

Planning the project

One of the most important aspects of information design is the planning process. Unfortunately, the planning process is one of the first items to get cut when schedules are tight. Projects that have skipped this step often suffer from problems that are difficult to fix once the site has been developed. For example, sites that have not been planned in advance often contain information that was added randomly and inconsistently; related topics don't link to one another; and readers have a frustrating experience navigating the site.

Even simple Websites will benefit from a project plan. Whether a large team is working on the site or whether one person is doing all the work, a project plan will keep key objectives at the forefront and ensure that the site is organized and well-designed.

This guide is intended to help you identify the decisions you will need to consider in planning a Website that delivers content to an established audience. This type of Website is becoming more common as online information delivery becomes a viable option for more companies.

The following steps aspects of planning a site are covered in this chapter.

- Project objectives
- The team
- Audience analysis
- Structure
- Navigation

Project objectives

Defining the project's objectives can seem deceptively simple. At the beginning of the planning process, however, it is a good idea to take a step back and identify exactly the goals you and your team want to achieve with the Website. It is worthwhile to write the primary objectives down. If you are designing the site for a client, have the client confirm the objectives. The written objectives do not have to be long or complex. They can be as informal as a few sentences in a bulleted list.

One of the most important questions to ask as you begin the planning process is: does the content already have the audience you want or does the content need to attract an audience and bring it back regularly. To help clarify, you could think about this question in terms of what would be a more appropriate print mechanism for your content, a text book or a newspaper? The answer to that question will fundamentally impact the way you plan and design your site.

When you've got the site's primary objectives down on paper, go through the process of prioritizing them. Later in the project, as your team is designing the site, you'll want to refer back to this list of objectives. Prioritizing the objectives will help guide design decisions later.

Bad and good objectives

Watch out for objectives that may indicate you do not have solid reasons for building the Website. Although they may not be worded exactly this way, the following types of objectives should send up red flags:

- To compete with another organization that has a Website
- To tell people about yourself or your organization

- To have a Web presence

These objectives are not always “bad” reasons to build a site, but they should be part of a list that includes reasons that reflect the advantages of the Web as a communication medium, such as:

- To save printing costs on direct mail or catalogs
- To provide updated materials more quickly to customers
- To make information available through search engines

The team

Another key consideration in planning the project is the team. It is important to define the roles for each person who will be working on the project. Try to work out their relationships in advance. Keep in mind that every project is different.

There is no standard number of people on a Web development team, so the roles defined below do not necessarily represent individuals. For example, one person might have several roles on a small team or several people could perform a single role on a larger team.

Project Manager

Primary responsibilities:

- Writes high level functional specifications
- Makes sure project achieves objectives
- Gathers user requirements
- Designs site hierarchy
- Manages budgets and schedules
- Coordinates workflow
- Communicates problems/concerns to management

Designer

Primary responsibilities:

- Manages visual aspects of the site
- Creates early prototypes for evaluation
- Develops navigational aspects of the site
- Maintains common visual themes and styles across the site
- Incorporates visual themes and styles from parent site if applicable
- Contributes to functional and technical specifications
- Contributes to site hierarchy designs

Developer

Primary responsibilities:

- Writes detailed technical specifications
- Recommends appropriate technologies bases on functional specifications
- Develops the site
- Maintains the server hosting the site

Usability Engineer

Primary responsibilities:

- Coordinates audience analysis
- Performs usability testing on prototypes and final designs
- Recruits appropriate users for testing
- Collects and reporting data
- Recommends changes to design
- Contributes to functional specification
- Contributes to user requirements

Writer

Primary responsibilities:

- Develops content for the site
- Defines relationships (links) between content
- Contributes to functional specification
- Contributes to site hierarchy designs

Editor

Primary responsibilities:

- Ensures content is consistent in style and voice across the site
- Checks site content for grammatical and spelling errors
- Ensures terminology is used consistently across the site
- Ensures content meets user requirements
- Defines categories for information
- Contributes to site hierarchy designs

Tester

Primary responsibilities:

- Tests links across content
- Tests full functionality of user interface

- Tests content and functionality on multiple platforms
- Tests content and functionality on multiple browsers and versions

Overlapping responsibilities

You may notice that many of the roles have overlapping responsibilities. For example, several roles contribute to the functional specification, creating the site's hierarchy, and defining the user requirements. In most cases, the roles have different perspectives. The contribution of each role is essential to the success of the site as well as general morale on the team. If any team member feels his or her recommendations are being ignored, it will adversely impact the entire team.

