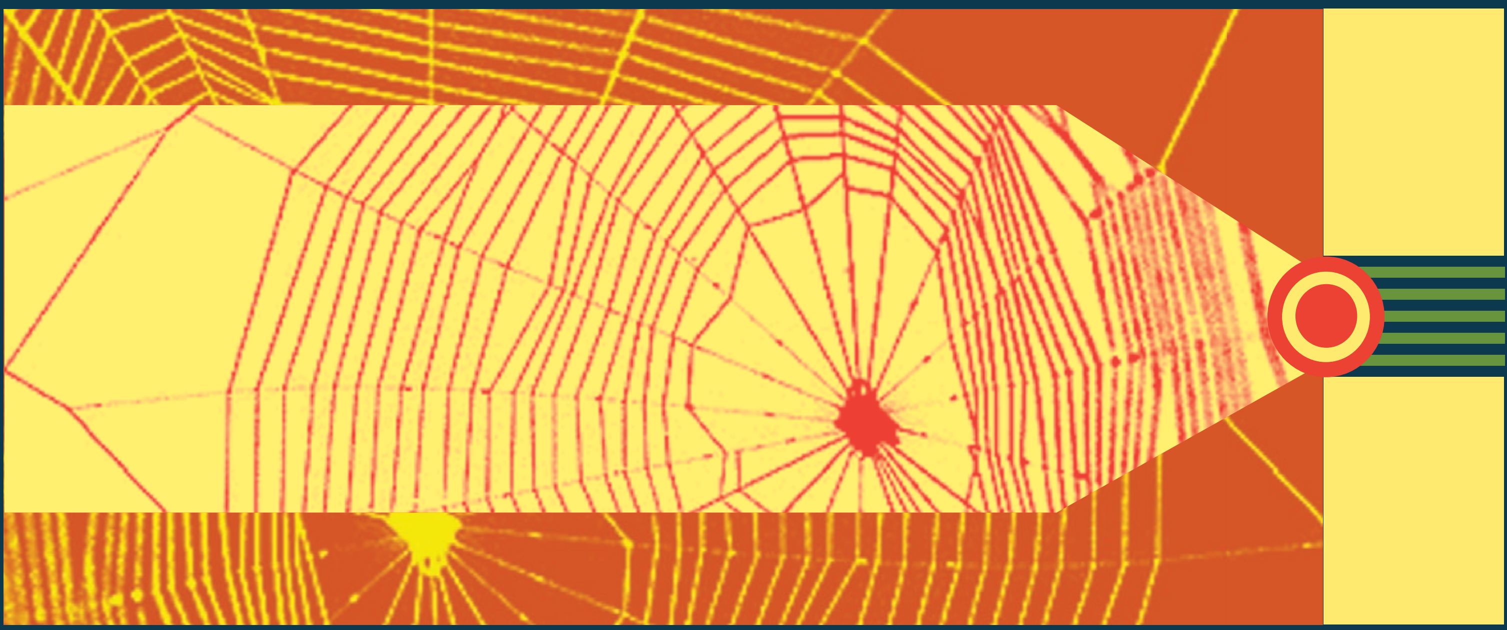
Summer 2004

Journal of Intranet Strategy and Management



Volume 1 Issue 3

p 6 IMHO
Don't fear consumer technology

p 8 From the trenches
Take two – a dual-pronged approach to usability

p 15 Case study
Discover how Big Blue's enterprise taxonomy perfects w3

p 21 Intranet fundamentals
Corporate culture can make or break your intranet

p 25 Best practices
Change happens – and your intranet can help

p 29 White space
Is your company a learning organization?

Features

p 15 **Case study: IBM's enterprise taxonomy**
Discover how Big Blue uses a common vocabulary to perfect the intranet, keep costs down and improve functionality.

By Sarah Goldman

p 21 **Intranet fundamentals: Corporate culture can make or break your intranet**
We reveal sure-fire techniques for fostering a dynamic intranet culture that creates relevant employee experiences.

