Usability Interface

The Newsletter of the STC Usability SIG

January 2004 *Volume 10, Issue 3*

Defining an Effective Electronic Performance Support System

By Sam Racine, Kristen E. Kralick, and Sathya Yesuraja

Are your products, services, and technology changing too fast for your customers and employees to keep up with? Are traditional training approaches adequate and cost-effective?

Most businesses have seen a dramatic increase in the amount of information employees require to perform tasks. Traditional approaches to training such as paper documentation, instructor-led training, or computer-based training (CBT) may have been effective in the past, but are not suitable to respond to the rapid changes in time, cost, and delivery of information today's marketplace requires. At Unisys Corporation we have piloted an electronic performance support system that provides self-instruction for our clients at their point of need. This system, which supports a commercial freight management application for airlines, combines multiple forms of user assistance into one comprehensive system that delivers situation-specific information on demand. It provides an effective, cost-saving augmentation to traditional classroom training.

Unisys Logistics Management System (LMS) – Enterprise Services (ES), is a thin client, web-based application used by shippers and freight forwarders worldwide to access timely and accurate information about their shipments. They use the application to check rates, make bookings, track shipments, manage terminals, and control customs, all through the Internet. Access to this data allows our clients to reinforce the unique value they provide, save costs, and offer services that extend across partners.

Challenges facing our users

Most of our clients are airlines, who operate on a tight budget with high employee turnover and with freight stations distributed across the world. These demands make traditional training methods as paper documentation and instructor-led courses expensive and inefficient: high turnover means we must support both novice and experienced users simultaneously and because of the cost to distribute material worldwide, clients want the support system contained within the application itself. Furthermore, airlines are heavily influenced by national, international, and industrial governing bodies who use a codified method of communication: terms like "SLULD" can be unfathomable to new users. Supplemental information is provided in long lists that need to be searched or printed. And because operations vary by airline, we need to provide our clients the opportunity to include their own information in user assistance.

ES is a complex large application, over 150 web pages, so we needed to provide navigational support. For example, we found that users knew the task they wanted to complete, but were not always sure how to navigate to the page where that task could be done. Many of the pages contain specialized features unique to freight management so we needed a clear way to identify features and inform users how to operate them.

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Intercom Features Usability

By David Dick, Editor

The Usability SIG is dedicated to meeting the specific professional development needs of its members. Through its award-winning newsletter, informative Web site, and conference presentations, the Usability SIG provides technical communicators resources and opportunities to learn about the field (what) and the different tasks that a usability professional must do (how). Results of the member survey in 2003 indicated that we are meeting the needs of a majority of members, and now we have an example.

The December 2003 issue of *Intercom* features selected articles about usability by Stephanie Rosenbaum, Caroline Jarrett, Carol Barnum, Geoffrey Hart, Whitney Quesenbery, and Scott McDaniel. The article by Geoffrey Hart, entitled "Practical Tips for Improving Web Site and Intranet Usability" grabbed my attention. It is of particular importance to us in the Usability SIG because its suggested reading list includes four articles that first appeared in the August 2002 issue of *Usability Interface*:

- "Intranet Accessibility and Section 508" by Kathy Bine
- "How to Use FrontPage to Design a Corporate Intranet" by Bonnie Velverton
- "Usability Strategies for Intranet Web Site Design" by David Dick
- "Innovations Team of the Department of Labor and Industries, State of Washington, Wins Excellence in Usability Award" by Deborah Sellers

Usability Interface is proud to provide a consistent, high-quality source of pragmatic information that is freely contributed by practicing professionals. If you would like to contribute an article for publication, or have an idea for an article, please contact me at david.dick@swift.com.

Since publication of these articles, Kathy, Bonnie, and I presented our topics at last year's STC conference. My article will be published in the February 2004 issue of *InterCom*.

This is a wonderful way to start the New Year!

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www.stcsig.org/usability

Usability Interface Online

www.stcsig.org/usability/newsletter

SIG e-mail list

The SIG e-mail list is open to all members.
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Looking Forward to A New Year in Usability

By Karen Bachmann, Usability SIG Manager

I have read several recent articles about being brave when trying new activities and facing challenges. The first was "What It Takes to Be A Leader" in the Orlando chapter October newsletter (www.stc-orlando.org/newsletter/2003/memo_2003_10.pdf). Mike Murray, the chapter president, encouraged readers to take the first step to become a leader. Soon after, several articles appeared in the health and fitness magazines I regularly read about how the authors had tried a new fitness activity—overcoming fears, excuses, and sometimes significant obstacles—and how their experiences gave them the courage and confidence to tackle challenges in other areas of their lives.

These articles on pursuing a new activity and facing down challenges made me think about the challenges facing us as usability advocates. From discussions on the Usability SIG discussion list and in other forums, many people still struggle to promote usability in their companies, to lead usability initial efforts, and to gain full support and recognition for the usability work they do. Such experiences can be discouraging. However, our more experienced peers often respond with stories of their own hard-won successes and advice for persevering against the barriers for success.

A common theme in most stories is that introducing usability into a company, or even just into your own technical communication work, is often a long-term effort. In my own experience, my first effort to introduce usability at my then employer took almost two years to move from a few isolated activities and providing occasional design advice to interface developers into a fully recognized user interface design role. When the role was formally established, many other projects wanted to include usability in their development plans. Persistence paid off with a breakthrough in understanding the value of usability by managers and developers an experience.

Another common factor in those with success stories is that they frequently have more, having gained confidence and experience in making usability efforts succeed. If you have a success story to share, please consider writing an article for *Usability Interface* or posting your experiences to the discussion list.

Of course, sometimes even the greatest effort may not produce wide-scale changes. If you are struggling to promote usability, perhaps the new year will bring that moment of breakthrough. If not, be heartened by the success stories of your fellows and keep learning new ways to succeed at any level in your organization. Do not discount the "small" victories. Changing even one programmer's view of users and usability is a major achievement and gains you an advocate and collaborator.

Whether you are continuing to be the lone voice promoting usability or are just starting to recommend your company include usability in their projects, 2004 is already looking to be a good year to learn more about usability and to create your own success stories:

Attending telephone seminars are a cost-effective way to learn from leaders in our profession. Seminars by Jean-Luc Doumont in January and by Whitney Quesenbery in February look at user interface design issues for the Web. See www.stc.org/seminars.asp for more information.

Caroline Jarrett, Usability and Information Design stem manager for the STC annual conference in Baltimore, Maryland, has put together a great program of usability and information design sessions. Look for the conference program on the STC Web site and plan to attend the conference (May 9-12). See www.stc.org/conferences.asp for more information.

Usability SIG business meeting at the conference, tentatively scheduled for Monday, 10 May, at 12:30, will be a time to plan activities. Attendees will have a chance to take leadership roles. Volunteering is an excellent way to learn new skills and to have those personal victories that may still elude us in our daily jobs.

Ginny Redish, founder of the Usability SIG and mentor to many of us in STC, will present the keynote address "Yours, Mine and Ours: Connecting Ourselves and the Communities We Belong To" at the 2004 annual conference of the Usability Professionals Association in Minneapolis, Minnesota. See www.upassoc.org/conferences_and_events/ for more information.

Sneak preview of the Usability and Information Design Stem at the 51st Annual STC Conference

By Caroline Jarrett, Usability and Information Design Stem Manager

STC will soon be mailing the advance program for the annual STC conference. But it's too exciting to wait that long. Here is a sneak preview of the Usability and Information Design (UID) stem. You can also find the full stem conveniently in a spreadsheet that you can download.

A new structure to the program

I want to mention some innovations for this year in the structure of the program. We have 54 sessions in UID, a great choice but a maybe a little overwhelming. I've identified each session in one or more of these threads. I hate to single out just a few sessions when there are so many, but I've chosen some of my personal highlights.