Successful teams recognize that no one person is ultimately responsible for the structure, design, or usability of the site. Of course, on paper this philosophy is easy. In real life it can be more difficult. When there are disagreements, it is important for everyone on the team to review the site's overall objectives and priorities. It is the Project Manager's job to make sure the objectives are clear and accessible. It is easy to get caught up in details and lose the bigger picture of the site's purpose.

Most importantly, everyone on the team needs to be involved in audience analysis. Attending usability studies, especially during early prototyping, can provide insights to everyone on the team and prevent disagreements about how users will interact with the site.

Audience analysis

The Web is no different than any other communication medium. Knowledge of your audience is essential to planning and designing a successful site.

It is beyond the scope of the chapter to provide complete instructions for conducting research to do a full analysis of your audience. However the following list provides some general guidelines of characteristics you should be able to identify about your audience before you begin to design the Website:

- Level of general education
- Subject matter knowledge
- Your users' technology
- Roles within the field or industry
- Language requirements
- Accessibility restrictions

Related resources:

Caernarven-Smith, Patricia. Audience Analysis & Response. Pembroke, MA: Firman Technical Publications, 1983.

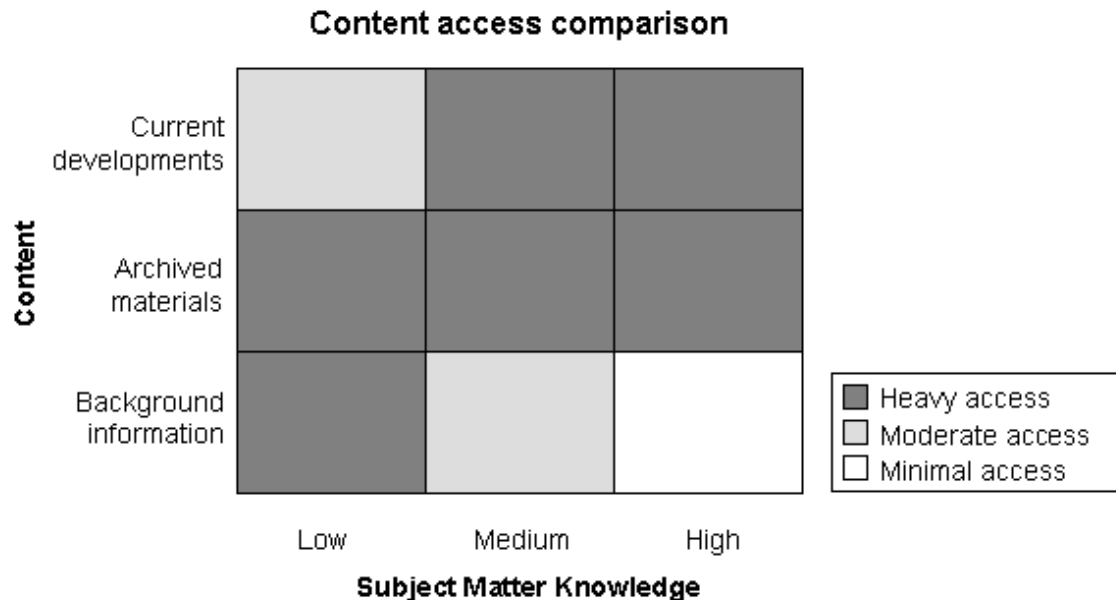
Field Methods Casebook for Software Design. eds. Dennis Wixon and Judith Ramey. New York, NY: Wiley Computer Pub., 1996.

Rosenfeld, Louis and Morville, Peter. Information Architecture for the World Wide Web. Sebastopol, CA: O'Reilly & Associates, Inc., 1998.

If your project is like most, you won't be able to pinpoint any characteristic across the entire audience. For example, your audience may range from moderately to highly knowledgeable about the information you are providing.

Audience segmentation

The next step after defining these ranges is to segment your audience based on the characteristics that you think are most important. You might consider a matrix like the one shown below to help analyze the range of users within the context of the information you are providing. The following diagram is based on a fictional Website which provides free information to an academic research community. They divide the information into three broad categories reflected on the y-axis. The range of users' subject matter knowledge is on the x-axis.



The site planners predict that their most knowledgeable users will probably not access background information, whereas users with low subject knowledge will access background information frequently. They also predict that the full range of users from low to high expertise will want to access archived articles.

