How do you know if your Web site is doing its job? Hits per day? Sales per week? All or none of those may matter, but how will you know which ones, and how will you find out? The purpose of this paper is to present a model which organizations can use to monitor their Web sites. First, a few common misconceptions are exposed.

Literature on Web theory is scant, for two reasons. First, it is a new area and many people are simply finding their way for the first time. Second, those who are at the forefront of the Web, the design technologists, are not typically inclined to sit back, reflect on their practice, source relevant theory and write about it.

As a result, what exists is either anecdotal or prescriptive. On one hand, there is the “I use loads of graphics and it works well” school; on the other hand there is the “don’t use more than three icons per page” school – each equally unhelpful.

Anecdotal experience may be fun and colorful, but it does not build a picture or a pattern for others to apply to their own experience. Offering prescriptive statements such as “too many/too few icons are bad” is a little like saying “blue cars are bad.” They are not bad or good, they either work or they do not. But why they work is not a function of the icons, the graphics, the content, the color, the length of the page, the number of links, the speed of my modem or any other technological variable. A Web site works because the people it serves like it.

No one, yet, is forced to use the Internet. We may argue that it helps in our research or our businesses, but we do not, yet, have to use it. We will therefore return to sites for the same reason that people buy from certain salespeople – they like them.

This article explores likeability factors and suggests ways that those factors can be controlled and their effectiveness monitored. It is also premised on the same variable that we use to determine whether an organization is succeeding in its objectives – the purpose is not to have a one-time-only interaction with our customers, but to build a long-term relationship where customers return again and again.
interesting. The only people who find the Web interesting are the people who program it, but then, they think computers are interesting, too. The rest of us find the whole subject of bits per second and PDFs and GIFs a real bore. What we really want to know is how to get the weather in Chicago or if anyone else in the world is doing research on long-range planning in Turkey.

That is not to say that serendipity is not part of the charm. Idle, non-linear browsing may form part of our Web activity, but it is not something a single site-owner can control. Were there a body such as Internet Inc., then the model could be applied to the Internet as a whole, but there is not. That is why the shopping mall analogy so commonly used is weak. Someone does manage a shopping mall, and assures that the individual stores comply with the integral design. We cannot do that for the Web as a whole, but we can for our own sites.

Our model for Web effectiveness does not incorporate any features of the process. How it works is up to the technologists: we just want to see if it works and why. It is a little like taking a flight from Toronto to London. We do not really care how the airplane stays up in the air, nor do we want to know it is built on something that is still called a theory – we just want to arrive refreshed and cheerful, without falling into the pond.

**Message, not medium**

The second step is to debunk the myth that the Web represents a completely new form of communication which needs new rules. This myth was probably generated by computer technologists whose strengths do not usually lie in verbal communication – with a few notable exceptions.

Everything we need to know about Web communication we learned in grade five. Every effective communication has three distinct parts which we will explore in more detail further on:

- an explicit purpose;
- a coherent structure; and
- a relevant conclusion.

That we use words, graphics or a mix of the two does not matter. Even comic books have titles, logical structures, and resounding finishes. Some pretty awful Web sites look like the kind of brochure created by an office clerk using the latest desktop publishing software. Just because we can push buttons to create different images does not mean the final product will hang together with integrity. Graphic designers know how to arrange text and visuals to complement each other, and to influence the audience. They have rules about weightings and fonts and sizes – all of which combine to create a professional product.

If we do not follow the few, simple rules about effective communication then we will fail in our message, whether the medium is a book, a Web site or a television show. To monitor our site's effectiveness, we first have to ensure that we have the basics of good communication working for us and our audience. It is the one variable which will undoubtedly cause our failure if we get it wrong, no matter how fast, sleek and sexy our site might be.

All of this is about doing the right things well, rather than doing the wrong things more quickly to more people more often. It is the difference between effectiveness and efficiency. As someone once said about using a spreadsheet for forecasting: "if I'm not careful I just compound my errors faster."

**Quality is ...**

Quality is whatever the customer says it is. Beyond the basics of keeping the wings on the plane, engineers do little to influence the moment-by-moment quality experience on an airplane. That is down to the standard of service performed by the cabin crew, the taste of the food, the variety of entertainment on offer.

Keeping the wings on the plane is static quality: we do not want it to change and we only really notice it if it stops working. Offering hot towels or offering to walk your crying baby is dynamic quality; we notice it because it attends to our individual needs in a unique and completely relevant way. It may change from airline to airline, whereas keeping the wings on probably will not, we hope.

A model for Web site effectiveness must therefore presume that we understand who the customer is and what the customer will see as quality. The model does not presume an internal committee of designers who judge the site – that would be a little like those notorious advertising awards where all the agencies congratulate
each other on creative design, but no one says whether the ads worked or not.

