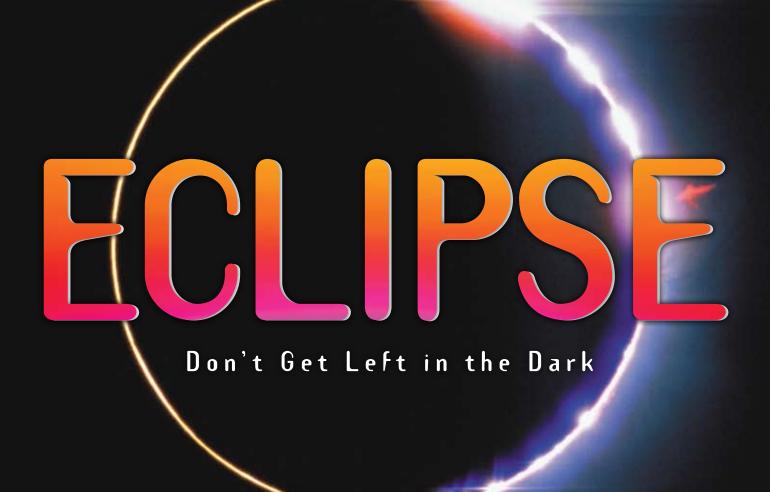
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INFORMATION MANAGEMENT AND HAZARD ANALYSIS: INVOLVING THE TECHNICAL COMMUNICATOR FROM THE START

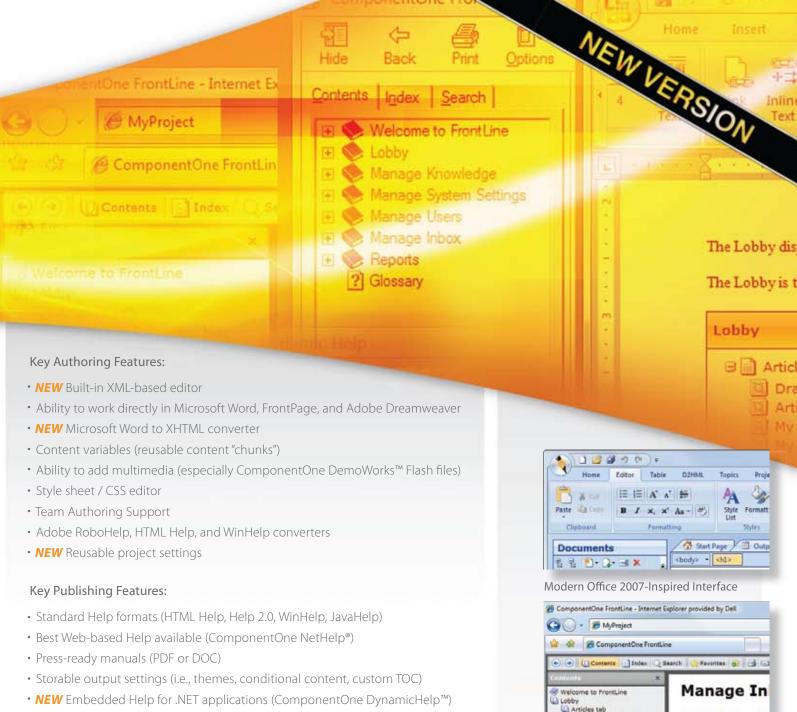
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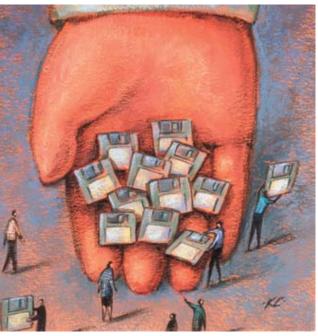
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Intercom introduces its new Editorial Advisory Panel, whose members help plan the editorial calendar so that the magazine covers the most important and timely topics for technical communicators. Panel members include chair Anne Gentle, senior technical writer at Advanced Solutions International; Janel Bloch, professor at Northern Kentucky University; Rhonda Bracey, managing director of CyberText Consulting; Tom Johnson, senior technical writer at The Church of Jesus Christ of Latter-day Saints; and Whitney Potsus, managing director of Connected Content. The panel members bring their experience from a variety of industries and sectors, including software, nonprofit, academia, aerospace, and more.