Thread 1	Accessibility	As technical communicators, we want to include the widest possible audiences for our products. And you may be required by law to make your communications accessible. Highlights in this thread include: - A panel on 'reaching any user' with Steve Krug, Karen Shriver and Ginny Redish - A fun session on designing for left-handers - A fascinating panel on designing for multimedia using digital storytelling
Thread 2	Advanced	Have you got several years experience in usability and information design? Do you write on or teach these subjects? If so, the 'advanced' thread is aimed at you. Anyone is welcome to attend but the speakers will assume that you know the basics, and they will dive straight into the tougher issues. Highlights in this thread include: - “Bringing brand alive in the design of Web sites” - Carolyn Snyder, author of *Paper Prototyping*, on the strengths and limitations of the technique - “Magical Numbers”: Jean-Luc Doumont challenges the myth of 'seven plus or minus two'
Thread 3	Getting started	Many of us are new to usability and want to learn about how to get started, and what pitfalls there may be. This thread is where you will learn from experts and from other beginners. Highlights in this thread include: - “Starting a customer contact program” - “Helping people to use PC hardware” - “Information Architecture- what's in it for me?”
Thread 4	Testing	OK, so usability and information design isn't all about testing. But some of it is, and his thread is the place to learn about it. There are sessions on testing at all levels from beginner to advanced. Highlights in this thread include: - “Web site usability testing demystified” - A live usability test - And you can spend most of Tuesday going through the different stages of a test: planning, running the test and then persuading people to listen to the results

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Thread 5	Handheld and mobile	How many of us now totally rely on our mobiles, PDAs or other small devices? This thread brings together four sessions: - Using a variety of techniques, including handheld devices, to engage online learners - Designing information for mobile users - Usability testing handheld devices - Usability testing a Pocket PC
Thread 6	Requirements	If you're into requirements, then there is a real treat for you at conference this year: four sessions on requirements, starting on Monday afternoon and continuing through most of the day on Tuesday. Learn about the importance of good requirements and then about how to gather and trace them through development.
Thread 7	Information Design	At the heart of the Usability and Information Design stem, we have a superb selection of sessions on Information Design - practical ideas for solving our technical communication problems. Highlights in this thread include: - Strategies and tools for information architecture - 'Tips-based help', moving away from HTML-help - Developing online tools to help customers make buying decisions - The latest thinking on designing web applications
Thread 8	Practical research	The conference is a unique opportunity to get the hot results from academics and researchers. Many of these sessions will have the first publication of this data, or are an opportunity to ask world leaders in our field about their latest findings. Highlights in this thread include: - Understanding how blind and low-vision users work with Web sites - Techniques for teaching usability and information design - “Are design standards any use for improving designs?” - And fun session on lessons learned from the theatre

Innovation in Progressions

If you have ever been to STC conference, you will know about its unique “progression” format. The progression brings together a selection of speakers on a theme; each speaker hosts a table that seats up to 10 people. You join the table of the topic of your choice, and you can easily discuss and question the speaker—without the formality of the larger set-piece sessions.

This year, we have four wonderful progressions. Here is your chance to get to the conference as a speaker: each of them still has a few places available. They are:

- UID 5 U “Willing and able, how technical communicators with disabilities succeed in their profession.” This one is the best choice if you want to talk about how you, a friend, family member or colleague has overcome or interacted with challenges caused by contextual, temporary or permanent impairments.
- UID 7 B “Section 508 for Dummies.” This one is the best choice if you can contribute thoughts on how to comply with section 508. It's not necessary to be an expert, just to have tried in some way.
- UID 3 B “Getting started in usability and information design.” This is targeted for people who are probably experienced technical communicators but who are new to usability and/or information design.
- UID 10 A “Usability and information design progression: intermediate/advanced.” This is intended people who are experienced in usability and/or information design and is a good place to discuss an advanced topic.

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If you have a topic that would fit nicely with any of these progressions, contact me (Caroline.Jarrett@Effortmark.co.uk) and I will put you in contact with the moderators.

This year, we also have a new format that has been very popular at UPA conference: the Ideas Market. It's even more informal than the progression. There are 'activators' rather than speakers, and they are there to encourage discussion and interaction. You can wander from group to group, or stay with a single topic: it's up to you.

The must-see top three

It was tough picking out highlights from so much that I'm excited about, but I'm now going to try the impossible and pick one item each day that I think is cannot be missed.

1. On Monday, it has to be the keynote: Ben Shneiderman. His recent book *Leonardo's Laptop* has been doing a great job of getting a wider audience interested in usability and information design, building on his many years of work in innovative interfaces and usability. It's also a big plus for usability at our conference that our keynote is in our field.
2. On Tuesday, there are so many great things but one shines out for me: Ginny Redish on "Applying Research to Practice: What's Relevant for Technical Communicators Today?" Ginny has it all: she is a great speaker, her experience in research and in technical communication is second to none, and she always makes sure that we come away with a wealth of practical insights.
3. On Wednesday, it is difficult to pick out just one topic. I am excited about the closing keynote: Thomas Haller, whose 'performance piece' will be a new take on information overload. But if you force me to choose, then I have to admit that topic that I'll be queuing up for is "Communicating with older audiences." This is such an important topic and there is so little good-quality recent research about how seniors use the web. I'm thrilled that Amy Lee and Dana Chisnell will be telling us about their work.

And finally… Baltimore

I first went to Baltimore for a conference a couple of years ago in the Hyatt Hotel; one of the conference hotels. The Inner Harbor area is such fun. It is only a couple of blocks from our venue in the Convention Center, and offers all you might want as relaxation from soaking up all those ideas: a world-class aquarium, a huge bookstore, all sorts of interesting shops, and bars and restaurants to suit all tastes and budgets. If you want to go further afield, the 'Falls Point' area is a good walk or a short taxi ride and offers some great bars, fun shops, and a bohemian atmosphere.

Being practical, Baltimore also has excellent transport connections though BWI airport and local and long-distance trains with a light-rail system that connects them to the Convention Center. For more information about the 51st conference, go to www.stc.org/51stConf/index.asp.

I hope that we'll see you there.

SIG News

Congratulations to Whitney Quesenbery on her election to President of the Usability Professionals Association. Previously, Whitney was Director of Outreach.

Conferences and Seminars

March 10–12

15th annual Computers in Libraries – The most comprehensive North American conference and exhibition on all aspects of library and information delivery technology. For more information, please visit www.infotoday.com/cil2004/.

May 9-12

STC's 51st Annual Conference will be held in Baltimore, Maryland. For more information, please visit www.stc.org/51stConf/index.asp.

Usable Tours: Transforming the Usability Lab into an IT Learning Zone

By Davis Maras

The Product Usability Design Group (PUDG) at IBM (IBM UK, Ltd., Hursley Park) was faced with a problem; we were constantly requested to run events for school children who visit the site and yet had nothing prepared to offer. The Usable Tour was our creative solution to this challenge. This was a series of user-centered design flavored activities which put a different spin on IT and taught the students something about usability techniques all while giving them hands-on experience with the Usability Lab and its equipment. The event was a success—the kids "learned new things to do with computers", and the PUDG team had successfully developed an off-the-shelf tour that can be used the next time they're requested to run an activity.

"[The Usability Lab gives] students real insight into the other types of careers available in a 'Programming world'"
IBM® Employee, Usable Tours Chaperon

The Driving Force

Originally, the PUDG team developed a tour for the UL Open Day in celebration of our lab's refurbishment. The tour entailed a set of three concise hands-on activities aimed at giving internal employees a taste of user-centered design (UCD) and the services our team offered.

The feedback received was positive; participants had fun brainstorming, prototyping and testing their 'kitchen-based interface'! The event's success, coupled with our frequent requests to run on-site activities for school kids, prompted the development of a formal set of activities. The notion was to design an 'off the shelf' tour that any member of the team could easily run, even with little notice.

As a part of the IBM® Mentorplace® initiative, the PUDG team offered to run the tour as an event for a group of schoolgirls aged 12 to 14. In addition to the Mentorplace® requirements (e.g. time limits), we brainstormed other requirements for the tour activities:

- Interactive and hands-on
- Participants should get their hands dirty with the various pieces of equipment available in the UL---it's the best way to learn, and much more fun than watching someone else!
- Showcase the UL and the UCD process
- Few people in the lab and the 'real world' have heard of UCD, let alone know what it's all about. Using the UL, the activities should give participants a basic understanding of UCD and its inherent benefit in the design process.
- Enable participants to leave with a sense of achievement
- The activities should give a new spin to the "heads down" developer image of IT; technology, technical processes and related equipment can be used productively by anyone with the desire to learn.
- Flexible to accommodate a variety of audiences and timescales
- The tour should be a series of packaged activities, which can easily be adapted to the requirements of a particular session, without affecting the value of the tour.

Logistics

One aim of the tour was to showcase the UL, so Stations 1-3 were staged in the UL itself. Due to size restraints, Station 4 had to be held in a room outside the UL in Hursley House.

Thirty-six school children were split into three teams (Team A, B, and C) and each team was

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assigned two chaperones: one from IBM®, and one from the participating school. Since there were only three PUDG people available on that particular day, we decided to assign one to each team. This meant that the PUDG representative ran each of the Tour activities, moving from station to station with their assigned team.

Activity Details

To begin, students were told that Smart Toys Inc. had just hired them to work on the FridgePlus project, a fictitious company that advocated UCD principles. The *FridgePlus* was to use Internet connectivity to create an intelligent refrigerator and their job for the day was to design the user interface for a LCD that would be mounted on the fridge. Each of the first three stations represented a different phase in the design process; requirements gathering, prototyping and usability testing (Stations 1-3).

Station 4 was a mini-design workshop that, although was not directly related to the FridgePlus, tied the activities of the previous three stations together. Students were given a brief explanation of the theory behind the task and how it fit into the UCD process at the beginning of each activity.

Station 1: Requirements Gathering

Brainstorm FridgePlus requirements and prioritize the list for one of the user groups using GroupSystems™ software.

