on. Breadcrumbs are not so much a means of navigation as they are an aid to determining one's location within the site. This is especially helpful on sites packed deep with information. As more tiers are explored, breadcrumbs make it easier for a visitor to remember exactly which category they are in or how they found the page they are currently reading.
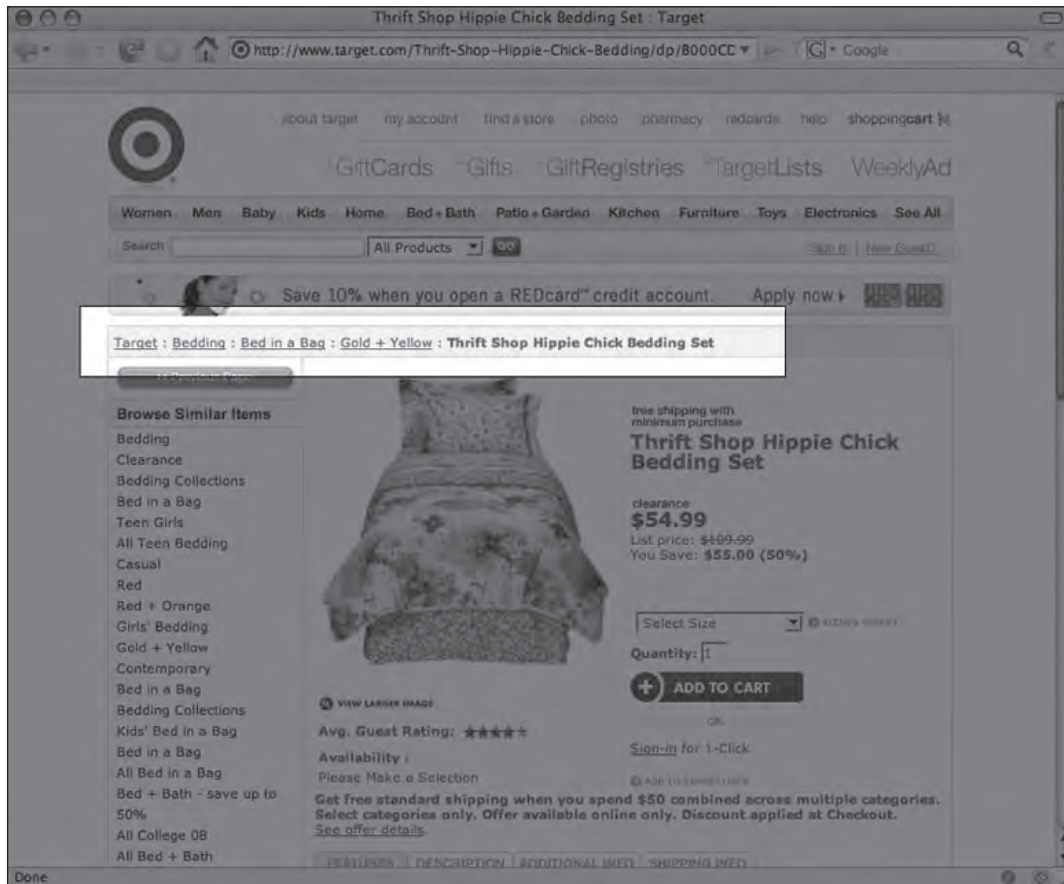
Figure 8-14 The Target site with the breadcrumbs highlighted.

Page Layout

The way a page is laid out can make or break a site, as many site visitors' interest in a site will be based on how the site looks and how it is laid out. Successful site layout will accomplish the following:

- Make the purposes of the site clear, letting the visitor know what they can expect to find there

- Promote the brand

- Provide easy access to information

- Lead the user to specific areas of interest or areas that the site owner wants them to see

- Provide an attractive, aesthetically pleasing environment for the user

Often, a site will have two page layouts: one for the Home page, and a second for all interior pages. As a rule of thumb, sites tend to be more graphic heavy on the Home page, where the pages need to catch the user's eye and entice them to browse further. In the lower tiers, after the visitor has already committed to exploring the site, pages tend to be more copy or content heavy. Visitors who have gone this deep into the site are usually more interested in reviewing information rather than just viewing marketing-style aesthetics.

