

Web Site Practices: Creating a Better Visitor Experience

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INTRODUCTION

Why is a visitor's Web site experience so important? Today's customers expect a company to have a Web site, if only to provide contact information or facility hours and locations.

However, studies from nearly every usability laboratory have shown that, on average, half to three quarters of the people who come to a Web site for the first time, or looking for something new, leave without finding what they were looking for – even when it is on the site.

Think about it. If your company has spent tens or hundreds of thousands of dollars on Web site features that your visitors want, but more than half can't find, you are losing a lot of your return on your investment.

But the problem reaches further than your immediate ROI. According to a study reported by Genex, 30% of visitors who have a negative experience on a company's Web site report that they are less likely to shop at that company's brick and mortar stores.

When Web sites fail to meet visitor expectations, the brand image of the overall company is tarnished – not just the image of the Web site. As a highly visible member of most Web site development teams, the credibility of IT also is at stake.

Hello, welcome to this WatchIT Peak Performance program: Web Site Practices: Creating a Better Visitor Experience. I'm Steve Telleen, founder of iorg.com, a company that helps align Web site strategy, objectives and practices with overall business objectives through practical workshops, audits and custom consulting.

In this program, we will cover the use of Web site practices, a proactive approach I developed to create better Web sites. The practices approach has proven effective and has been refined through the evaluation of Web sites for over 100 companies in North America, Europe, and Japan.

PROGRAM ROI

In our program today, you will learn:

- ~ Why the three traditional approaches to managing visitor experience fall short;
- ~ What practices are; and
- ~ Why a practice-based approach can help.

You also will learn:

- ~ How to create and refine practices;
- ~ Five specific ways to use practices to manage visitor experience in the implementation of Web sites; and
- ~ How to implement a practices approach.

AGENDA

The program will cover four agenda topics.

- ~ We will begin with a brief look at traditional reactive approaches to managing visitor experience.
- ~ Next, we will examine why proactive design practices are a better alternative to traditional approaches.
- ~ This will be followed by a discussion of how to develop and refine practices for your Web site.
- ~ Finally, we will look at various ways to use practices in the design and implementation of Web sites.

VALUE-ADDED RESOURCES INCLUDED WITH THIS PROGRAM

If you are viewing this program via the Internet or on CD-ROM, you'll have access to:

- ~ The program transcript;

~ A glossary of terms; and

~ Links to related Web sites, key documents, recommended books and articles, and relevant vendor information.

TRADITIONAL APPROACHES TO MANAGING VISITOR EXPERIENCE

Let's now take a look at some techniques for managing the visitor experience.

Do you ever feel overwhelmed by the complexity of Web site development and improvement projects? No matter how hard you try, another usability test always seems to turn up visitor barriers that were overlooked and require endless and expensive rework! If so, don't be too hard on yourself; it isn't your fault.

Several studies on best practices for Web site usability testing showed that even the experts run into this problem. In the first of these studies, the nine teams that participated collectively uncovered 310 usability problems. Of the 310, only two problems were reported by six or more of the teams. And 29 serious problems were each reported by only one team.

Rolf Molich, founder of DialogDesign, a Danish usability consultancy that offers a range of services, conducted this and several subsequent studies. He concluded that: "The number of usability problems in a typical Web site may be so large that one cannot hope to find more than a fraction of the problems in an ordinary usability test."

So now, let's examine the three traditional approaches for managing the visitor experience:

~ Usability testing;

~ Heuristic reviews; and

~ Satisfaction surveys.

We'll discuss each one in turn.

Traditional Approaches to Managing Web Site Experience: Usability Testing

Usability testing is a straightforward approach. It asks people who are the target customers to use the product while the researchers observe the result, without comment or intervention. The researchers record the process in an attempt to discover all the barriers to use that the testers encounter, so they can understand the reasons and overcome the barriers.

Usability testing has been used to test everything from physical product designs to computer applications. However, usability testing has drawbacks when applied to Web sites.

At the top of the list is the cost. A Web site usability test generally starts at over \$20,000 and goes up from there. The cost is directly related to the number of people tested.