Staged in the Decision Support Centre (DSC), Station 1 required participants to brainstorm requirements for the FridgePlus. Each student was each assigned a ThinkPad® equipped with the GroupSystems™ software and instructed to spend 10 minutes typing in features he or she thought would be good to have on the FridgePlus. The facilitator started with a few example ideas appropriate to their age group such as a ‘Justin Timberlake Alert’, an alarm that indicated the fridge was low on Justin’s top four favorite foods. The second step in this activity was to assign and prioritize each of the features to one or more (time dependent) of the profiled 5 user groups; mom, dad, grandparent, sibling, you.

Station 2: Prototyping

Prototype the task flow to assign a name to a glass of chocolate milk in the fridge using the SMART Board and Denim© prototyping software.

Students sat in a circle around the SMART Board and the PUDG rep explained the task. They were told to imagine they had just bought some chocolate milk at the grocery store.

A UCD team member watches on as students brainstorm design requirements during the Mini-Design Challenge.

Before putting it in the fridge:

1. Label it with a name
2. Set the expiry date alarm

Since no one had ever used a SMART Board or Denim© before, the PUDG representative gave a quick demonstration. Students were encouraged to collectively design the task flow and were called up individually to each have a turn using the technology.

Station 3: Usability Testing

Run, observe and participate in a usability test using a PowerPoint prototype of the FridgePlus.

Each student was assigned a specific role and given a task sheet that gave more detail about their specific role and instructions. There were 6 tasks (Interviewer, Test Administrator, Recorder, Observer, Equipment Controller, and Test participant) so students were required to pair up.

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Once the activity was explained, students went off into the appropriate room (observation room or test cell) to begin the activity. The students in the Test Administrator role were given a Session Scenario sheet to be read aloud explaining the basis for the FridgePlus test and the two tasks to for Test participants to perform. A PowerPoint prototype was provided to simulate the FridgePlus interface.

Station 4: Mini-Design Challenge

Design and present a costume for a superhero, Zapper.

This activity was originally developed for another school even run by IBM®. At an accelerated pace, students are required to brainstorm and prioritize requirements, design, draw and pitch a superhero's costume. In light of this, we thought it would be a perfect way to tie together the principles learned through the other three stations. The group was divided into two equal teams and each given a design pack which contained markers, glue sticks, and colored and poster paper. They were instructed to follow the printed instructions and at the end of the 20 minutes they were to present their costume to the other team. Both chaperones and the PUDG representative judged the presentations and deemed one team the Design Challenge winner based on a set of criteria (e.g. number of features). Small cakes were given as prizes.

At the end of the tour all Teams met in the auditorium room for a 5-minute debriefing session facilitated by the PUDG representatives. Due to miscommunication, this was not planned and so the PUDG team has to run it Ad hoc. As a group, we quickly reviewed each of the stations and then asked the students for their thoughts, impressions on the afternoon overall. Students voiced their opinions on what they did and did not like and what new things they learned. The students had a great time learning about this new face of IT.

***Table 1*: Activity Quick view**

	Activity			
	Station 1: Brainstorming	Station 2: Prototyping	Station 3: Usability Testing	Station 4: Mini Design Challenge
Task	Brainstorm and prioritize a list of requirements for the FridgePlus	Prototype the task flow to assign a name to a glass of chocolate milk in the fridge using the SMART Board and Denim© software	Run, observe and participate in a usability test using a PowerPoint prototype of the FridgePlus	Design and present a gadget for a the superhero, Zapper
Skill /Lesson Learned	Brainstorming techniques Prioritize requirements Target user profiles GroupSystems software	Prototypes: use, purpose, place in design cycle prototypes Denim© software SMART Board hardware	Usability testing: administrating, observing, running and purpose in design cycle PowerPoint software Observation room equipment (cameras, microphones)	Group work Rapid prototyping Presentation skills
Equipment	Computers with GroupSystems software	Denim© software SMART Board	PowerPoint prototype Role instruction sheets	Design pack: assorted pens, markers, paper Task instruction sheets Prizes for winning team
Location	Usability Lab: DSC Room	Usability Lab: Foyer	Usability Lab: Test cell & Observation room	Hursley House
Time (mins)	20	20	20	20

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Usable Tour feedback from UK school girls:

"I learned a lot about customer requirements and how you can test to see if the product is satisfactory!"

"I learned new things to do with computers."

"The usability labs r excellent…they're really cool. There's loads of laptops down there."

Looking Back

Overall, the event was a success as evidenced by comments from the students and chaperons. The students had a great time playing with the various bits of equipment and at the same time learned something new either about UCD, IT or themselves. The PUDG team was pleased with the afternoon as well; the UL got some publicity with the news items surrounding the event, the department finally had a canned UL tour the team could run with and it was a great way to spend an afternoon. It was rewarding to be a part of something where students get excited about IT!

At the end of the session, we combined the feedback from the students and the chaperons with our own observations to rundown what worked and what could be improved for next time. These "lessons learned" are summarized below.

Lessons Learned

- Add in a 5 minute 'Introduction' session
- Once students were escorted down to the UL, they were immediately divided up into groups and sent off to the appropriate activity room. In hindsight, a group spiel was needed to introduce the PUDG team, explain a little about what we do and what the students will be doing.
- Laminate usability testing task sheets and fix them to the relevant pieces of equipment
- It was soon apparent the 12 students was too large a group to run the usability testing activity; there seemed to be confusion over where they were to stand and perform their individual roles. Afterwards, we thought that fixing the task sheets to the appropriate positions (rather than handing them out) in both the observation room and test cell would help space the students. Additionally by having them laminated it would make the task sheets more durable and reusable.
- Include a wrap-up session
- Although the PUDG facilitated an impromptu wrap-up session, it was a great way to close out the afternoon. It brought everyone together to share their afternoon's experiences and gave the PUDG team an opportunity to get feedback on what did and did not work.
- Provide participants with information sheets about each activity
- It would have been helpful to give participants something tangible to take away from the event. An informational hand out offering quick educational bites about each of the activities with space to add their own comments may help to remind them what they did while on site. It could also include links to follow-up sites, just in case some students were interested in IBM®, the Hursley Lab, UCD or IT in general. These information brochures could be tailored to the specific audience (i.e. internal website links for IBM® employees versus links to external site for visitors).
- Try to incorporate current classroom lesson themes with the activities
- The challenge is always to make the topic relevant to the target audience. As the activities need to be flexible to accommodate a range of user groups (students, IBM® employees, customers etc.) it may prove difficult to find a universal topic that's engaging for all. One suggestion was to get in touch with the school/group/department in advance to get a feel for their current topics. This buzz item could then be somehow incorporated into one of the activities. For example, if a class is currently studying India, one option might be design a travel website for India as the subject of the mini design challenge activity.

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Next Steps

At the time of this article, the PUDG has not yet run another tour; however, modifications have been made for next time taking into account the previously stated *Lessons Learned*.

The success of the event has got the PUDG team thinking about the possibility of an Ease of Use course for internal Hursley employees based on a similar set-up. This would serve two purposes; further increase the awareness of the UL, the PUDG team and their services, as well as educate the Lab on the UCD process and its benefit to the development cycle. Hopefully, this would in turn, increase the buy-in from teams not sold on UCD or simply not understanding what UCD is all about.

Davis Marasco, Usability Engineer, IBM® UK. Contributed by: Keren Lyndon, Usability Engineer, IBM® UK & Brian E Jones, Usability Engineer, IBM® UK.

Giveaways to Thank Helpful Users--What's Best?

Compiled by David Dick

What is the best way to thank helpful users for participating in a usability study? Carl Myhill asked this question to a popular e-mail discussion group of the Usability community. The following are some of the replies:

We've recently used gift certificates at a local electronics/computer/geek stuff store.

–Dick Miller

I've compensated test subjects as follows:

- Federal employees and persons providing feedback on Federal systems: a thank-you letter from the Federal person on the project, as high up as we can get.
- Persons from private organizations who provided feedback on a private company's site: Amazon gift certificates sent via email. Since we identified the persons via email, this worked well.
- Persons from private organizations who provided feedback on a Federal web site: A check, sent after the fact. This was the worst solution, since I couldn't present the check that day, and it was a pain to order the checks and have them sent to the participants.
- I'd hesitate to give away chocolate--it's too easily damaged by heat, and some people don't want chocolate. Another problem: I love chocolate! I'd be afraid to keep that in my office for any length of time! During the test, I'd happily provide the person with snacks, coffee, tea, cola, or water, but that's not compensation.
- I'd be inclined to have our logo pens in the office and allow the person to take a pen or two if they like them, but I don't think they are nice enough to compensate for the person's time.

I always, always thank the person profusely before and after the evaluation, and send a thank-you note afterward.