When designing a page, it is important to consider how information will be presented. Whatever is most immediately visible to the viewer will likely determine whether or not a visitor remains on that page or navigates elsewhere. It can be difficult to know exactly how a site will look to an audience. Some sites will look different depending on the monitor size and resolution settings and the Web browser being used, so developers often try to design sites for the lowest common denominator—the worst viewing conditions that could reasonably be expected. Site designers typically consider the **fold** of the site when deciding how to disperse information. The fold is the part of a Web page that might be cut off by the bottom of the browser window. Information that is seen immediately when a page opens is considered "above the fold." Information that requires scrolling in order to be viewed is considered "below fold." This is important because information that a marketer considers significant might not be seen at all if it falls below the fold; therefore, the real estate above the fold is the most important space on each page.

With this in mind, developers should design page layouts that make use of this prime real estate to drive traffic to the pages that they want their audience to see. Although the top tier navigation might not give preferential treatment to one content area over another, other areas of a page may have call-outs that drive traffic in a particular direction. Figure 8-15 shows the Home page for a typical B2B site. The large animated graphic in the center draws visitors in, and the four small boxes to the right drive traffic to specific pages based on current campaigns or important, timely information. Figure 8-16 shows an interior page of the same site. Notice how the page layout has changed. The size of the graphics has been reduced, providing more space for content.
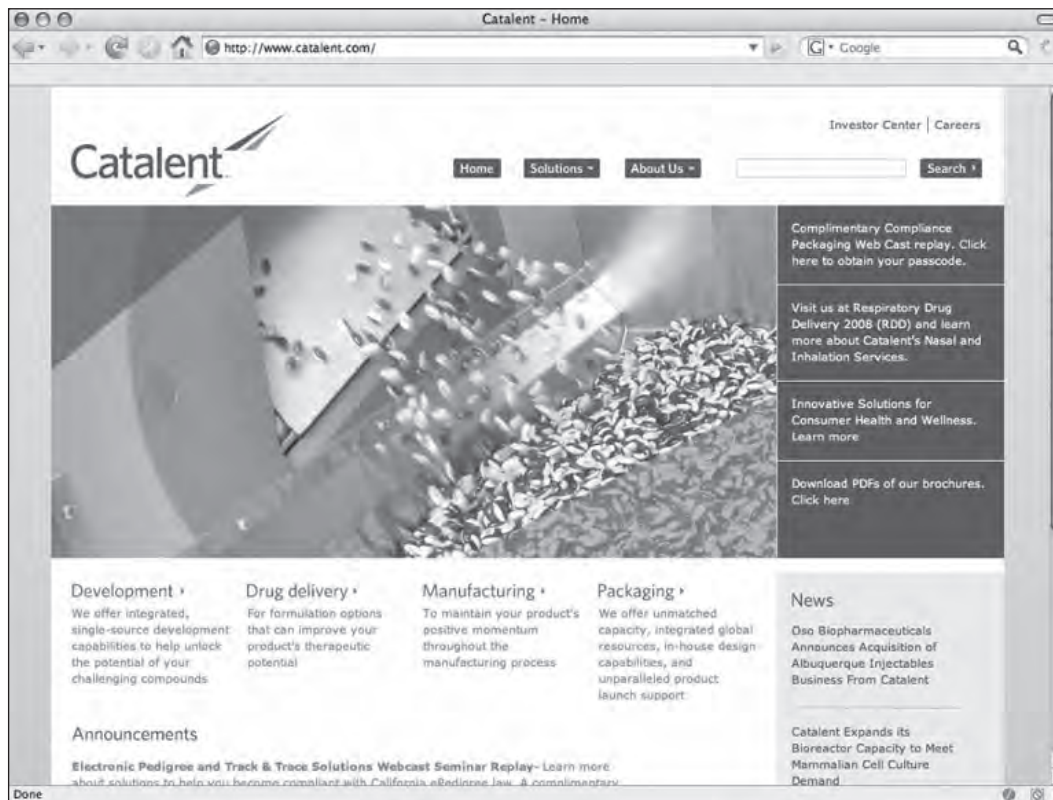
Figure 8-15 The Catalent Home page has the main navigation across the top, but it drives visitors to specific areas through announcements on the right-hand side.

Figure 8-16 The interior page of the Catalent Web site. Notice that the image is smaller, leaving more room for content.

Graphic Design

As with other mediums, such as music, television, and fashion, graphic design styles change over time. In the early days of the Web, sites were overrun with wacky, colorful backgrounds (no one seemed to care if people could not read the copy). Soon Web site designers began putting bevels, embosses, and drop shadows on absolutely everything.