Next, it has become apparent that, for a Web site, the traditional five to eight testers are not nearly enough. The highly diverse content and variable visitor objectives found on most Web sites create too much complexity for simple usability testing to be practical.

While usability testing remains an important experimental tool, and can provide value for finding unanticipated barriers and for verifying assumptions about characteristics unique to specific audiences, it is not a cost-effective tool for managing the overall customer experience on a Web site.

Traditional Approaches to Managing Web Site Experience: Heuristic Review

The heuristic review was intended to provide a faster and less expensive way to approximate the results of a usability test. Jakob Nielsen, of Nielsen Norman Group, and Rolf Molich developed the framework to help usability experts identify and report common usability barriers to developers.

Unlike usability testing, heuristic reviews contain prespecified parameters that are given numeric scores by the expert doing the review. It generally is recommended that at least three experts independently review the site and average their scores.

The heuristic approach has serious drawbacks. First, assigning the numeric values to the parameters is highly subjective. Second, the framework – as it's evolved – became adapted for standardized comparison, not actionable response. Recommendations for improving a Web site's score require expert advice.

Rolf Molich recently said in an interview: "Heuristic inspections are cheap, simple to explain, and deceptively simple to execute. However, I don't use this method very often and I don't recommend it to my clients. Heuristic inspection is based solely on opinions."

Traditional Approaches to Managing Web Site Experience: Satisfaction Surveys

Satisfaction surveys should be familiar to everyone. A survey is presented to the Web site visitor with questions about what they like, don't like, and their overall satisfaction. While they can be presented at any time, the Web site makes it easy to present a survey during or immediately after a visitor session. The closer to the experience, the better the respondent's memory will be.

Satisfaction surveys have three major challenges for managing visitor experience on Web sites:

- ~ The choice and wording of questions and responses can affect the results;
- ~ The sample of respondents may not reflect the most important visitors; and
- ~ Visitors can tell what they do not like, but they are not experts on causes or fixes.

Satisfaction surveys are an important tool in managing visitor experience. However, the trends, observations and suggestions that come from these surveys need to be tested and corroborated with additional research.

Traditional Approaches to Managing Web Site Experience Are Reactive, Not Proactive

One point all three approaches have in common is that they all are reactive rather than proactive. They were developed to test and identify problems with existing Web sites. They were not developed as tools to help eliminate as many barriers as possible during the initial design and implementation.

WHY PROACTIVE DESIGN PRACTICES ARE BETTER THAN REACTIVE APPROACHES

In this next section, we'll discuss why proactive Web site design practices are better than traditional approaches.

A major reason proactive design practices work better is straightforward economics. According to the Usability Lab at Bentley College, revision costs are 1.5 to 6 times greater during development than during the design phase and 60 to 100 times greater after release.

Eighty percent of these costs are due to unmet or unforeseen user requirements. With numbers like this, it should be apparent that proactive approaches that help eliminate visitor barriers in the initial design are more cost-effective than relying solely on reactive approaches that apply late in the development phase, or after deployment.

With Web sites, there may be another reason. Expanding on Rolf Molich's observation presented earlier: the number of usability problems in a typical Web site may be so large that one cannot hope to find more than a fraction of the problems using reactive testing.

And even if one could, there would be so many that the time and effort to fix more than a fraction would be prohibitive. It is better to design and implement the first time with as few barriers as possible, which brings us to the concept of Web site practices.

The Concept of Web Site Practices

A proactive practices approach can have a very positive impact on IT by:

~ Allowing the developers to focus on high value functionality rather than reinventing the basic grammar of the Web medium with each project;

~ Reducing the number of design rework iterations due to imprecise communication with business owners and designers; and

~ Reducing the number of critical errors found after the Web site goes live.

Several researchers have suggested the concept of a proactive approach to design. Rolf Molich (who we've already introduced), Alan Cooper and Robert Reimann, authors of *About Face 2.0: The Essentials of Interaction Design*, and Doug Van Duyne and his colleagues – authors of *Design of Sites* – have identified three elements as important:

~ A basic unit which Cooper calls “principles” and Molich calls “standards”;

~ A collection of design solutions which Cooper and van Duyne call “patterns” and Molich calls “interface building blocks,” and finally,

~ What Molich calls “contextual inquiry.”