–Kathy Bine, ICF Consulting

We recently gave out some little tins of mints at a conference (not my idea) www.clikclak.com. The box and the name of the tin give it all away - click clack - yes, it makes sense. But when you look at it, it's just a tin of mints with a very stiff lid! Unless you think to turn it over you don't know you are supposed to press the top down and 'click clack' to open the tin. How many mints do you think ended up on the floor? How many minutes did I spend twisting the lid to remove it? How smug is my marketing colleague who developed the knack for twisting the lid off (- a major victory for women's lib she claimed)?

Only after the conference did someone discover the click clack nature of the mint tins!

–Carl Myhill

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Continued from page 11.

My parents own a publishing company and were trying to think of something to hand out at a boat show. One thought was candy wrapped in our logo but we didn't want them to eat the candy and then throw the logo on the ground. But at the same time, we didn't want to do pens because that is somewhat too overdone and it is hard to find good inexpensive pens. I believe that it is vitally important to consider your audience and the amount of face time, and therefore the amount that you want them to remember you, your company and the experience they had with you.

–John Dozier, Jr., Bentley College, MSHFID

On our Intranet team, we used to find participants in training classes. We gave out the usual logo items such as Frisbees, yo-yos, key chains, notepads, mugs, T-shirts, etc. But I always found that most people volunteered for usability testing either because they were curious or just wanted to be helpful. Some didn't even want the giveaways or accepted them as an afterthought.

Now, most of the time we are working with employees in internal departments that will eventually be using the sites and applications that we are designing. So, their motivation is that they want to be helpful because they will eventually be using these systems. In this case, the usual "cheap" giveaways are almost insulting. And I would be embarrassed to give them out.

For these people, I've found that a sincere thank you email is much more appreciated. Our company has an "e-Card" site for recognizing employees by sending them "e-Cards". Their manager also gets a notice that the employee has received an e-Card. It may sound a little corny, but most employees really appreciate getting this good feedback, especially when their manager gets this notice. It helps at performance review time, which is far more valuable than a mug.

–Jim Ross, Bank One

I have used Amazon gift certificates as well; they are easy to purchase because they have corporate gift certificates. You specify the number of recipients, amount per person, and then type in the e-mail address of each recipient.

–Mickey Monaghan

There are some problems with Amazon (and possibly other) gift certificates:

Amazon gift certificates come through email with an odd address that resembles spam e-mails. Some people who received email certificates, as a thank you, would accidentally delete the email version of the certificate and then complain that they never received it. If this happens, you will have to get Amazon to cancel out that certificate and reissue a new one. Getting gift certificates cancelled can take some work.

Some people will forget to use a gift certificate or lose their certificate. On a few occasions, I had people who remembered about the certificate after the expiration date and they were disappointed that we could not issue them a new one. Remind people to use gift certificates right away (whether paper or e-mail).

In the USA, there are different state laws about the minimum length of certificates. You should find out what the minimum, if any, there is in your state. I am not sure what the international rules on gift certificates might be.

You can order Amazon certificates through email and then hand participants paper copies of the email with the certificate number. Make sure you order your online certificates a few days before testing since the time it takes to get certificates seems wildly variable. With Amazon certificates, I have had lag times range from 1 hour to almost 24 hours.

If you are handing out certificates in person, create a short script of instructions (including expiration dates if applicable) and make sure people are clear on how to use the certificates before they leave the lab.

–Chauncey Wilson

One of the problems with rewarding good behavior is that it sometimes conflicts with a user's corporate policies. A common policy is that a user cannot accept a gift that is valued at more than $50 or cannot be shared among their coworkers. Chocolate is a good gift for under $50 that "shares" well in most any office.

–Larry Marine, Intuitive Design

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I've used:

- Gift certificates for books (e.g. Amazon)
- Cash
- A variety of food and drinks
- Gadgets with company logo

For internal testing I really like the idea of sending a thank you note to the person and their manager. I hadn't thought of that and it's a great idea. Everyone likes getting recognition for his or her contributions. Always consider the image that you want to project with what you give away.

–Laura Downey, CSC

Although pens are a complete cliche, my Effortmark pens have proved to be very popular and one client even asks me to bring my pens as a giveaway rather than using their own pens.

Reason? I think it's because they are immediately recognizable as Parker pens and this brand has a lot of prestige here. They cost me about £3 = approximately $4.50 when I buy them in quantities of 250, enough for about two years for me. Also, they come in a plastic protective box that fits snugly, so the whole package is small and easy to carry but it means that the pen is protected from scratches.

When I've done field studies, I've sometimes taken a big box of biscuits (if it's in an office with several people participating) or a small flowering plant (if it's an individual woman), or just gone with the pens if I'm not sure.

I've also found that a letter of thanks on headed notepaper is very acceptable if the study is in a workplace, with a copy to the participant's boss also being a good idea. This can be the only acceptable thank-you for government departments.

In the UK, wine is acceptable but I guess it's not a great idea in the USA. Also, the UK Association for Qualitative Research did some research into what incentives worked best for participants in focus groups in many countries. As I recall, that from about three years ago, cash money was the best in every country except, I think, Hungary where grocery vouchers were preferred.

–Caroline Jarrett, Effortmark Ltd.

Defining an Effective Electronic Performance Support System

Continued from page 2.

Meeting User Challenges

To meet these challenges, we designed an electronic performance support system, or EPSS. EPSS is an electronic system that directly supports a worker's performance when, how, and where the support is needed with minimal external intervention (Raybould). Integrated components include tips, coaching, built-in wizards, tutorials, and online help (Gerry). Successful integration of the components provides task-specific support to users based on their immediate need and simplifies their work process. These components then allow users to increase their performance levels, which results in higher productivity and quality of work. Information delivery through EPSS is current, consistent, and employees can use it as needed.

Unisys combined several components to meet the needs of our clients. To accommodate new-hires, our technical writers created demos on how to complete common tasks in the application. Demos show cursor movements and include written instructions to guide the user through a task. Rollover help provides more information on specific items within the application, including item description and instructions for use, limited to 120 characters per item. Rollovers automatically appear when the cursor hovers over every item on the application page. In this manner, users do not need to leave the page to find help. Expert users have the ability to turn off the rollover feature if they find it distracting. Figure 1 shows the rollover text for the "Routing" data input field. Note that the rollover appears below and to the right of the field as not to obscure the field itself.

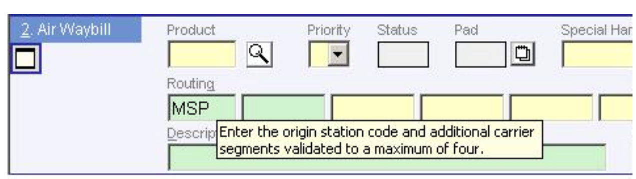

Figure 1: Rollover Text

We minimized both domain knowledge and information needed to operate the application by linking related tasks together with context menus.

Continued on page 14.

Continued from page 13.

When a user right-clicks on an application page, a context menu appears which lists all related application pages relevant to their current task. The user can then click the page he/she wants to display. Users no longer have to search long drop-down menus for a page they need or guess at a potential next step in their workflow. We embed as much help as possible into the application, despite a shortage of real estate.

Where possible, we added instructional text and warnings such as, "Click the table headings to sort" or "changes are not yet saved." Figure 2 shows the shortcut menu for a selected container (container T4321 is selected from the list) and the use of embedded help in italics. In addition, we customize standard host-provided error messages to provide a more meaningful response.

The online help tool we use has the capability to create conditional text for our users. We include customer-specific information where they want it within the help file.

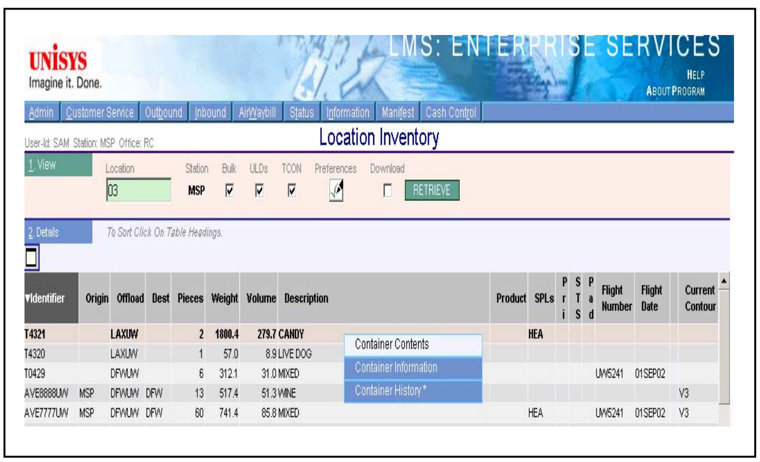

Figure 2: Shortcut Menus and Embedded Help

In addition to providing assistance, these unique customizations brand a customer's version as its own. Unisys has also collaborated with industrial governing bodies to add industry-specific rules for international operations as well. Within our application, there are many messages and parameters that users need to reference. These lists are long and cumbersome and therefore don't fit the standard type of information to use in a help topic. We created PDF files for these lists so customers can search and print what they need.