Over time, a cleaner, more streamlined design style gained popularity. As it did, sites changed and adapted to keep up and fit in. Sites often reinvent themselves as the need to update content grows, new tools—such as social media applications—become available, and design styles evolve. This not only helps keep the brand fresh, but it also lets audiences know that the company behind the site is not stagnating.

Regardless of style, however, certain aspects of design have not changed. Good, bad, attractive, or ugly, all Web-based graphic design shares the same commonalities:

- Graphics are typically displayed in one of two **bitmap** (pixel-based) formats:
  - JPGs can use millions of colors to display each image and are static; they cannot be animated.
  - GIFs use far less colors in their representation and can be animated (although animated GIFS are often somewhat crude)

- Bitmap graphics are sized to 72 pixels per inch—which is how computer monitors display information

- Colors in graphics are presented in RGB—a combination of red, green, and blue that combine to create any the millions of colors that can be shown on a computer monitor. The RGB color model is used because computer monitors emit red, green, and blue light to communicate colors to the viewer's eyes. Images that get printed on paper are created in CMYK—cyan, yellow, magenta, and black.

- Vector graphics, which are created from mathematical formulas rather than pixels, cannot recreate photographic quality in an image, but they are good for illustrations and creating smooth animations (such as those that might be created using the Flash program)

- Images will tend to look darker on PC-based computers; they will look lighter and brighter on Macintosh computers.

- File size, which used to be a very important issue in the early days of the Web, has become less of a consideration for designers as more business and homes access the Web through broadband connections.

Content Development

Content for a site can come in the form of copy, images, video, blogs, or a variety of other media. Content creation can be a daunting task. Copywriters and other developers must have an intimate knowledge of the topics that will be covered on the site. They need to be able to express these ideas in a way that accurately represents the brand and its personality and is easily understood by the audience.

Some sites rely heavily on site visitors for content generation for all or portions of their site. Sites such as YouTube, MySpace, and Wikipedia, are made up almost entirely of user-generated content. These sites serve as a platform for visitors to generate and post their own content.

Chapter Summary

- All sites begin with an idea. The site owners and developers should start with an idea about which they are passionate and knowledgeable. They also need an idea that will attract the target audience. It is equally important to define the objectives of the site so that it can be built to meet the stated goals. It is also essential to assess the particular needs of the site, including appropriate financing.

- Understanding the audience is vital for both the site and the brand. Without this understanding, it is practically impossible to build a site specifically for a target market. Marketers have several different tools for collecting market data on a specific audience, which is defined by the demographic and psychographic traits its members share in common. These methods include conducting surveys, organizing focus groups, and tracking usage of the blogosphere and other social media.

- Sites can either be developed in-house or by a third-party developer. Each of these options comes with certain pros and cons, in terms of cost, speed to completion, and knowledge of content. When working with an outside company, the relationship is vital to site success, and each party needs to carefully understand and analyze the other before engagement.

- Basic site design and development issues that all sites need to consider include navigation, which is critical to helping move users from one page to another. Navigation should be planned in advance and be consistent throughout the site. Well-developed sites are organized into tiers, with lower tiers favoring content over aesthetics. Creating a page layout that fully engages site visitors is similarly important, as is developing appropriate content.

Key Terms

bitmap—Pixel-based graphics

boot-strapping—A slang term that means a company tries to do most of its site development in-house in order to keep costs as low as possible.

breadcrumbs—A navigation aid used to show the path of links that the visitor took to get to the page they are currently on.

business plan—A formal document that outlines the site concept, market, anticipated revenue structure, marketing, strategy, and technology plans.

focus groups—Meetings in which a group of individuals (usually between 15 to 20 people) that represent the target market are gathered and are engaged in a discussion about a topic of interest to the marketer.

fold—The part of a Web page that might be cut off by the bottom of the browser window.

link—Any word or image on a Web site that, when clicked, brings a visitor to a new page.

marketing strategy—The strategy that a site or company employs in order to gain more customers and revenue.

navigation—The specific and planned organization of certain links that provide the organizational structure of a Web site.

psychographics data—Data that provides information on large groups based on personality and lifestyle characteristics.

schematic—A visual map that shows how the content of a site will be organized.

site Maps—Recreations of the original schematic, existing on the site itself.

static pages—Pages that stay the same regardless of the person visiting the page or the time of visit

tag clouds—A collection of tags that are popular among visitors to a certain site.

target market—The market segment most likely to visit a company's site and purchase its products or services.

tiers—Levels of information and sub-categories within a larger category on a Web site.

visitor retention—The measure of how long a visitor remains on a site and how often he or she returns.