By Jerrod A. Larson

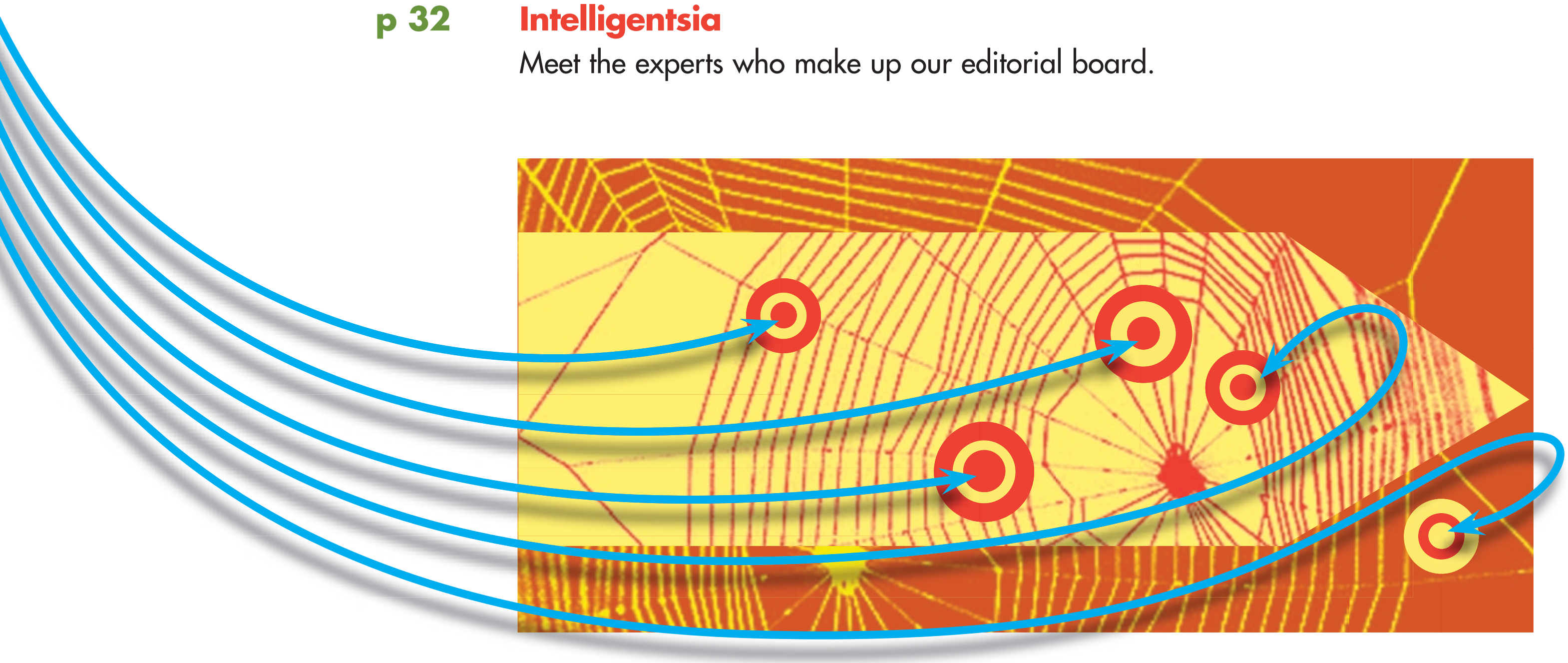
p 25 **Best practices: Change happens – and your intranet can help**
Porter Novelli shows how to inspire your employees to buy in to new systems.

By Warren Egnal

p 29 **White space: Is your company a learning organization?**
The success or failure of your online communications tools may depend on your answer.

By Dr. David Livesay

p 32 **Intelligentsia**
Meet the experts who make up our editorial board.



Columns

p 4 **From the editor: Intranets=trendy? You bet!**
Demographic shifts and changes in the way we work are conspiring to make intranets a vital tool for tomorrow's successful organizations.
By Lisa R. Sulgit

p 6 **IMHO: Don't fear consumer technology**
Hot consumer applications like Instant Messaging and blogging will find their way into your suite of internal communication tools. Don't fight it — that's a good thing.
By Shel Holtz

p 8 **From the trenches: Take two — a dual-pronged approach to usability**
Combining lab-based and contextual interviewing techniques for usability testing charts the course to improved productivity.
By Lon Taylor

p 12 **Killer App: Status at a glance**
Take a look at some of the best intranet applications you and your colleagues are using. This issue: See how the Mayo Clinic and the U.S. Coast Guard use their intranets to alert their members to important schedules and events.