To accommodate the various skill levels of our clients, we created different types of help. For our more novice users, we created a section that contains step-by-step instructions called, "How Do I" to guide them through tasks. For both beginners and more experienced users, we have created a section called "Page Details." These Page Details display detailed information about every item on the application web pages. For experts, we have provided a high domain knowledge section called "Processing." This section displays detailed information about the processing of a function.

Our clients have responded favorably to our EPSS. Reports on our initial release show anecdotally that clients are pleased and users make use of the features we offer. Indeed, clients are so pleased with the premise and foundation of our EPPS that they have initiated refinements, which we have incorporated. For our next iteration, we plan a systemic assessment of the EPSS to quantify the benefits it provides to our clients.

Gery, Gloria. 1991. Electronic performance support systems: How and why to remake the workplace through the strategic application of technology. Cambridge, MA: Ziff Communications.

Raybould, Barry. 1996. "What is an electronic performance support system?" Reprinted from Technical and skills training (February – March). www.pcd-innovations.com/key_concepts.htm

Sam Racine is Usability Architect; Kristen E. Kralick is a Senior Content Developer; and Sathya Yesuraja, Consultant; of the Unisys Corporation.

Types of Usability Methods

By Alice Preston

We are all somewhat familiar with the range of methods that can be used to usability test our products or even early designs. But there may be more methods than you've thought about. How many of the following methods are you familiar with?

- **Interviews/Observations**: One-on-one sessions with users. At the Interview end of the spectrum, ask them questions about what they do. At the Observation end of the spectrum, watch what they really do. It's often possible to conduct both types of session in the same on-site visit.
- **Focus Groups**: Often used in marketing well before there is any kind of prototype or product to test, a facilitated meeting with multiple attendees from the target user group.
- **Group Review or Walk-Through**: A facilitator presents planned workflow to multiple attendees, who present comments on it.
- **Heuristic Review**: Using a predefined set of standards, a professional usability expert reviews someone else's product or product design and presents a marked checklist back to the designer.
- **Walk-Around Review**: Copies of the design/prototype/wireframe are tacked to the walls, and colleagues are invited to comment. (Post-It® Notes are good for this) It also works well when users are around for some other purpose, and this is the only way you can get their attention.
- **Do-it-Yourself Walk-Through**: Set up a usability test situation, but without invited users. Make mock-ups of artifacts, but make the scenarios realistic. Walk through the work yourself.
- **Paper Prototype Test**: Use realistic scenarios but a fake product. If possible, have a colleague "play" the insides of the product or software.
- **Prototype Test**: A step up from a paper prototype, this one uses some type of animated prototype with realistic scenarios.
- **Formal Usability Test**: Using a stable product, an animated prototype, or even a paper prototype, test a reasonably large number of subjects against a controlled variety of scenarios. See How Many Subjects Do I Need for a Statistically Valid Survey by Daryle Gardner-Bonneau for pointers on how to decide when you have enough subjects.
- **Controlled Experiment**: A comparison of two products, with careful statistical balancing, etc. This may be the hardest method to do "in the real world" but it's the one you need to publish the results.
- **Questionnaires**: formal questionnaire, matching questionnaire (sometimes these are similar to a card-sorting exercise), phone questionnaire. Each of these formats has pluses and minuses, with questionnaire design being a field of its own. See www.stcsig.org/usability/topics/measurement.html for more information on questionnaires.

Any usability test method will give better results with real user participation, but sometimes that just isn't feasible. Let's face it, even getting colleagues to join you can sometimes be difficult. However, it's important to remember that there are many tools in your usability toolkit, and there will usually be one that can get the job done.

Methods such as User-Centered Design, Usage-Centered Design (and other variants of meaning for UCD) often incorporate one or more of these test methods into the design process. That's all good, as is the combination of heuristic and questionnaire approaches in the accompanying article.

Alice Preston is a member of the New Jersey Usability SIG.

Usability SIG Web Site Tests Macromedia FlashPaper

By David Dick

The Usability SIG is always interested in new ways to put publish our newsletter on the Web. When an upgrade to Macromedia's Contribute 2.0 included a new program called FlashPaper, we decided to give it a try.

The first hurdle with any new program is making it work, and this one was easy. All we had to do was to select the FlashPaper Printer from the print dialog to create the file.

The user interface is equally simple–a small control bar at the top of the page lets users zoom in and out, or jump to a specific page.

Our first impression is that this is an interesting program, adding document support to the popular Flash program, and well worth watching.

Benefits

- FlashPaper works with any printable document so Web site visitors can display them using the Flash viewer without having to own the original program.,
- FlashPaper documents open instantly within Web pages, providing a seamless way to display documents as an intrinsic part of a Web page.
- The initial display is very fast, with little program or document load time.
- A minimal user interface avoids screen clutter, while putting zoom, page and print controls in easy reach

Drawbacks

- Although Macromedia FlashPaper is a useful and practical method to share any printable document as an intrinsic part of a Web page, there are several limitations:
- The text in FlashPaper documents cannot be searched or selected by Web site visitors.
- FlashPaper does not support digital signatures, annotations and a variety of other features of enterprise document sharing technologies as PDF.
- FlashPaper is only available on Windows 2000 and XP, and soon to be available for MacOS.

So far, our use of FlashPaper is just an experiment. We are interested in hearing about other people's experiences as well as usability or accessibility issues with this new format.

More information about Macromedia FlashPaper is available at www.macromedia.com/software/contribute/productinfo/flashpaper

If you are using Macromedia FlashPaper and would like to share your experiences, please contact me at david.dick@swift.com.

Usability in Practice: Company Profile of Hylotek

By Diane Giangrossi

For those of us who are passionate enough about usability to belong to a Usability SIG, the necessity of making a product usable is obvious. We debate the definition of "usable" and delve into the theories and concepts of usability but never question that some kind of usability analysis is an essential piece of the development process. But some of us are disappointed in how slow our companies or industries have been in adopting formal usability processes, which leads to the question: Which companies are actually practicing usability, and what does usability mean to them? Who's investing time and money into usability, and what kind of return are they receiving on their investment in the real world?

One such company is Hylotek of New York City (www.hylotek.com), established in 1999, provides Web services in the form of Web design, back-end programming, and strategy. User-focused research is an established piece of the analysis phase in Hylotek's three-phase process (analysis, design, and build). "The entire design and technology team is expected to understand and participate [in the usability effort]," says Joshua Fruhlinger, co-founder of Hylotek.

The usability methods employed at Hylotek vary according to the project's scope and the client's needs. "We do anything from basic heuristic reviews to full in-person usability testing," says Fruhlinger. "We also do user scenarios, information architecture, and prototyping."

What led Hylotek to integrate usability into its processes was recognition of a gap between the typical client's stated business needs and the goals of the product's actual end users. Hylotek discovered that without upfront research into both of these areas, design revisions were being made in a vacuum. "By working with the client to uncover the gap between business and user goals," explains Fruhlinger, "we were able to create clear mandates and consensus for re-architecture and re-design. User-centered design methodologies were the clear winner for that process, as they provide us with a consistent document set and accessible deliverables."

This addition of a research and analysis phase before the design and build phases has created a more efficient process for the design team that saves clients money. In this analysis phase, a minimum of two weeks is dedicated to the usability task at the beginning of every project. "Results from this phase are used to both inform the client and get them to think about the end user as well as to inform the design team," notes Fruhlinger. "We find that this allows the design phase to be focused on aesthetics rather than functional or usability issues, making it a much more fruitful creative exchange."

Focusing on usability issues at the end user's level often uncovers problems with the overall corporate workflow. Improving the process for the end user in these cases is often a matter of resolving symptoms but not the underlying problem. Fruhlinger would like to see Hylotek take the next step of serving as a business process consultant to help a client address the corporate workflow issues that can lead to usability issues for end users.

The benefits Hylotek has enjoyed thus far from its investment in usability prove that incorporating usability simply makes good business sense. "We find that clients return to us because we can provide them with metrics for success," Fruhlinger asserts. "Every client is looking for metrics to show a project's success. At the same time, every service provider is looking for ways to optimize process and reduce resource drain. A user-centered approach does both," with documented test results that can be used to show improvement and other deliverables, such as prototypes, that streamline the design process.

Fruhlinger advises every company to try usability, as usability's return on investment is an easy sell. "Traffic numbers and conversion ratios are no longer sufficient to show that a design is effective. Having the usability barometer as a metric for design efficacy is a huge boon and comfort to both us and our clients."

Diane Giangrossi is a senior technical communication engineer at Baker Hill Corporation. She can be contacted at dgiangrossi@bakerhill.com.