Review Questions

1. Which of the following is probably not a viable reason for developing a Web site?

   a. To build brand recognition

   b. To build traffic for the purposes of generating advertising revenue

   c. To reduce the number of phone calls a company gets

   d. To meet other like-minded people

2. Which of the following is not among the resources a site needs in order to get developed?

   a. Graphic design

   b. An interesting logo

   c. Content

   d. Programming

3. A target-market can best be defined as:

   a. The market segment most likely to visit a site

   b. The market segment least likely to visit a site

   c. The people that site visitors will tell about the site

   d. The people involved in developing the site

4. Which would not qualify as demographic data for a site?

   a. 45% of visitors are male

   b. 16% of visitors come from the north east

   c. 11% enjoy hiking

   d. 72% have broadband connections

5. Which would not qualify as psychographic data for a site?

   a. 18% of visitors go on cruise vacations

   b. 32% read sports magazines

   c. 9% plan to purchase golf equipment over the next year

   d. 14% are married

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6. The main reason to collect data on a target market is:

   a. To better understand how to design and build the site

   b. To know how much to charge them for products

   c. To change their behavior

   d. None of the above

7. Members of a focus group are typically made aware of what brand is conducting the meeting. True or False?

8. One reason that searching social networks and blogs for market information is useful is:

   a. Blogs can be written in a way that users can be led to give information the developer is looking for

   b. People who participate in blogs would never participate in a survey or focus group

   c. It is likely a marketer can get more honest feedback this way

   d. It is not useful because it takes too long

9. According to Lee Rainie, what percentage of the population is considered "heavy users" of the Web?

   a. 8%

   b. 20%

   c. 51%

   d. 92%

10. Which of the following is more likely to have a lower cost associated with development?

    a. In-house development

    b. Outsourced development

11. Which of the following would a marketer most likely want to know about a third-party developer before engaging in a working relationship?

    a. Breadth of experience

    b. Type of experience

    c. Agency size

d. All of the above

e. None of the above

12. In the quest for revenues, Web development agencies should accept all the projects that they are offered. True or False?

13. Which question would be the least useful for an agency to ask a potential client before engaging in new site development?

a. "Do you have an established budget for this site?"

b. "Is any content already developed?"

c. "How much creative freedom do we have?"

d. "Who came up with the idea for the site?"

14. Web sites are fairly linear. True or False?

15. Navigation can best be described as:

a. Specific and planned organization of certain links that provide the organizational structure of a Web site

b. Any links within a site that brings users from one page to another

c. Any link that has been created a graphic on a site

d. Any link that appears in text

16. The map that initially lays out the organization of a site is called the:

a. Blueprint

b. Schematic

c. Footprint

d. Tier

17. Which is most likely to have the most copy and the least graphics?

a. The Home page

b. Tier 1 pages

c. Tier 2 pages

d. Tier 3 pages

18. Which of the following is most likely to have the largest graphics presence and the least copy?

    a. The Home page

    b. Tier 1 pages

    c. Tier 2 pages

    d. Tier 3 pages

19. Which type of graphic cannot be animated?

    a. JPG

    b. GIF

    c. FLASH

    d. None of the above

20. RGB stands for:

    a. Roy G. Biv

    b. Red, Green, Blue

    c. Really Great Blog

    d. None of the above

Projects

1. Find a Web site whose second tier navigation system is separate from the first tier navigation, as shown in the example in Figure 8-9. Access the code for the site by selecting View → Source on your browser menu bar. Copy the code and manipulate it locally to turn the second tier navigation into drop downs off the first tier navigation.

2. Choose a site with at least three tiers of information. Create a schematic that represents the site.

3. Suppose you work for a company that is looking to build a Web site and you have decided to hire a third party to do the development. Choose a Web development company or marketing agency to work with based strictly on the information on their site.

   In a two- to three-page paper, discuss this company and explain why you would select them. Discuss at least two competing companies that you did not choose and why you did not select them.

4. Create a survey that measures 8-10 demographic and psychographic characteristics of any established group of 5 to 7 people that share a particular similarity—for example, people who live in your apartment building or neighborhood or people in one of your classes. Gather the results and in a one-page report, and describe this market based on your findings.

5. Using the same survey that you created in Project #4, program the survey to work on the Web. Use at least three different types of question and answer formats (such as radio buttons, check boxes, and fill-in forms).