Call for submissions:

Welcome to the third issue of the *Journal of Intranet Strategy and Management*. We think of you, our readers, as a community of individuals passionate about improving employees' daily lives. Making a difference – helping you be more productive, more creative, share your expertise, collaborate on a new idea, or even find others with similar ideas – is why the editorial board and contributors came together to create this journal.

We need your input, feedback and experiences to make sure the journal serves your needs. You will notice many specific places for feedback. Even where you don't see the opportunity, feel free to write to any of the contributors or directly to me at editor@intranetstrategy.com. We welcome ideas for articles and columns; we want to showcase both your successes and the more difficult projects from which you've learned valuable lessons.

Invite your colleagues to get involved as well by passing along an article or two. Start a little community-building right in your company. I guarantee, you won't be disappointed with the results.

Journal of Intranet Strategy and Management

Editor in chief	Lisa R. Sulgit
Managing editor	Sarah Jersild
Art director	Jonathan Soard

Intranets=trendy? You bet! by Lisa R. Sulgit

Two trends have contributed to my belief that intranets or employee-facing systems have to be the next big thing.

1

In 10 years, there will be a labor shortage.

Those of you left with two-and-a-half jobs after downsizing may not believe that, but it's really true! The number of baby boomers retiring will be greater than the number of young people entering the workforce. Add to that the prevailing wisdom that education is not properly preparing students for the workforce, and it's clear we'll have a problem.

Companies have been notoriously bad at holding onto knowledge when employees move on. We've got the next 10 years to integrate the corporate knowledge in employees' brains and computers into the company itself. That's quite a challenge.

My mom has been telling me about a program at her senior center for high-school students. Using the web to research a particular period in history, students ask seniors to tell their personal histories from that time. Initially, when the seniors are asked about their lives, they insist there's nothing interesting. Before the end of the session, teens are teasing seniors because the stories have kept them riveted the entire time. What a wonderful way to learn about history!

I feel similarly about senior employees: They have a ton of knowledge about how things work at their companies, but without an audience or a place to put it, that knowledge will simply disappear when they retire. Doesn't diversity mean that everyone has something to contribute?

It will be interesting to see the innovative solutions that come from this fundamental need. The seniors paired with high school students reminds me of all the diverse ways to capture knowledge. I'd love to see mentoring programs that pair up senior staff on the road to retirement with high-potential employees whose responsibility is to document the knowledge they pick up. There are tools that can help ease this transition. For example, learn how IBM is tackling taxonomy to categorize their corporate knowledge. (see p. 15)