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cut&paste

New Study on Writing

any fledgling writers have been taught the mnemonic KISS: Keep it simple, stupid. A new study backs the wisdom of that advice. Daniel Oppenheimer at Princeton University conducted five experiments manipulating the complexity of vocabulary or font style. Turns out, and no surprise to us, short words and classic fonts make you look smart. The results will be published in the journal *Applied* Cognitive Psychology. To read more about the study, visit www.livescience.com/strange news/051031_kiss.html.

Novel Ideas in the Current Economy

/hat must technical communicators do to save their jobs in the current economy? R.J.R Rockwood has written a dramatic novel called The Last Ant: Elegy for a Technical Writer that tells the story of Anton (Ant), an English teacher turned industrial technical writer. The book is relevant in regard to the effects of globalization and the continuing dependence of corporations on outsourcing. Read more about the author and the book at www.thelastant.com.



Blogs by STC Members

heck out Michael
Hughes' blog on Use
Cases for User Assistance
Writers at www.uxmatters.com/
MT/archives/000329.php.
He explains the benefits of
use cases as a document's

foundation: "Use cases aren't just useful tools for defining functional requirements. They can be a useful design tool for writers of user assistance. Not only do they focus on user goals and contexts, they let writers get started on final documentation before the product team has designed and developed the user interface. And finally, they let you create design documentation within the production tool, while you are producing content that persists into the final user assistance deliverable."

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Tech Comm and Comics

omic Scott McCloud has created a comic book for Google explaining their new open source browser Google Chrome. McCloud conducted interviews with about 20 engineers who worked on the project, then adapted what they said into comics form. "Some paraphrasing, lots of condensation, and one or two late drop-ins, but basically it was a very organic adaptation and I had a lot of latitude." To take a look at the comic book and Google's new browser, visit www.google.com/googlebooks/ chrome/index.html. 10

By Fei Min Lorente, Senior Member

Don't Get Left in the Dark

f you are a technical communicator in the software industry, you may have already heard about Eclipse. If you haven't, you probably will.

Eclipse is an open-source, integrated development environment (IDE) that is rapidly growing in popularity among educational institutions, software companies of all sizes, and their vendors and clients. With software comes help menus, help buttons, and ideally, integrated help. The demand for Eclipse-based integrated help (or user assistance) is so great that standard documentation tools—such as Mif2Go, XMLSpy®, and ePublisher—now produce Eclipse help.

What Is Eclipse?

Eclipse defines itself as "an open source community whose projects are focused on building an open development platform comprised of extensible frameworks, tools and runtimes for building, deploying and managing software across the lifecycle." In other words, Eclipse is a single, integrated development environment where software developers can write, compile, run, and debug code; manage the source, manage projects, send and receive email messages; perform scheduling; revise task lists; and more. Eclipse users (be they software developers or otherwise) can also access and use integrated user assistance.

A key feature of Eclipse is that it is extensible, which means that after you install Eclipse, you can customize it to meet your needs using plug-ins. Plug-ins and customizations also require integrated documentation, which is added as an extension to the primary documentation.

Another key feature is that Eclipse is open source. Not only is Eclipse free, but when a company adds value to that free platform, they can also sell their resulting enhanced product without developing the entire application from scratch. As more companies produce Eclipsebased products, technical writers will need to write and deliver Eclipse-based user assistance.

Open source also means that the finest minds in the world can contribute to this product; it is not limited to a single company. Although it is free to users, many of the developers are paid employees of Borland, HP, IBM, SAP, and Wind River, just to name a few. With an annual release train, the Eclipse platform is under active development and is reliable enough to meet the rigors of commercial applications.

Who Uses Eclipse?