Heuristic to Evaluate Online Help

By Donn DeBoard

I was tasked to evaluate online help. However, I had point of reference on which to evaluate content and quality. There is no consensus concerning what criteria constitute good online help. So, I created my own heuristic checklist based on the ISO 9241 standard, which is:

> *The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.*

The ISO 9241 standard definition was too broad to be directly applicable to evaluating online help. Additional research ("Using the 5Es to Understand Users," Whitney Quesenbery, www.wqusability.com/articles/getting-started.html) was needed to flesh out the ISO 9241 standard. The final heuristic evaluation criteria, using these supplemental principles, were:

- **Effective**

  The completeness and accuracy with users can achieve specified goals. Were the goals met successfully and was the work correct?

- **Efficient**

  The speed and accuracy in which users can complete the tasks in their particular product.

- **Engaging**

  Is the help pleasant and satisfying to use? Is the visual design clean and appropriate to the tasks, users, and context?

- **Error tolerant**

  Does the help system help prevent errors and/or help the user recover from an errors that do occur?

- **Easy to Learn**

  Is the help system easy to learn? Does it build on any prior experience with similar systems?

These criteria helped apply the ISO 9241 standard to online help. I created a set of questions for each category for the person performing the heuristic evaluation with a range of very satisfied to very unsatisfied to not applicable. Each question can have a severity level that can raise significant opportunities for improvement to the foreground. I also allowed for comments and notes from the evaluation. This form helps the evaluator rate each category with a score plus an overall rating for the entire session. I created a summary report based on my evaluations and recommendations for Information Development management and the help authors.

Donn DeBoard is a Senior Information Developer for Vertex, Inc., a tax compliance software company located outside of Philadelphia, Pennsylvania. He holds a MEd in Instructional Systems from Penn State, and a MS in Technical and Science Communication from Drexel University.

Donn is a senior member of the Philadelphia Metro Chapter. He can be contacted at donn.deboard@vertexinc.com.

The checklist is on pages 18-27.

Heuristic Evaluation Questionnaire

Effective

(What is the completeness and accuracy of your work? What percent of your goals were reached successfully? How well was a task completed?)

1) Is it clear where on the screen to find the help system?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

2) Is it clear how to begin to use the help system? (Is it obvious how to invoke the help?)

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

3) Is it clear how to exit help system at any time?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

4) Can you change the level of available detail in the help system?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

5) Can you easily switch between the help system and your work using (your software application)?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

6) Is the help non-intrusive (invoked only when the user requests it)? (The Help should not distract the user's attention from their work before being invoked.)

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

7) Can you resume your work where you left off from accessing help?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

Totals this section:

Very Unsatisfied	**_____1**	**_____2**	**_____3**	**_____4**	**_____5**	**Very Satisfied**
Severity Ranking	**___Low**	**_____Moderate**	**_____High**			**Question is Not Applicable___**

Evaluator Comments:

Efficient

(The speed and accuracy of your work? How quickly did you reach your goals? How quickly was a task completed?)

1) Are there various access methods in the help system (Table of Contents, Index, and hyperlinks) that enable you to find information quickly and easily?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

2) Context/Purpose: Does the information in the help system answer why a given task is necessary? (Is it context-specific?)

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

3) Navigation: Is the information in the help system easy to find?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

4) Is the information in the help system navigational (Where am I?)?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

5) Is additional information in the help system available (What information related to this topic?)?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

6) Does the information in the help system point you to the next task in a workflow?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

7) Is there an example in the help system for you to reference, as needed?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

8) Does the help system provide an overview of the work process you perform?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

9) Does the help system assist you in defining your workflow using (your software application) and the related tasks involved in that work?

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ____Low _____Moderate _____High Question is Not Applicable___

Totals this section:

Very Unsatisfied _____1 _____2 _____3 _____4 _____5 Very Satisfied

Severity Ranking ___Low _____Moderate _____High Question is Not Applicable___

Evaluator Comments:

Engaging

(How distinct and consistent is the visual presentation, graphic images, and colors? How clear and distinct is the design and readability of text on screen?)

1) Presentation: Is the visual layout in the help system clear and distinct? Are there visual cues that help identify information and its use?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

2) Conversation: Does the information seem complete and understandable? (Information is assumed accurate, based on current information at time of help development.)

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

3) Is the information in the help system goal-oriented (What can I do with (your software application)?)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

4) Is the information in the help system descriptive (What is this (your software application) module for?)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

5) Is the information in the help system procedural (How do I do this task?)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

6) Is the information in the help system interpretative (Why did this happen?)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	_____Low	_____Moderate	_____High			Question is Not Applicable___

7) Is the information in the help system easily available (Help is available within one or two clicks? Reader does not need to rummage through help topics.)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

Totals this section:

Very Unsatisfied	**_____1**	**_____2**	**_____3**	**_____4**	**_____5**	**Very Satisfied**
Severity Ranking	**___Low**	**____Moderate**	**_____High**			**Question is Not Applicable___**

Evaluator Comments:

Error Tolerant

(Does the help system prevent the user from making errors? Is there information on how to recover from errors?)

1) Are there cautions and warnings in the help systems that keep you aware and away from trouble using (your software application)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

2) Is there a troubleshooting section of the help system that provides a remedial course of action if something unexpected occurs while using (your software application)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

3) Is this troubleshooting section easy to find?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

Totals this section:

Very Unsatisfied	**_____1**	**_____2**	**_____3**	**_____4**	**_____5**	**Very Satisfied**
Severity Ranking	**___Low**	**_____Moderate**	**_____High**			**Question is Not Applicable___**

Evaluator Comments:

Easy To Learn

(Is the help system predictable? Can anyone use the help system with confidence, given a basic skill set required to use (your software application)?)

1) Is the help system navigation consistent with the navigation interface of the (your software application)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

2) Is the help system presentation consistent with the presentation interface of (your software application)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

3) Is the terminology (terms, concepts, etc.) in the help system consistent with the terminology used in (your software application)?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

4) Does the help system have shortcuts or ways to support people with varying levels of knowledge or a familiarity with the help system?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

5) Does the help system encourage you to learn and perform complex tasks by providing cue cards, coaches, or wizards?

Very Unsatisfied	_____1	_____2	_____3	_____4	_____5	Very Satisfied
Severity Ranking	____Low	_____Moderate	_____High			Question is Not Applicable___

Totals this section:

Very Unsatisfied	**_____1**	**_____2**	**_____3**	**_____4**	**_____5**	**Very Satisfied**
Severity Ranking	**___Low**	**_____Moderate**	**_____High**			**Question is Not Applicable___**

Evaluator Comments:

Overall Totals This Session:

Very Unsatisfied	**_____1**	**_____2**	**_____3**	**_____4**	**_____5**	**Very Satisfied**
Severity Ranking	**___Low**	**____Moderate**	**_____High**			**Question is Not Applicable___**

Overall Evaluator Comments:

Paper Prototyping, The Fast and Easy Way to Design and Refine User Interfaces

Reviewed by David Dick

My experience has been that to create a prototype is to create a working model to allow users to test functions and features. Because so much time and effort goes into creating the prototype, time constraints prevent refining the design, and the product is rushed to market—design issues are fixed in the next release. There's a solution that's low-cost, quick, and effective in finding design issues—paper prototyping. If you want to learn about paper prototyping from a renowned practitioner then I highly recommend *Paper Prototyping* by Carolyn Snyder.

Snyder advocates paper prototyping because it's easy to design (requires minimal drawing skills), cheap to create (needs only paper and markers), and offers and opportunity for developers and users to evaluate design concepts. If you wonder where the beginning of the design process starts, it begins when great minds meet and brainstorm ideas, and drawing is a natural approach to illustrate them.

Paper Prototyping consists of four parts:

1. "Introduction to Paper Prototyping" has case studies for a variety of products (e.g. Web applications, e-commerce Web sites, small screen displays, and touch screen interfaces), lists benefits for users and product team, and the materials to create a paper prototype. I learned the how to plan and design a prototype. Understanding how to conceptualize ideas is a critical skill. Fortunately, Snyder included examples that proved helpful because they are real and relevant.

2. "Conducting a Usability Study with a Paper Prototype" describes how to plan a usability study, how to choose tasks, how to create a paper prototype, how to prepare for usability testing by doing walkthroughs, how to facilitate a usability test, the do's and don'ts of usability testing with a paper prototype, observer protocols, and what to do with the test results.

If you are not a usability specialist, you may be doing some of these tasks for the first time. If you have a process for conducting a usability study, this chapter will help you identify the activities that are different from what you typically do. Conducting a usability test with a paper prototype is unique, because the goal is to verify ideas and correct the prototype to validate improvements. An additional bonus is the ability to evaluate the types of tasks the product would be able to perform.

A paper prototype does not rely on databases, networks, servers, or any form of technology, eliminates most of the things that can go wrong. It's portable—if the users cannot come to you—you can take it to the users. You don't need a sophisticated lab to conduct usability tests or big budget to get good feedback.

3. "Deciding Whether to Use Paper" covers the advantages and disadvantages of paper prototyping, the dimensions of a prototype, and the politics.

Synder describes how paper is not suitable to evaluate interaction issues:

- It will not show subtle screen changes that are typically shown at the bottom of the screen.
- It will not allow scrolling, a variety of menu effects, and cascading menus.
- Download time and other response time.