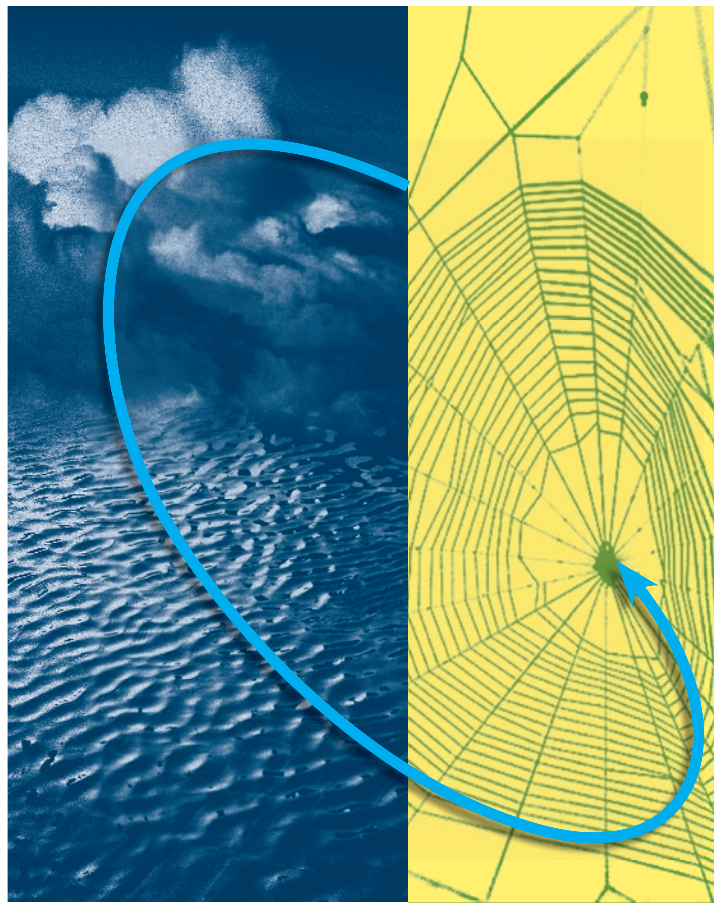


Illustration: Jonathan Soard

2

Another trend is going to add to the problem. Allison Hemming started The Hired Guns in the belief that:

we're headed for a flexible workforce.

(http://www.thehiredguns.com/) While some folks may want and need the stability of a traditional full-time job, many will become part of the flexible workforce for some or even all of their careers.

This coincides with the post-9/11 desire many employees have to spend more time with their families. Besides, who's going to take care of all those retirees?

And that's why intranets are going to be so hot over the next years. The very nature of employment is going to change and very few companies are prepared.

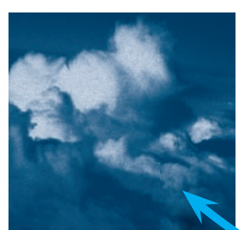
Many more jobs will be project driven, similar to the movie industry today. For example, when a company plans an intranet upgrade, a manager within the company starts to look for talent to round out the team, pretty much how we use consultants today. As we build up this alternative workforce, we'll each have the experience of working with many different people on projects and we'll know who we want to work with again – and who we wouldn't recommend. Diversity at its finest.

A third trend came across my desk as I was working on this column. A piece in The New Yorker described how **companies have been hoarding cash instead of using it to hire more employees,** give existing employees raises, or begin to seriously fund initiatives that give employees better jobs, better skills and more satisfaction. "History suggests that, the more cash a company has, the more inclined it will be to misuse it." (http://www.newyorker.com/talk/content/?040809ta_talk_surowiecki) I'd like to see us nip this trend in the bud and turn it into companies realizing they don't have a lot of time to get a handle on their information and create satisfying employee experiences. With an employee shortage, guess who will be holding all the cards?

To support these trends, our third issue explores putting intranets through their usability paces with a "From the trenches" look at usability (see p. 8), generating true learning environments (see White space on p. 29), and understanding that change is not an event, but a process (see Best practices on p. 25). And don't miss Shel Holtz's rant on consumer trends migrating to intranets. (see IMHO on p. 6).

Let us know how your company is pushing the envelope to meet these challenges head on.

Lisa R. Sulgit
Editor in chief
editor@intranetstrategy.com



Don't fear consumer technology

by Shel Holtz

Hot consumer trends will find their way onto your intranet. That's a good thing.

A new survey from Osterman Research suggests that Instant Messaging (IM) has begun having a significant impact on the organizations that use it. Employees are making fewer phone calls and sending fewer e-mails. Employees responding to the survey note that they are more likely to get answers to questions quickly when they use IM.

The survey also suggests that those who have been using IM longer – two years or more – are more likely to reap the benefits than those who haven't. New technologies need time to soak in.

About half of the wired workers in the United States use IM today, but it was only a few years ago that most organizations dismissed the technology as irrelevant. I remember sitting in a client's meeting room discussing ways to reduce e-mail overload. When I suggested IM, the head of IT security folded his arms across his chest and declared, "We will never have Instant Messaging in this organization." He perceived IM as a vehicle for idle conversation that would diminish productivity. Instead, it is proving to be an invaluable tool for increasing productivity.

Thus has it always been.

- Here's an intranet theorem: Hot consumer trends will find their way onto intranets.
- Here's a follow-on theorem: Management will initially dismiss the new technology.