A December 2007 study conducted by BZ Research shows Eclipse is used 62.7 percent of the time compared with its closest competitor, Sun NetBeans, at 24.4 percent (as reported by Alan Zeichick in his weblog: http://ztrek.blog.spot.com/2008/03/netbeans-oracle-make-some-progress.html). The Eclipse Community survey conducted in October 2007 (http://cdn.idc.com/downloads/Eclipse

CommunitSurveyResults %5BNotesPages %5D.pdf) describes the kinds of organizations that are using Eclipse in terms of size and the types of projects. While I first heard about Eclipse five years ago, I now find that, in a room of technical writers, at least one person will have heard of Eclipse, if not used it.

Where Do Technical Communicators Fit In?

This all sounds wonderful for software developers, but is Eclipse relevant to technical communicators? I think so. Depending on your product, you might choose one of the following modes to run the Eclipse user-assistance code:

- If your product is Eclipse-based, the workbench mode is available; help is integrated with the product. For example, if your company decides to deliver a product on the Eclipse platform, they may ask you to adapt your user-assistance documentation. Customers will expect integrated help, and technical communicators are the ones to provide it. The more popular Eclipse becomes, the more you will encounter this situation.
- If your product is not Eclipse-based, you might choose the standalone mode. A smaller version of Eclipse is shipped and installed with your software product and called up from your product's Help menu.
- If you want to deliver the help content over the Web, you would choose
 the infocenter mode. For example, if
 your company's product is not Eclipsebased, but you need a tool to display
 your documentation electronically,
 you might consider using Eclipse user
 assistance, thereby avoiding the cost of
 purchasing and writing a help system.

Standalone and infocenter modes only provide the Help Contents user assistance. Once you know all the ways you can provide information to your users, you can decide if and how Eclipse is useful to you.

Technical Communicator Decisions

When providing Eclipse user assistance as one of your deliverables, here are some items to consider:

- Decide which Eclipse user-assistance format to use for various parts of your documentation: help files, welcome pages, or interactive tutorials.
- Determine how to generate the file types that Eclipse needs for its formats and which ones to use (such as XHTML or HTML for help files).
- Discover the aspects you can change, those you cannot, and those that are difficult to change on your own.
- Employ topic-based writing (because content is typically displayed in at least three different ways: table of contents, context-sensitive help, and user-search actions).
- Find tools that produce Eclipse userassistance files or write a script that converts your table-of-contents files to the required XML formats.

It is likely that your responsibilities with respect to Eclipse will be determined by your organization. Some technical communicators will simply provide HTML files to software developers, and the developers will incorporate them into the Eclipse user assistance. Other technical communicators will need to develop Eclipse user assistance themselves. In this case, they have to be comfortable with XML, plug-ins, build configurations, and even Java. All technical communicators who deliver their information via Eclipse need to know how that information will appear to users, and what types of Eclipse user-assistance formats exist so that they can make wise choices about the best way to write and present the material.

User Assistance Formats

User assistance formats support the following types of deliverables:

- Topic-based documentation for help
 —organized with a table of contents,
 provides the bulk of your supporting
 content. (To distinguish this type of
 content from the general use of the
 word "help," I call it "Help Contents"
 in this article.)
- PDF files—for customers who still like to print their documentation in book form.
- Welcome pages—ideal for introduc-

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- tory and auxiliary information, such as "What's New" and technical-support contacts.
- Interactive tutorials—intended to be brief and simple (in Eclipse they are called "cheat sheets").

Eclipse User Assistance in Action (Eclipse 3.4 Ganymede)

Eclipse 3.4, known as Ganymede, was released on 25 June 2008. Eclipse has regular releases every year, usually in June. Beta versions are released prior to the final release so that software departments have time to preview upcoming features and adjust to the changes.

The following examples are based on the SignaKlara® Development Tools IDE, running on Ganymede.

Help Contents

The bulk of your documentation is displayed by choosing Help Contents from the Help menu. The documentation set then appears in a separate window (see Figure 1), with a table of contents (TOC) in the left pane and the contents in the right pane.

The TOC is composed of one or more XML files with links to individual pages or to embedded anchors. The pages can be written in HTML or XHTML. Additionally, the TOC can link to PDF files.

Help Authoring Tools (HATs) that support Eclipse Help Contents can create the XML TOC files. Some other help formats that are not exactly the same as Eclipse, such as JavaHelp, can be converted with a simple search and replace, which could be automated by a script. The TOC file's XML can also be modified manually in a text editor.