Quality is customer-focused; it therefore must be customer-led. Putting the customer at the center assures that our communications mirror the customer’s needs and preferred style of medium. We need to establish the basics of static quality and then be responsive enough to offer dynamic quality as well. We need to do some of that alone, and some of that with our customers.

Owning up

What then, are the elements of static quality which we can firmly establish, which will not change daily and for which we must take utmost responsibility as professionals? We need to identify those and then monitor that they work in practice. These are the elements that do not depend on customer interactivity. They are what is known in strategy theory as “conditions of doing business”. They are not options and they are not open to daily review. These elements are to a Web site what knowing protocol is to a diplomat – they will not guarantee you will win the war, but without them you will not even get an audience.

The second element, of dynamic quality, is the only element which we can offer for customer feedback. This may change on a weekly basis, but we can manage the change within a model.

Let us explore the elements of static Web quality which are our responsibility and see how we can monitor them:

1. Identifying our customers.
2. Articulating the site’s purpose.
3. Providing relevant content.
4. Creating coherent structures to mirror customers’ needs.
5. Arranging visual elements to reflect (1), (2) and (3) above (we call it housestyle).
6. Creating relevant concluding/action points.
7. Delivering the promises we made at the action points.

Customers

If we know why we are in business, we must know who our customers are. Just because the Web reaches millions does not mean they are all our customers, any more than saturating a city with leaflets means we will get to the people who will eventually buy. We may hit them in passing, but a message which appeals to everyone will be so diluted it will not appeal to the group we want.

Who are the customers in your business and what are they doing on the Net? Why are they there and what do they hope to gain from being there? These are questions which need to be answered before we can design the words and pictures to satisfy them. Any medium of mass communication, whether that be television or newspaper or Web, can seduce us into thinking we are communicating with the people we want. Leaders in the direct mail industry learned a long time ago that the most important element of the communication was the target audience.

We may not prevent everyone from visiting at least the opening page of our site, but we are not going to put any effort into satisfying everyone’s needs. We can monitor this by evaluating the nature of the people who go further into our site, even as we create reasonable obstacles to impede the progress of the casual observer. The last thing we want to do is to clutter our database with thousands of people who have no real interest in what we do.

That obstacle may be a registration page, it may be the need to pay money or it simply might be the specificity of the content. Either way, we want to measure the quality of the visitors and see if it matches the profile of our customers.

Purpose

Every effective communication has a clearly stated purpose known to both the creator and the audience. Good articles begin with the purpose (Day, 1996); good presentations begin with a purpose; good marketing communications begin with a purpose. A Web site is no different. We must tell our customers immediately why the Web site is there and what it will do for them.

The problem is often defining the purpose in the first place. Many Web designers fall into the same trap as other poor marketing communicators – they feel that their presence alone is purpose enough, that “awareness” is sufficient. With all the investment required to create and maintain an effective site, simply being there is not going to provide a return. That return does
not have to be measured in pure financial terms – it may be sufficient to say that our purpose is to attract other researchers, or to create a database of prospects. But it must, like any marketing communication, be quantifiable.

Too many people measure their site effectiveness by the number of “hits” – that is, by the number of people who log on. That is like measuring the effectiveness of a television commercial by the size of the audience. Granted, some people still do that, but not the effective ones. What we want to know is: are the right people visiting our site and are they doing what we hope they will do when they are there?

That needs hard thinking, but no one said it would be easy. As a first step, ensure the purpose is distinctly clear and has a quantifiable customer-focused measure relevant to the objective. Then, monitor it using that criterion only.

Content
The question of “what should be on the page” is answered by understanding the customers’ needs, behaviors and expectations, combined with the purpose of the page.

Some organizations may be offering text-based papers or conferences; others will be enticing customers to buy lawn furniture. Others are just an expression of the Web-owners’ ego (“Hi, I’m Dave, welcome to my homepage”) which do not concern us here.

What we have discovered so far from the Internet is that people behave pretty much as they do in other environments. The extrovert takes the lead in a discussion group; the introverts lurk. The person who wants something for nothing comes and goes; the community-minded person contributes and enhances the site by their presence.

Offering content for customers will be based on your understanding of who they are and how they will behave. But how do you know if you have it right? This is one area where involving your customers is critical. Test the content on a target group – we will discuss how to do this later on.

Structure
Structure follows strategy. Once the above three items are worked out – the customer group, the purpose, and the content – then the structure is easy. Most confusing Web sites do not follow a logical structure because they are not created with the logic of the customer in mind, or follow the logic defined by the purpose. Creating a coherent structure is a function of two important variables:

- following the logic dictated by the customer and purpose; and
- stating clearly along the way what you are doing, commonly known as “signposting”.