We've seen it with Instant Messaging. With streaming media. Even e-mail and access to the world wide web were seen as interruptive technologies that had little benefit to the organization when they were new. Now, we can't imagine doing our jobs without them.

Even before computers, we experienced the same kind of resistance, often clothed in fear of new technology. Photocopiers and fax machines are perfect examples. One of my clients recalled needing executive approval to lease a fax machine during a crisis in order to communicate with the media. "We can't have one on-site permanently," he was told. "It would make it too easy to fax confidential documents outside the company."

Illustration: Jonathan Soard

A friend of mine who has spent his career at a major oil company showed me an article from the company's magazine back in the 1920s when telephones were being introduced. The article notes that access to a phone does not absolve employees of the responsibility of writing a business letter. In other words, management didn't see the potential for the new tool and feared employees would use it in haste rather than continue to function within the constraints of old technology.

So what's next? Blogs are the current battleground. Blogging has huge potential in organizations, but so far, with a few exceptions, it's dismissed because the blogs most leaders have seen are specious and inconsequential. But blogs are a hot consumer trend, they're used as a tool for knowledge sharing, and their infiltration of the intranet space is inevitable. After that, watch for social networking to make its way onto intranets.

But only after their usefulness has had time to soak in.

Take two — a dual-pronged approach to usability by Lon Taylor

from the trenches

Combining two approaches to usability provides actionable and measurable results.

As the process of building a website has matured beyond the "just get something up" phase, many progressive firms have started to incorporate usability testing into their site-development process.

Whether it's conducted on a live site or during the iterative phases of construction, companies have begun to understand that conducting website usability research is as important as presenting their branding and advertising ideas in front of focus groups.

The research also revealed something we didn't expect: the enthusiasm employees had for participating in the study and helping to improve the systems they were using. That was refreshing.

For most marketing and IT leads, minimizing risk is still the most compelling reason to undertake a website usability test. Unearthing and eliminating potential "showstopper" interface problems makes the testing fairly easy to justify for most larger projects. There are also rich insights that come from watching your target audience from behind a one-way mirror, or even in the same room with the user, to see how they react to a site's value proposition, functionality, navigation and content.

If you're an intranet manager, the rationale behind usability testing may be a bit different but is also easily quantified. Typical corporate intranets have been created with a few key drivers in mind that make them different than websites. For example, intranets are much more geared toward cost savings (e.g. a reduction in the need for printed material, training or support calls) and are ultimately aimed at improving worker productivity.

Assuming that you and your senior staff are sold on the idea of performing usability research on your intranet, there are probably going to be plenty of questions about how to approach the project. While a two-day, lab-based usability test with 10 to 12 interview sessions in front of the interface you are building will yield some very useful data, we have found that combining two methodologies elicits information that is much more robust and has a greater impact when the findings are presented to key intranet stakeholders.

Why a two-pronged approach?

Start by selecting an objective that is not tied to any particular company agendas. Then plan for two days of contextual interviews and two days of lab-based usability testing. This combined approach works well for several reasons.

Contextual interviews allow:

- the usability researcher to gain a detailed understanding of how people are currently using your intranet or other internal systems
- participants from different departments to provide their unique perspectives and explain what they would like to have available in future iterations
- an examination of the intranet at your offices where a researcher can view the natural environment in which the interface is being used
- a more effective usability test as the moderators will be informed, in part, by findings gathered during the contextual interviews.

Usability testing done in a quiet "lab-based" environment allows:

- new visual and user-interface concepts to be examined in a controlled setting
- a consistent line of questioning based on a moderator's guide
- an understanding of whether or not the interface you present meets the participants' expectations
- the opportunity for clients to view the proceedings from behind a one-way mirror or via a live video feed.

As you might imagine, this two-phased approach will take a bit more in the way of preparation time and budget, but the end result will be worth the effort. To illustrate my point, let me share some details about a recent project that benefited from the dual methodology.