Even when delivering your organization's customized product, you will probably choose to keep the Workbench User Guide, which is provided by the Eclipse organization. It contains all the basic information about using the IDE that your customers will need, and most companies usually have insufficient resources to rewrite it.

Navigation aids include bookmarks, breadcrumbs (a single line of text showing a page's location in the site hierarchy, with links to each parent page), and a button that highlights the TOC entry

Figure 1. Eclipse Help Contents displays the documentation set



Figure 2. The welcome screen appears when a user starts Eclipse for the first time



for the page you are viewing, called "Show in Table of Contents." In your HTML topic pages, you can add your own navigation aids, such as a "return to top" button.

To help users find particular information, you can provide a keyword index in the required XML format. Again, HATs that support Eclipse can provide these automatically; otherwise you have to script or handwrite these files. The keyword index is still being refined, however, and currently has a couple of stumbling blocks (remember, this is open source!):

 While there is support for listing "see" and "see also" entries in the keyword index, those entries do not link to the referenced term. For example, for the entry "JRE, see Java Runtime Environment," you cannot click on it and jump to the "Java Runtime Environment" entry.

 The indices for the installed manuals are integrated into one keyword index, and there is no way to identify to which manual the index entry refers. This information might help a user to select an index entry.

Most useful of all, you can search the Help Contents in several different ways, which I discuss in detail below.

Welcome

Before user assistance in Eclipse, we had "release notes." The welcome pages

7

(see Figure 2) are a good place for information like that, as well as basic "getting started" information, and who to contact for technical support.

The icons you see here are selected from a library provided by Eclipse. It is difficult to use your own icons because several different versions of the same icon are required for use in different contexts. The positioning of the icons is also hard to change. You do have control over the mouse-over text, but not over the formatting of it.

Clicking on an icon displays a specific Welcome page (see Figure 3). The icons here are also from Eclipse, and you have no control over the look or feel of this page unless you delve into the Eclipse code. However, you can control the text and link the icons to pages in Help Contents. This is one example of how to reuse the Help Contents.

Figure 3. One of the welcome pages with a selection of links to detailed information

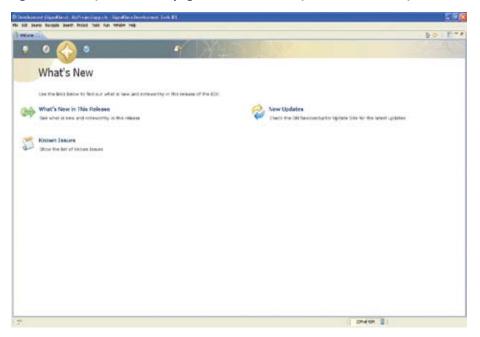
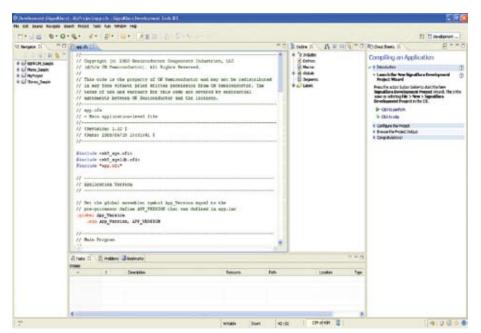


Figure 4. An example of an Eclipse work area (or workbench) with a cheat-sheet view on the right side



Cheat Sheets

Cheat sheets are interactive tutorials that appear in a side panel or view that allow you to perform the steps while reading the instructions (see Figure 4). As a result, each tutorial is intended to be brief.

Cheat sheets must be written as XML files and are not intended for reuse within the other formats; that is, their content won't appear in searches or context-sensitive help.

The cheat sheet XML structure allows for sub-steps to convey a procedure-within-the-procedure. The XML formatting elements are limited to bold, and sadly, these tags do not work in the sub-steps.

The cheat sheets allow for a help icon where you can link to further information about a particular step. This information can be part of the Help Contents (another example of reuse) and be as long and detailed as necessary.