A Web site practice refers to the first element: the basic unit. A practice is a specifically defined, observable trait of a Web site. A practice describes an element or convention employed on the Web site that affects the visitors' perception of the Web site in terms of:

~ Success;

~ Trust; and

~ Likeability.

We will cover practices in more detail in the following sections.

Factors That Create Barriers for Web Site Visitors

To be used proactively in the design process, practices need to be organized in a pragmatic manner so they can be found and utilized. This can be accomplished by placing them into categories based on the factors that create barriers for Web site visitors.

The most common factors that create barriers for site visitors can be placed into four categories:

~ Navigation;

~ Presentation;

~ Link construction; and

~ Design.

Factors That Create Barriers for Web Site Visitors: Navigation

We begin with navigation, because a Web site is a medium that is conceptually multi-dimensional, and the exploration of the site is under the visitors' control. This is unlike a radio or television channel where the order and timing of the content is not under the viewers' control, and is unlike print, where the physical embodiment of the content allows readers to explore, even when navigation aids – like a table of contents or index – are missing.

On a Web site, if the visitors cannot find, and follow, the path to their expected destinations, then those destinations do not exist, no matter how much time and money were spent creating them.

The three most common barriers site visitors face in navigation are:

- ~ Ambiguity of category names;
- ~ Omission of critical links or information, and
- ~ Disorientation once they have started down a path.

Factors That Create Barriers for Web Site Visitors: Presentation

Presentation refers to the way in which the content is presented to the visitor – not from an aesthetic perspective, but from a usability perspective. The three most common barriers in presentation are:

- ~ Technology;
- ~ Representation; and
- ~ Accessibility.

The most common presentation barrier comes from the choice of technology as seen from the visitor's end. Anything that requires:

- ~ A plug-in;
 - ~ A special application; or
 - ~ A specific browser
- ... will create a barrier for some visitors.

Other examples of technology barriers include:

- ~ The loss of usable formatting when style sheets are turned off; or

~ The loss of form data when the back button is used.

Representation refers to the way in which the content is rendered on the visitor's screen. Examples of barriers caused by representation issues are:

~ When the text is too small; or

~ The contrast between the content and the background is too weak or variable for the visitor to easily see and comprehend its meaning.

While accessibility barriers are serious issues for visitors with a disability, they are not seen directly by most visitors. This does not mean that removing these barriers does not add valuable options for all visitors.

For example, the use of alternate text behind images helps all visitors when images are slow loading or don't load at all.

Since most people can read faster than they can talk, the provision of text transcripts for streaming audio presentations allows visitors with normal hearing to read and scan content when they don't have time to listen.

Also, keep in mind that not providing an accessible Web site can pose a serious legal and ethical risk to a company.

Factors That Create Barriers for Web Site Visitors: Link Construction

Link construction creates barriers when scanability, recognition, and uniqueness are compromised.

Scanable links are a function of:

~ The type of link;

~ Layout on the page; and

~ The number and choice of words used in the link name.

Recognizable links contain a word or element that the visitor easily and correctly associates with the destination target. Unique links are unambiguous and do not overlap in meaning with other links.

Factors That Create Barriers for Web Site Visitors: Design

Design barriers are the most politically and emotionally charged, partly because design has a large subjective element, and partly because the Web medium is so different from the more familiar broadcast media. Two objective barriers that often occur in design are:

~ Goal interference; and

~ Choice interference.

Goal interference occurs when the Web site practices actively interfere with the goal-seeking behavior of the visitor. Two common examples of goal interference are:

~ Automatic pop-ups; and

~ Animated text or images.

Pop-ups cover potentially important content, and animations distract the concentration of the visitor.