What to expect

One of our financial services clients expressed a desire to better understand how their customer service representatives (CSRs) were using a suite of internal call-center software applications. The intranet aspect of the project was in the form of a custom help and reporting area created to make it easier for CSRs to find specific documents and log particular problems. After a high-level discussion of objectives, we recommended an approach using eight contextual interviews and 12 lab-based usability sessions. To our client's credit, they got behind this methodology and provided the extra time and budget needed.

The project did present some challenges. Given the client's geographic location, their technical limitations and privacy considerations, there was no way to actually see the systems we were testing prior to the face-to-face interviews. As it turned out, this made it even more logical to incorporate both methodologies. By tackling the contextual interviews first, we gained a huge amount of knowledge simply by sitting with CSRs and observing them as they fielded calls from actual customers for 90 minutes. As we began to truly understand the complexities and challenges they faced every day, the information we gathered allowed us to structure a more robust lab-based usability test plan for the second portion of the research.

Why test your intranet usability?

By Kara Pernice Coyne

Director of research,
the Nielsen Norman Group

Improving the usability for internal systems can lead to many measurable and immeasurable benefits, including:

- **increased productivity**
- **fewer IT support incidents (including fewer password-related calls)**
- **decreased or eliminated training costs**
- **higher job satisfaction for employees.**

Additionally, providing interesting news that spans the organization can inform employees about exciting happenings at the company, and can keep them abreast of important industry news. Unless this information is presented simply, however, employees may not find what they need and will even revert to using antiquated systems that compete with the intranet – what I like to call "anti-killer apps."

As presented in this article, it is important to employ a combination of iterative usability evaluations and field visits to fully understand what the users are doing, what they want to do, what currently works and does not work well, and solicit ideas for improvement. To that end, asking users can be informative, but this will only give you information about what users actually remember and deem important. Better is to take a behavioral approach, watching users and analyzing what they do and need. The good news is that in many cases it is less difficult to find and recruit internal users (employees) than it is to recruit customers and potential customers for usability tests. Look around. The people you need are sitting next to you, or they are in your employee directory. Take advantage of this. Be diligent in recruiting test participants from the different functional groups at the organization. A mix of managers, secretaries and knowledge-workers will help you to cover the wide variety of tasks different people at the organization do with the intranet.

As in any usability study, be very careful to protect the anonymity of the test participants. When testing with employees at your own company, users should know that their information will be used only by the development team, and will never end up in their HR file. Nor will they in any way be judged by their performance in the study. Treating the participants and data from studies properly will make for a positive experience for everyone involved, and will help the usability team to thrive in their intranet research work.

A real-world example

If you are not familiar with contextual interviews, allow me to offer some details about our methodology. After a brief introduction to let the participants know what our goals were (to observe them in their normal work environment), we were able to plug a headset into their phone to listen to real customer calls. As each new call came in, the CSR jockeyed among various applications and the intranet. From the old "green screen" type system to Windows-based interfaces, the CSR faced a pretty complex method of helping customers. The interviewer was able to sit in on about six to eight calls, with the CSR stopping after each one to explain what was easy or difficult about processing that call and assisting a customer.

The usability-related issues we set out to observe included:

- ***Inefficient workflow*** – how often did CSRs need to use non-integrated applications?
- ***Increased task complexity*** – were there areas where applications lacked consistency (e.g. DOS vs. Windows-based)?
- ***Data double handling*** – did CSRs have to enter data twice or in two different systems?
- ***Strains on the actual computer systems*** – how often did crashes or slow reaction times delay CSR response?
- ***Use of artifacts*** – did the CSR have to write things down on paper or use paper-based "cheat sheets"?
- ***Reduced overhead potential*** – in what areas could reduced training and/or improved system architecture save time and money?

Without going into lots of detail, the contextual interviews uncovered several granular system deficiencies, outdated or missing information on the intranet, inconsistent applications, and a host of opportunities for improvement and short- or long-term cost savings. The research also revealed something we didn't expect: the enthusiasm employees had for participating in the study and helping to improve the systems they were using. That was refreshing.

Into the lab

Upon completing the first half of our research, we were ready for the one-on-one usability interviews that would allow the client to watch the testing via a video feed. We scheduled 60-minute sessions, giving our team 30 minutes to research a totally new application and 30 minutes dedicated to the internal systems we had seen earlier in the week. With the client's tight schedule, all of our research was done over a four-day period with our summary reports delivered about seven days later.