Obviously, paper is not the medium to evaluate interaction, but it is ideal to evaluate the following "look" issues:

- Design concepts and terminology
- Navigation
- Work flow
- Task flow
- Content

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- Documentation and online help
- If the design satisfies user requirements and functionality
- Screen layout
- Branding
- Understanding the strengths and weaknesses of paper prototyping is essential to managing the expectations of proponents and opponents. Snyder describes how to respond to concerns of skeptics that using paper is a valid and professional technique.

4. "Broadening the Focus" consists of case studies that Snyder collected from usability specialists of The MathWorks, IBM, and Dictaphone. The case studies reveal how paper prototyping is one of several techniques to conduct task analysis and evaluate product design.

I learned a use for index cards; they are useful for smaller prototype pieces: dialog boxes, pop-up messages, drop-down menus, etc. Snyder describes how a team at The MathWorks created a method for capturing and managing information about screen design. During prototyping and design sessions, team decisions about how the prototype would behave were recorded on index cards. The index cards were also used to track problems to be solved. Some members of the team used the cards to create a test plan. The technical writer used the index cards to create a first draft of the tool's documentation.

What I like best about *Paper Prototyping* is that case studies and testimonials support each topic. Illustrations and photographs of exhibits enhance thorough descriptions of concepts and instruction. I wondered how Snyder could cover product design with profound insight, and then I read her credentials: software engineer, project manager, student, teacher, and consultant—she is an astute observer of all facets of product design.

Paper Prototyping is particularly useful for people testing print documentation. The techniques of testing paper prototypes apply to any situation in which the test facilitator sits in the room with the participant. "Introduction to Usability Test Facilitation" is one of the best discussions of the advantages of working in the room with the participant, and the human and logistical issues that might arise.

Yes. I am convinced that paper prototyping is the fast and easy way to design and refine user interfaces and you will too. If you buy the book and have questions that you would like to ask the author, you will be happy to know that Carolyn Snyder will be appear at annual STC conference in Baltimore (May 2004). You can also visit her Web site at www.synderconsulting.net for more information.

Carolyn Snyder, *Paper Prototyping, The Fast and Easy Way to Design and Refine User Interfaces* 2003, Morgan Kaufmann Publishers, San Francisco, [ISBN: 1-55860-870-2. 378 pages, including index.]

Contribute to the April issue of Usability Interface

Usability Interface is accepting original articles and case studies, anecdotes, cartoons, and book reviews on Content Management Systems and Performance Management Systems.

Do you know a company that deserves recognition for practicing usability? Tell us how and why, and benefits.

Do you know somebody in your Chapter's Usability SIG that deserves recognition? Tell us why.

The deadline for submitting articles is 30 March. Send your articles to david.dick@swift.com.

Designing Web Sites for Every Audience

Reviewed by Whitney Quesenbery

I liked *Designing Web Sites for Every Audience* from the very first page, where it starts with these words:

"During my thirteen years as a marketing consultant, one of my most persistent tasks has been to remind designers and other creative types I work with to think first of their audience….Sounds easy, but this is a huge challenge. You want the art and design to speak for themselves, regardless of who sees the work. But in marketing…it's crucial to know who your market is and what they need to see."

Author Ilise Benun looks at the web from a refreshing perspective, tying marketing and usability together through a common interest in understanding the people who use a web site.

The first chapter approaches the question, "Why does usability matter?" with an overview of a user-centered approach to design and lessons in usability from a wide-ranging collection of experts. Benun's ability to reach across the web design community to bring together different perspectives is one of the strengths of the book. If you have ever wondered how to find the right words to talk to marketing directors and visual designers about the importance of usability, you might start here. Familiar usability concepts are tied to specific examples and presented from a marketing perspective. Most importantly, she makes the case that marketing and usability are not opposites, but have the same goals.

The rest of the book uses a series of case studies of site redesigns. They include before-and-after screen shots, interviews with the designers, which provide insight into how and why decisions were made, and background on the goals of the project. Each story shows how usability is important to the success of a site and how posing the question "'Does this work?' while also asking 'How does this look?'" can allow beauty to mesh with functionality.

The case studies are divided into six chapters, each focusing on a different type of user and reason for using a web site. The chapters begin with a brief persona, creating a tangible picture of these users and reminding the reader that web sites are should be designed for their audience. The six personas are:

- Learners
- Shoppers
- Connection Seekers
- Transactors
- Business Browsers
- Fun Seekers

These personas focus on the relationship between the person and the site, and highlight different approaches to design for different audiences. Using these personas as a window into the world of web design, Benun reminds us that successful web sites start with an understanding of the audience – and are designed to meet their needs.

If you are looking for a set of guidelines or instructions on a process for designing a web site, this is not the book for you. Instead, this is a book to browse for inspiration and an overview of the current state of web design.

Benun is Director of Creative Marketing and Management, an expert in self-promotion, and Vice President of the New York Chapter of the UPA. To find out more about her work, visit www.artofselfpromotion.com.

Beyond Borders: Web Globalization Strategies

Reviewed by Jeff Staples, Houston Chapter

If your Web site is not designed for or understood by a global audience, you are excluding an estimated 200 million people, according to John Yunker in *Beyond Borders: Web Globalization Strategies*. Yunker contends, "Web globalization will open your organization to virtually unlimited opportunities, but also many risks" (p.3). It is these opportunities and risks that Yunker examines in his book.

Many of the considerations involved in creating or converting documentation for a global audience apply also to the Web and are covered in the book. For example, many have probably heard about a USA-made car that was called Nova, which in Spanish translates to "no go." If you've been involved in or read about translation related to documentation, some of the text may seem familiar. However, in Yunker's treatment, what may be familiar is melded into the overall concept of globalizing your Web site.

To quickly assess if this book is for you, turn to the Introduction. Here a "Who this book is for" section identifies the intended audience. This is followed by a brief synopsis of each Part. Checking the table of contents, you find the chapters are organized into seven Parts that convey the flow of globalizing your site. The focus of each Part ranges from preparation through implementation and strategies for successful global promotion. Part 7 contains a helpful glossary and appendixes, the content of which is referenced in various chapters.

Throughout the book, Yunker "Spotlights" various organizations such as Monster.com and FedEx. Through these spotlight glimpses, you learn how these organizations went about developing their global Web sites and the challenges they faced. To help you gain experience in developing sites in other languages, Yunker offers "Hands-on" sections. These sections offer files that you can download to help you create actual sites in various languages, including Spanish, German, and Russian.

Chapter 1 ("One Internet; many voices") provides some basic information on the Web and why Web globalization is important. If you have been involved with products or documentation that are going international, this information may be familiar. Concepts and terms such as localization (L10N), internationalization (i18N), and globalization (g11N) (pp. 17-21) are explained. According to Yunker, "Success at Web globalization demands high attention to detail and the ability to look at your Web site through the eyes of someone else" (p. 11).

Many languages coexist on the Internet. Chapter 2 ("Navigating the multilingual Internet") offers information on the behind-the-scenes aspects of the Internet that make the coexistence of these various languages possible. Here you learn about writing systems (ideographic and phonetic), character sets (ASCII and Unicode), language identifiers, and country codes. Yunker provides this information to extend your information on the internal aspects as groundwork for understanding what the outer elements of a localized Web site are based on. It is a lot to grasp at once, so bookmark this chapter for future reference as you proceed through the book.

Chapter 3 ("First steps—and missteps") prepares you to go global with your Web presence. Here you can get a head start by learning about the mistakes that other companies have encountered as they took their Web sites to a global audience. And more importantly, you learn how you can avoid these same mistakes. Multiple examples of the Web sites in question are provided, such as overweight sites (less than 89 kilobytes is recommended), sites that play hard to get (keep navigation simple and consistent), and sloppy sites (avoid mistranslation errors and inconsistencies).

Chapter 4 ("Are you ready to go global?"), Yunker helps you to evaluate your global readiness. Before going global, review the Reality Checklist (p. 81) and determine if your company, products/services, and brand names are ready to go

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global. “Localization requires keeping an open mind about foreign languages, cultures, and traditions” (p. 81).

Yunker provides checklists of areas within your company such as customer service, marketing, and legal that will be impacted by your globalization. For example, you have converted your Web page (the front end) to Spanish, but can your customer support staff (the back end) handle questions in Spanish?

After you have evaluated your readiness, you decide you are ready to go global. Chapter 5 (“Web globalization workflow”) introduces you to the basic strategies for developing and managing global Web sites. Yunker provides you with a to-do list (p. 123) for going global. For example, you find out what’s involved with localization, such as translation (test, create, implement), editing (test, create), and graphic design (design, develop, test); and content management, such as developing content, localization maintenance, and customer support. The list is a convenient roadmap with detail on what each globalization component requires.

The globalization strategy that you select needs to best fit your needs. Yunker provides three scenarios on different localization strategies available and how each strategy effects the workflow (p. 135).