When I run authors’ workshops at universities, I distribute at random journals of different disciplines, then ask the participants to choose one paper at random. They then have five minutes to discover what the purpose is, the key points and the implications. If they cannot do that, the article is deemed a failure. Anyone should be able to skim read a paper about anything and at least be able to state the purpose, main points and implications. At least, anyone looking at a paper which has been written properly.

That does not mean we have understood the paper in depth – that may take several readings. But just as we can scan titles and abstracts to decide whether we will read the paper, so we can skim the paper and decide whether it is worth reading again, slowly.

The same situation occurs with a Web site. Anyone should be able to find the site, see instantly what it is about and what it has to offer, navigate quickly to key pages, understand what they can do next and decide whether or not to do it. That the site offers a multiplicity of options is not the point. Those options and their relevance should be instantly clear.

Now, how do we know whether or not the structure is working? If we know the customer group and the purpose of the site, then we must assume we can predict the customers’ behavior to some extent. We must have a theory about what the customer will do when faced with a certain page at a certain time. I am assuming, of course, that we have already dispensed with those people who are not our customers by weeding them out early on in the process. But for those we know and understand, we should have a theory about what they are going to do.

It is exactly the same with placing an ad in a magazine showing a certain picture, having a certain headline, and presenting a certain offer. Our theory is that a certain sort of person seeking...
certain benefits will respond in a certain way to the offer and respond accordingly. That is how all effective marketing communications work, grounded in such a theory, and our Web site is no different.

We can apply the advertising industry’s short guide to effective communication design:
• attention;
• interest;
• desire; and
• action.

We can therefore monitor the structure’s effectiveness in two main ways. First, we can observe the behavior of those entering the site and starting to move through it. We can track their movements and see if they go to the areas we want them to go to. We can see if they consistently log off at a certain point and then tie that behavior back to our theory. If we had assumed that our customers would want to download that hefty file of information because we know it will match their interests and yet we see that most customers do not, we can safely assume that the average download time of three minutes may be too long. So, we can cut that file into smaller pieces and see if they hang on for 15 seconds.

We can help them along, just as we do in an article, by advising them of what is to come and how long it will take.

The second prime way we can track their behavior is to see whether they return to the site. The fundamental objective of any organization is to have repeat business – few people survive by interacting with customers only once. How many of our customers come back again and again, and how do they move through the site? We all know about bookmarks, and we usually bookmark the sites we want to return to. By measuring the return hits and looking at the behaviors we can quickly turn those data into useful information: 20 percent of first-time users come back again; 15 percent of them consistently log off at certain points, for example. That gives us the best information of all – it tells us what the people we are really interested in are doing.

Housestyle

The Web site must have a housestyle, just like a publishing house has for its books and journals. No one claims that the choice of housestyle elements makes the biggest difference for the audience (it actually makes the least), but it must be appropriate to the audience’s needs.

Having an aesthetically pleasing site is not an art form anymore; it is just another condition of doing business. But it must be grounded in the theory. Decisions to use a certain typeface or certain graphics are driven by our understanding of the customer and the purpose of our page.

Here are, however, simple design conventions which need to be followed on a Web site just as they are on a printed page. The few rules are once again the kind of static quality which needs to be embedded in the site. The usual rules governing housestyle are:

(1) Integrity. The material, whether it is a Web site or a book, needs to have consistency.

Once our audience has warmed to a certain style they begin to depend on it. Unfortunately, many Web sites appear to suffer from innovation overload, where a variety of designers have free rein to design whatever pages they like within the same site. That would be like having different typefaces for different chapters of a book.

This may be what Artz (1996) describes as the result of an “evolutionary” approach to Web development, as opposed to a top-down methodology. He argues that the weakness of the evolutionary approach is that participants are all involved in a joint experiment or learning experience: “consequently, evolving prototypes often suffer from several common problems including failure to meet business objectives; design conflicts resulting from conflicting purposes; inconsistent look and feel; data synchronization problems; data update problems; maintenance difficulties; and complex and confusing interfaces.”

If these problems sound familiar, perhaps it is time the organization accepted a top-down methodology. Applied to housestyle, that would mean all designers would know, for example, that each page must start with an introduction; it will contain horizontal rules every three paragraphs, two image links, a “last-updated” note and a feedback e-mail section (or whatever is deemed necessary).
appropriate to the customer group and to fulfill the purpose).

(2) Clarity. A good lay-out assists comprehension. Every graphic designer knows that minimizing variety helps the reader, just as crowded text and pages turn them off. Conventions governing how text is laid out and when images are used becomes part of the housestyle to be followed by each designer. An organization without a complete understanding of what governs clarity needs to get back to the drawing board before it launches itself on the Web.