Choice interference occurs when the design omits or masks key visitor choices. Commonly seen examples include:

~ Hiding lower-level links in rollovers; and

~ The use of large images or narrative text blocks that push key choice links below the initial screen view, or force their omission altogether.

HOW TO DEVELOP AND REFINE WEB SITE PRACTICES

Now let's examine how to develop and refine practices for your Web site.

Specific categories can be defined, and within each, specific practices can be identified.

The four categories used in the discussion of barriers are certainly beginning candidates. However, to be useful, the definition of practices requires a more formal construction. Practice definitions have five requirements:

~ Credibility;

~ Structure;

~ Openness;

~ Specificity; and

~ Perspective.

Let's talk about each one in more detail.

Developing Web Site Practices: Credibility

Credibility is a requirement that normally would not apply to a purely descriptive element. Any element with common agreement could be included.

However, the practices we are defining have a context that is more specific than general description. We are defining practices that affect visitor experience, and – as we shall discuss more fully in the requirement for perspective – practices carry an explicit recommendation in the way they are worded. Therefore, a practice needs supporting evidence that it does affect the visitor experience and whether that experience is positive or negative.

Initially, this support comes from credible sources such as:

- ~ Professional and academic research;
- ~ Professional standards bodies; and
- ~ Case studies.

Over time, they are molded by testing experience with the Web site's audiences. Practices need to be based on objective support, rather than opinion.

Developing Web Site Practices: Structure

Structure makes practices easier to scan, understand and use. The structure of a practice consists of two parts:

- ~ A name; and
- ~ A set of specific attributes.

The name should be descriptive and short – two to four words; for example, Page Titles.

The attributes under the name provide the detailed description of the practice and are listed individually. For example, the attributes for Page Titles include:

- ~ Does every page have a clearly identified title?
- ~ Is page title placement consistent throughout the site?
- ~ Is page title format consistent throughout the site?
- ~ Are page titles six words or less in length? and
- ~ Do all page titles match their content?

Developing Web Site Practices: Openness

Openness allows attributes to be added, deleted, or modified, based on future experience. This means the structure does not prespecify a set number of attributes for a practice, or for that matter, a set number of practices for a practice category.

If summary values are needed for comparative reasons, giving each attribute a value of one, and normalizing the result to ten at the practice level will allow this comparison. Normalizing the data at higher levels allows comparison of practice categories without using a subjective scoring system or creating an artificial requirement for an equal number of attributes for each practice.

Developing Web Site Practices: Specificity

Specificity in defining attributes is critical, since the attributes provide the definition of the practice. Two tests can help create attributes that are specific.

The first is the “what does it look like” test. Each attribute must be defined in a way that it can be seen in concrete form on the Web site.

The second is the “yes or no” test. Individuals looking at the attribute should be able to look at a Web site and agree whether that attribute exists or not with a simple yes or no. It should not require an opinion, interpretation or graded response.

Developing Web Site Practices: Perspective

Perspective refers to the wording of the attribute. The perspective needs to be consistent for all the attributes in all the categories.

The two important parameters of a practice perspective are whether the attributes will be in the form of a statement or of a question. The second is whether the answer will be positive or negative.

To some extent, the use of practices determines the perspective. For example, if the practices are going to be used to evaluate a Web site against standard practices or as a checklist, a question format with the desired state being a positive response is the more natural model.

If the practices are to be used as standards to be followed by the organization, then an imperative statement format may be more appropriate, and inconsistency of the positive versus the negatives is less disruptive.

WAYS TO USE PRACTICES IN WEB SITE DESIGN

In this section, we'll look at various ways to use practices in the design and implementation of Web sites.

Practices can be used for a number of pragmatic purposes, including:

- ~ Checklist;
- ~ Design requirements;
- ~ Standards;
- ~ Testing; and
- ~ Knowledge capture.

How to Use Web Site Practices: Checklists

Checklist: Practices can provide a comprehensive checklist of specific attributes that lead to a successful visitor experience. As we suggested earlier in this program, used as a checklist, practices can proactively help the initial design and implementation, and avoid a large number of barriers that otherwise would creep in through accident and inattention.