The audience range matrix is useful because you want to optimize the site for your different users. The matrix can help you decide how to organize and define relationships in the content you will be hosting on the Website. Content that will be heavily accessed by all the audience segments should have more exposure than content that will be accessed by a lower percentage of users.

As you did with the project's objectives, it is a good idea to briefly outline the audience segments and their primary characteristics on paper and make them available to everyone who will be working on the site. If you are producing the site for a client, confirm the audience segments with their representatives.

It is also a good idea to prioritize the audiences. Ideally, you want the site to serve the range of users that will be coming to it, but you may need to make design decisions that optimize the site for one type of user or another and it will be useful to have those priorities laid out before you begin building the site.

Structure

Planning the structure of the site is an important step before content development begins. You should create an overview of all the information that will appear on the site. The more thorough and complete the outline, the more successful you will be in creating the structure and navigation models for the site.

The overview of the content can be a simple outline or it can be a more complex diagram created with a graphics program. At the very beginning of the process you may prefer to work with Post-Its or index cards which will allow you to lay out the content and move it around easily.

A common approach is to collect all the content you currently want to deliver via the Web, organize it into a hierarchy and call the content plan done. That approach provides a good starting point, but be sure to extend the process to identify holes and missing pieces that your users need.

After you've outlined the content that should be hosted on the site, check with your customers. Ask them what kind of information would bring them to the site and what they would expect to find there. If the project schedule and budget do not allow for a user survey, put yourself in the user's shoes and analyze the content from the user's perspective. Keep in mind that the organization's conceptual understanding of the information may not be the same as your readers'.

The following table shows two sets of categories for similar information. In some cases, the distinction is subtle, but it is more than just semantics. Thinking about your content in terms of what your users are looking for will impact the way the content is developed.

Typical categories from the writer's perspective	Typical categories from the reader's perspective
About our organization	Contact information
Press releases	Industry news
Alphabetical list of products	List of products by specialty
Product features	Product uses
Prices	Cost comparison with competitive products
Our clients	Our products in the field

It is a good idea to check competitors' Websites if they exist. A competitive analysis is a good way to find holes in your content. But, don't feel you have to do everything they do. There is lots of bad design and content available on the Web. Copying it doesn't help your users.

Lastly, be brutally honest about cutting out content your users do not care about. Your credibility as an information resource will suffer if users feel your site is geared too much toward marketing. Avoiding the marketing spin can be particularly difficult. You may feel pressure from sales and marketing departments to "educate" people that come to the site. Unless a clear goal of the site is to educate people about the company, limit that kind of content.

Related resources:

Farkas, David K. and Farkas, Jean B. Website Design: Theory and Principles. 2001.

Fleming, Jennifer. Web Navigation: Designing the User Experience. Sebastol, CA: O'Reilly & Associates, Inc., 1998.

Nielsen, Jakob. "Is Navigation Useful?". January 9, 2000. <http://www.useit.com/alertbox/200000109.html>.

Navigation

The most common navigation models on the Web today are navigation columns and navigation bars.

The column normally acts as a "table of contents" for the site. It contains a list of links that display content in a separate pane to the right as the user clicks on them.

The navigation bar typically runs horizontally across the top of the site, the bottom, or both. The navigation bar is useful for moving between major sections of the site. It sometimes contains dropdown menus to make more content directly available.

Occasionally sites will use both, but for the sake of simplicity, it is preferable to use one or the other.



The site shown above uses both a navigation column and a bar. Some of the categories in the bar are duplicated in the column. It makes the site complicated and difficult predict.

Linking content

Don't assume you need to represent all the content in your site with the navigation column or bar. Extensive linking within your content can be an effective way of getting users to the right information. Defining relationships within the content should be a part of planning the site's structure. Identify related content by drawing lines between the content nodes in the site structure diagram. Indicate whether the links are one-way or two-way.

Step through the content yourself, trying to imagine what paths users would choose. Make sure you don't leave them at any point in the structure where they can't get back to a navigation bar, an overview topic, or the "home" page. Be conscious of multiple paths available to users. Each audience segment you have defined in your audience analysis will be interested in different content and navigate through it a different way.

Summary

The planning phase is an integral part of the project before design or development of the Website officially begins. The key aspects of the planning process are:

- Defining the site's objectives, formalizing them on paper, and then prioritizing them.
- Creating a team, identifying key roles for each member, and recognizing overlapping responsibilities.
- Performing a complete analysis of your audience, segmenting it, and defining key characteristics for each segment.
- Planning a structure for the site that reflects the user's perspective.
- Planning the key navigation features for the site including a navigation column, bar or internal linking.