These are some of the questions we presented to our client.

If you are managing the intranet and spearheading the usability undertaking, you should expect similar inquiries from your vendor:

- Will there be access to the intranet or internal systems before the interview dates?
- Is there any existing data (e.g. employee survey, log files, help-desk inquiries) on intranet usage?
- Are there multiple areas of the intranet for different internal groups (e.g. call center reps, marketing, HR, finance, etc.)? Who is the target audience for the project?
- Do you want to question experienced employees or those new to the systems?
- Are the suspected system problems with a specific network application, on the intranet or both?
- For the usability testing, can two side-by-side rooms be used at your offices, one for interviews and one for observation? (Note: Doing intranet usability testing in your offices saves employees time and means you won't have to rent an outside facility – usually about $1,500 per day.)
- What, if any, technical limits are there on the computer equipment and video taping of the sessions?
- Can an internal resource provide guidance and help with the recruiting and any incentives?

Here's what we were looking for during the lab-based usability testing as we presented some commonly expected tasks:

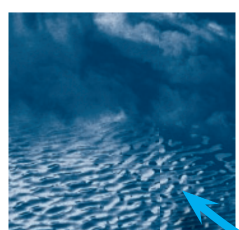
- the ease of navigating the intranet and other systems
- CSRs' understanding of the terminology presented
- functional aspects of the systems under review
- how much time it took to find and use specific pieces of information
- ideas for improving the systems.

How did this stage of the research turn out? The participants were eager, the video equipment was ready, our moderator's guide was prepared and there were plenty of snacks in the client viewing room. However, after the initial half hour of testing we found it very difficult to log on to the client's own internal network from the computer we were using. Although access to the internal network had been tested the night before, having each participant log on to the systems with their unique user IDs and passwords proved to be too much and the systems crashed the PC we were using. While this clearly demonstrated a major shortcoming of the systems being tested, we still wanted to elicit more quality data from the participants.

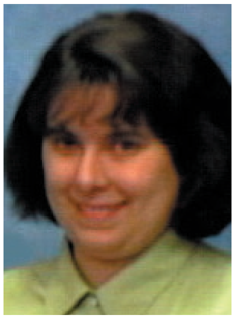
As it happened, the CSR participants were quite familiar with the tasks that we planned to present. As we asked CSRs to walk us through some common tasks (e.g. How would you help a customer after multiple failed attempts to log on to the financial services site had locked them out?), they were able to describe each part of the CSR servicing process without needing to view the interface on the screen. The CSR had memorized each step in their workflow process and were able to describe the shortcomings of the system in great detail. What might have been a flop given our inability to view the live interface turned out to be fine. The data we gathered, even without the benefit of viewing most of the interface, was consistent and usable for the summary reports we prepared.

In the end, we were confident that we had covered all the bases regarding the objectives of the project and the client was pleased with the results of the research effort. If you are contemplating usability research on your internal systems, consider a two-part solution with contextual interviews and a lab-based usability component. The comprehensive findings and feedback will allow you and your team to prepare actionable recommendations and move forward with measurable improvements.

Lon Taylor **is a principal usability consultant at First Insights in New York. He has conducted usability research on websites, intranets and user-interface prototypes for Bank One, GM, Cadillac, Orbitz.com, Hewlett Packard and Office Depot. He is co-founder of the New York Research SIG and can be reached at www.firstinsights.com.**



intelligensia



Christine Connors, MLIS, is metadata architect at Raytheon Company, part of corporate IT's information and knowledge management strategic initiative. The goals of the program are to provide information globally and empower all knowledge workers to easily, quickly and reliably access relevant information in context. Christine leads the intelligent search and knowledge representation (KR) teams. The KR team won the 2003 Raytheon Excellence in Corporate IT Award for Collaboration and Knowledge Management. Christine maintains professional memberships in SLA and ASIS&T. Her research interests include classification systems, digital archiving and knowledge sharing. Christine has an undergraduate degree in management and a Master's of Science in Library and Information Science.

For a complete listing of editorial board biographies, click here