A practices checklist also can be useful for evaluating existing sites in a reactive mode. They have many of the same benefits the heuristic review was supposed to deliver, but the structure and specificity of the practice definitions remove the element of opinion.

If there is disagreement about the effect or benefit of an attribute, the open nature of the practice definitions encourages further refinement of the definitions, and provides a descriptive structure for rational testing.

How to Use Web Site Practices: Design Requirements

Design requirements: Business owners, designers and implementers of Web sites can use practices to describe and document key Web site requirements. The practices provide a vocabulary that is non-technical and easily understood, but very specific as to the visitor-centric behaviors required by the Web site, reducing dissatisfaction and rework caused by misunderstandings.

How to Use Web Site Practices: Standards

Standards: Complex Web sites often have multiple sections owned by different organizations. For example, marketing managers for different products may own a section; customer support may own a different section; investor relations yet another section, and so on.

Practices can be used to set, communicate, and audit practice standards to be followed by these distributed stakeholders. This ensures consistent behavior of the Web site across all the sections and a more integrated customer experience with the company overall.

How to Use Web Site Practices: Testing

Testing: It would be naive to believe that practices from even the most credible sources provide the best solution one hundred percent of the time. Well-defined and structured practices provide a rational framework for targeting, testing and refining the practices for a specific Web site's audiences.

Practices complement traditional usability testing in three ways:

- ~ They help identify the most productive test focus;
- ~ They provide a description of the Web site elements in enough detail to control variables when testing specific hypotheses; and
- ~ They provide a framework for capturing the results so they are not lost in future designs.

How to Use Web Site Practices: Knowledge Capture

Knowledge capture: The concept of practices as knowledge is really an extension of the idea in the testing model just discussed. It is important to have a record of what we have tried and how it worked so we don't continuously repeat our mistakes. By capturing and retaining a comparative practice history, we create this record in a detailed and usable form.

Implementation of Web Site Practices

We'll conclude this section with a few comments on implementation.

There are two key parts to the implementation:

- ~ Defining the processes that need to occur; and
- ~ Creating the policies that guide behavior.

Defining Processes That Need to Occur in a Web Site Implementation

For most companies and uses, once the initial practice sets have been acquired, the process begins with a baseline audit. The baseline audit provides two benefits:

- ~ First, it becomes the initial description of the Web site, against which changes can be compared.
- ~ Second, it identifies where the Web site currently deviates from practices that are known to be effective, providing an objective focus for discussion on prioritization and exceptions.

The practices should be modified to describe the target state for the Web site, and used proactively in the new design and implementation.

Since Web sites undergo incremental changes between redesigns, the site should be audited and the results reviewed on a periodic basis. The period will depend on the frequency of changes to the site, but a period should be formally set and adhered to.

Establishing Policies to Support Web Site Practices

Policies are the way we encourage desired behavior in organizations. To get the most from Web site practices, policies that support them need to be established.

Policies that support the use of practices in an organization need to:

- ~ Document the current practices;
- ~ Define who must follow them;
- ~ Define exceptions for deviation from them; and
- ~ Specify who is responsible for creating and maintaining them.

Since the practice concept supports change and adaptation to specific requirements, policies also should be created for changing practices and handling disagreements on their applicability. These policies should encourage testing the specific practices and proposed changes to support any decisions. It is by this type of testing and refinement that the knowledge embodied in an organization's practices grows.

SUMMARY

Now we'll present a brief summary.

In this program, we have explained how to proactively approach the design and implementation of Web sites. You now should know:

- ~ How proactive approaches differ from reactive approaches, and why they are better;
- ~ The five requirements of a practice definition;
- ~ Five ways to use practices; and

~ The importance of a baseline audit and the development of policies.

FOR ADDITIONAL INFORMATION

If you have been viewing this program via the Internet or on CD-ROM, please click on the Resources tab for additional information on this topic.

Thanks for viewing the WatchIT Peak Performance program: Web Site Practices: Creating a Better Visitor Experience. I'm Steve Telleen. If you have any questions or comments, please e-mail us at the address on your screen.

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