And as with most ventures, “show me the money.” You may be ready to go with your globalization efforts but your budget may not. Chapter 6 (“Let’s talk budget”) addresses this touchy subject. Yunker provides a checklist of globalization expenses you can expect to incur as well as the areas these expenses will come from such as “the five major slices” (p. 141).

So, are you going to internationalize or localize your Web site? Chapter 7 (“Internationalization and localization”) helps explain the two terms. “Internationalization is the process of building a Web site so that it can support multiple locales, while localization is the process of modifying that site for a specific locale” (p. 171). Yunker discusses constants (items that remain the same no matter what market) and variables (items that change based on the market) (p. 175). You read about elements that will help you create a balance between global efficiency and local customization in creating your global Web sites.

Chapter 8 (“Translation management”) addresses “the most important, and most noticeable, component of localization: translation” (p. 193). Yunker covers the various phases, components, and attributes associated with translation. Included in this chapter are the phases of the translation process such as creating a budget and a translation/localization kit. Your options related to translating your Web content include handling it yourself with in-house personnel or contract translators; or you can hire a translation vendor (focuses on text translation only) or a localization vendor (manages text translation as well as graphics and Web page localization). You learn what to look for and expect whether going it on your own or hiring a vendor. And if hiring a vendor, be aware that “the translation industry is not regulated” (p. 215).

To provide assistance with all the demands of Web translation, Chapter 9 (“Computer-aided translation”) offers information on software to aid in the process. Yunker focuses on the two most common computer-aided translation (CAT) tools: translation memory (TM), software that stores previously translated sentences for reuse, and machine translation (MT), software that translates whatever text you enter.

The value of TM software is not just that it recycles text, “but that it helps you track changes to already translated text” (p. 221). In discussing TM software, Yunker gives a brief overview of one of the most popular packages, TRADOS 5. Discussing MT software, Yunker covers the most popular, AltaVista’s Babel Fish. TM software is more expensive and provides quality and consistency, while MT software is faster and cheaper but error-prone. According to Yunker, “Computers are better at *assisting* translators than *replacing* them” (p. 219).

Just as with taking printed document and “dumping” online, what works for your source site (for a specific audience such as the United States) may not be the best for your entire global audience. Chapter 10 (“Writing for a global audience”) encourages you to think globally as you create the text on your source site. This practice of thinking globally can help you save on translation cost while maximizing your translating dollars. For example, ways to create translation-ready, globally friendly text include keeping it short, avoiding slang, and

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punctuating properly. “A poorly written Web page will be reflected in poorly written translations … but a well-written Web page has the potential to increase sales and set you apart from competitors” (p. 277).

Chapter 11 (“World wide design”) focuses on the design of your Web site: building your global template and localizing that template for each Web site. “A global template enables companies to make the most of one design, to centralize control, and to convey a consistent image to the world” (p. 282). A major consideration with the global template is the “global gateway”. “ This is the portal off your main page for users to access their localized Web sites. “It requires a combination of design elements and technologies that, when used together, ensure that users find their localized Web pages as quickly and effortlessly as possible” (p. 283).

A localized Web site needs to be sensitive to the cultural environment. Yunker discusses various culturally sensitive design concerns such as power-distance (conveying power structure and class definitions, or treating all people as equals) and characterization of females versus males.

However, your company may want a completely localized Web site for each location instead of a global template. Both methods are discussed with examples of actual Web pages.

Familiar with Unicode, the Internet’s default character set? Chapter 12 (“Creating multilingual content”) discusses Unicode and creation of multilingual Web content. Unicode supports all major languages; however, not all software supports Unicode. “The tricky part about working with different languages is that you need to understand their underlying character sets. Everything depends on your target languages” (p. 314). Yunker discusses four methods for managing text in Web pages and graphics and each methods strengths and weaknesses.

Having one Web site creates challenges in managing the site content. If you then take that original site and localize it into various languages, your content management challenges have greatly increased. Chapter 13 (“Global content management”) provides information about addressing these challenges, including discussions on software that can help you manage Web content. The main challenges in keeping source and localized Web sites in sync include update control, error control, turnaround time, and business rules.

If you want software to assist you in managing Web content, Yunker discusses content management systems (CMS) and globalization management systems (GMS). He presents a brief look at two leading CMS vendors, Documentum and Idiom, and discusses some of the factors to consider in selecting a CMS vendor, such as the flexibility of the system and whether translators can use the system.

In the United States, we have the domain name system (DNS), which allows us to enter Amazon.com rather than 207.171.181.16, its IP address. Chapter 14 (“Mastering your country domain”) explains that DNS is not so user-friendly with a global audience. In addition, DNS allows for only a subset of the ASCII character set, raising issues “for companies with names in languages that use no ASCII characters at all” (p. 375).

Yunker helps you make your Web site more accessible to a global audience by selecting domain names that are familiar to each specific country. There are generic addresses such as .com and country code domains such as .jp for Japan and .uk for United Kingdom. Registering your global Web site in the structure of the country for which the site is localized offers trademark protection, usability, marketability, and searchability. For example, “Local search engines give preference to Web sites that use country-specific domain names” (p. 374).

If you have created a globally-focused Web site, the front end (Web page) addresses your global audience. However, don’t forget the back end (support for customers using your site). Chapter 15 (“Supporting international customers”) provides support information that was briefly addressed in earlier chapters. Although customer support may actually be an issue after you have customers, it is something that you need to think about and plan for in the early stages of developing your Web site.

Yunker addresses the challenges you will face in supporting a global audience and your options for providing customer support such as Web, e-mail, phone, and retail. For example, if you sell your products or services online, your site will need to reflect the currency and payment collection fees for

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the particular site location, as well as applicable taxes. And don't think that every customer will be happy with your product/service—be sure to incorporate delivery and return options.

Your site will have little effect if no one knows about it. Chapter 16 ("Promoting your site globally") focuses on Web-centric approaches to promoting your site such as search engines, banner ads, and e-mail. Yunker provides an explanation of each type. The basic message is to make your promotion fit the specific locale. "Just as Web sites must be localized, so too must their promotions" (p. 439).

In wrapping up his discussion, Yunker addresses what lies ahead for Web globalization. Chapter 17 ("The future of Web globalization") offers insight into likely trends in Web development, commerce, and content. In Web development, Unicode encoding <charset=UTF-8> will soon start displaying on Web pages and should increase in popularity as more and more people upgrade to Unicode-friendly Web browsers. Other developments include the use of XML (eXtensible Markup Language) to separate form from content, increased standardization, and globalization-specific software such as Dreamweaver 12: The Globalization Edition.

In commerce, Unicode will enable Web developers and designers to have more control over development of Web pages in various languages. This will force localization firms, which thus far have had a monopoly on localization software, to focus more on "quality, customer service, and value-added services" (p. 464). And "as customers come to expect more from localized Web sites, companies will face the challenges of meeting their expectations" (p. 465).

In the development of content, human translation costs are not expected to decrease, so companies will be more specific in what they choose to translate. In addition, because of the costs associated with changing the texts in graphics, companies will closely evaluate their use of graphics.

Web globalization is still in its infancy. Yunker has amassed a wealth of information that will help you and your company as you begin or expand your globalization efforts.

Although the information speaks for itself, I do question the arrangement and presentation of the information. For example, the "Contents at a glance" (p. iii) effectively categorizes the chapters based on Part classifications such as "Implementation" and "Text and translation." However, within the book itself, there is no reference to the Parts; you have just the chapters. Having a section on each Part (probably taken from text in the chapters) would provide a good lead-in for the text to come. As it is now, the lead-in text for the next chapter comes at the end of the previous chapter. This is great if everyone reads the book sequentially, but I would say that someone converting their Web site will probably go directly to the chapter that has the information that they are addressing at that moment and will not see the nice lead-in text.

In addition, I didn't understand the significance of having the Spotlight and Hands-On sections at the end of certain chapters. These sections are definitely beneficial, but I didn't find a correlation between the sections and the chapters they were included with. I found that they took away from the flow of the book and would have been better in their own chapters or appendixes.

Through an e-mail exchange, Yunker said that he spread out the Hands-On sections to provide a more gradual immersion into the subject, and the Spotlight sections were spread out as well to compliment the Hands-On sections. Yunker explained, "I envisioned these combined sections becoming a sort of *real world* rest break amidst the more academic chapters."

With this text, you have a compiled reference to begin your quest of globalizing your Web page. Whether you will work in two languages or twenty-two, Yunker has delivered a resource for expanding the reach of your Web presence.

Beyond Borders: Web Globalization Strategies by John Yunker. 2003. Indianapolis, IN: New Riders Publishing. [ISBN 0-7357-1208-5. 552 pages, including indexes. $39.99 USD (softcover)]

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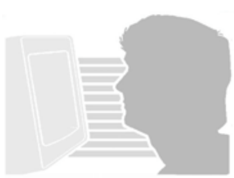

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