Once again, I am not proposing that a new approach to this medium is required. What I do suspect, however, is that the same measurement will apply here as it does to ads and books: the creative execution is there to assist the reader, not exist for its own purposes. As long as it is good enough, it’s good enough. But if it is poor, then audiences will be lost forever.

The housestyle therefore determines that good practice is followed, creative designers are managed to the brief rather than to their own whims, and everyone knows what practice to follow. That allows us to move to the meat of the site, the content, without interruption.

Creating and maintaining housestyle also means we can remove one variable when monitoring behavior. We will not be confused by a page which is prettier than others, or a page with no graphics, when we are trying to assess the site’s likeability.

Action

As every communication has a purpose, so it must have a result. What do we expect will happen as a result of our communication? This goes back to the points of purpose raised earlier on, and impacts on the design of the site itself. And yet, something so simple as action points may be overlooked or, worse, degraded to the “give us your feedback” pleas.

We are not on the Web to gain feedback. We are on the Web because we believe something will happen as a result of our presence. Just as we would measure our organization’s success based on number of products sold, or number of students registering, or number of votes at election time, so we must set a measure for the success factors we will attribute to the site.

How easy are we making it for our target group to do what we hope it will do – to place an order, to fill out a form, to add to a conference, to request further information? Agam, this is an enormous difference from simply measuring “hits”. Just as our purpose cannot be as sloppily defined as “awareness,” so our action measures cannot be a function of the number of people dropping in.

The measure needs to be quantifiable and built into the strategy of the site. It then needs to be monitored and reviewed, just as any organizational activity should be, and decisions made as a result.

Promises delivered

The only thing worse than not promising results is making promises and not delivering them. A critical part of the Web site’s effectiveness is how it performs its objectives, and some of those will be linked to other parts of the organization.

For example, the Web site may be successful in attracting its target audience and convincing the audience that it is worth the effort to fill in the form and request further information about the doctoral program, the running shoes, the cruise, or whatever.

What happens next? How is that information fed through to different parts of the organization, and who determines that it is acted on? Many organizations see their Web site activity fall into a black hole at this point, or come up against a brick wall. The very parts of the organization which need to act on the customer’s request may be those least inclined to embrace electronic marketing. Who takes responsibility for action to happen?

Before making empty promises, the Web site champions must walk themselves mentally through the processes which will occur once the customer presses an action button. Map the flows from this point and see where they lead. Ask them lead away from the IT branch, where do they go and on whose desk will they land? Will the request for further information go into the same piles as all the other requests?

The customer on the Web is accustomed to something the print-based customer is not: speed of response. We know by their inclination
to use the Web that they want and expect instant responses – look how they complain when their system crashes or someone’s site takes too long to load. We are dealing with a target audience with a certain level of expectation, which must be met at each stage.

Once you have walked through the action flows, there might be another job to do before the potential problems can be resolved. These are serious matters of organization structure and politics: someone, most probably at the most senior level, needs to approve the cause and help remove barriers along the way.

Creating customer focus groups

Asking for feedback is largely a hit and miss affair. Customers expect to have their needs fulfilled by exploring your Web site; they are not in the business of charitably offering their serves as a market research group and it is unrealistic to expect them to do so.

Even so, some do respond. But, does that mean they are representative of the customer group you are seeking to target? Those who offer feedback may be a category of themselves: “feedbackers,” just as those who use coupons in stores are a category of themselves: “coupon-users.”

To create meaningful feedback we need to concoct a group representative of the whole. This is essentially what anyone does when they conduct market research. The sample must be a sample which can safely act as a surrogate for the group at large. We are, of course, assuming that we know who the target group is, know them intimately enough to select members who will give us information we can apply to the rest of the group.

The sample group must be invited to act as a market research sample, and induced to do this through an appropriate reward system. Depending on the group, these rewards may take the form of prestige factors, cash, product samples, or gifts – all of which need to have affinity with the product or service we are actually offering.

We will ask our group to comment on the key variables of the site we need our most important feedback on: the design and the content. The questions we ask need to be appropriate to the benefits we assume our group is seeking. For example, if we believe interactivity is the main benefit, then we need to ask our sample group to comment on that factor. If we believe it is the nature of our up-to-the-minute industry information, then we will ask about that.

The point is, there is no sense in asking our group open-ended questions like “what do you think of our site?” Our questions need to be directed toward the criteria we think are most important, and only those.

Implications

This article has provided a wide view of the Web site’s role and potential, stressing that measurements must be struck which are relative to the organization’s and target group’s objectives. These can then be monitored against those criteria.

Further, the paper has proposed that a Web site must be championed at the highest organizational level to ensure that the action the customer wants is acted on.

The implications for further research lie in the areas of profiling actual customer behavior and seeking correlation between predicted and actual behavior; reducing the number of variables through consistency to allow effective measurement; and the impact of the medium on organizational structure and culture.

References