As for interactivity, each step automatically expands and collapses as users finish with each one. The best feature of all is that you can provide buttons to invoke menu items on the user's behalf. For example, when a user selects "Click to perform," a dialog box appears as though the user had followed the menu choices. This is an example of the concept of "integrated" user assistance.

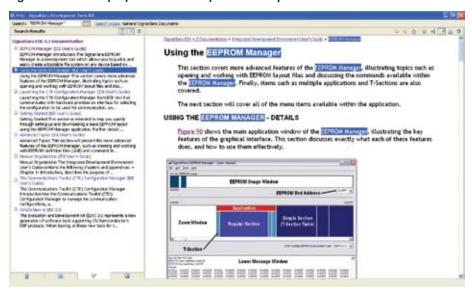
Searching

You can perform a full-text search from the Help Contents window (Figure 5). If you pre-index the contents, users do not have to wait for the search index to be created when they first perform a search on a newly installed product. You can also limit the scope of the search to a particular collection of documents.

When you select Search from the Help menu, you have the added option of searching the Web using a search engine of your choice.

Pressing F1 gives you context-sensitive and dynamic help (only available in workbench help mode), as shown in Figure 6. Eclipse automatically detects which view is active and provides a link to the Eclipse information about that view. You can change or add links to this context help as necessary. At the same time,

Figure 5. Results of a full-text search from the Help Contents window



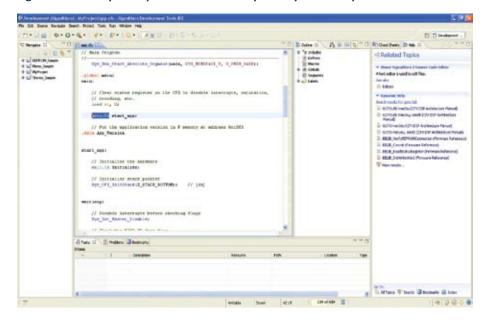
dynamic help returns search results based on whatever text you have selected in an editor, or based on where your cursor is. For example, as you select different text, the search results automatically change. This is another way in which the Help Contents information is reused.

Conclusion

Eclipse is growing in popularity in the software development community. As more software companies use it, more technical writers will be asked to provide integrated user assistance for products developed for Eclipse. Since the user Within the Eclipse environment, users can find information in many different ways:

- Table of contents
- Full-text search
- Keyword index—provides valuable synonyms and concepts as search aids not available in the full-text search.
- Context-sensitive help—tracks the tool you are using or the term you have highlighted and provides relevant information.

Figure 6. The Help view provides context help and dynamic help



assistance features are reasonably robust and well-maintained, and the platform is free, you might adopt it as your documentation delivery system in standalone or infocenter modes.

This article provides only an overview; a product that is this powerful and flexible is also complex. To use it successfully, you will need to understand the organization of the document files, the XML structure for various user assistance formats, the available tools, localization, how to customize it, and more. This information is hard to find because no one sells training on Eclipse user assistance, and books and conferences are geared to software developers.

The Websites www.eclipse.org and http://help.eclipse.org/ganymede/index.jsp contain official information about Eclipse. In the Eclipse documentation, see especially "User assistance support" in the "Platform Plug-in Developers Guide." The more you know about XML and Java programming, the easier these files will be to understand.

Another source for information is the Eclipse Platform Technical Writer discussion list: http://groups.yahoo.com/group/eclipse_tw/messages/101. The technical communicators on the list, all of whom work with Eclipse, can help you work through any problems you encounter, no matter how simple or complex.

Regardless of your reasons for choosing Eclipse user assistance, the technical writing community has to contend with the focus of the Eclipse community on software developers. It's time that we help each other obtain the information we need in order to work in an Eclipse environment. •

Fei Min Lorente (feimin.lorente@onsemi.com) is a senior member of STC and a senior technical communicator at the medical division of ON Semiconductor, where she has had the opportunity to learn and implement Eclipse user assistance as a lone writer. Her work experience encompasses technical communication in the database, banking, automated pipeline control, and defense industries. She maintains a fondness for software and considers herself a programming dilettante.

Information Management and Hazard Analysis

Involving the Technical Communicator from the Start

BY BETH FRAMPTON, Senior Member

ne of the biggest challenges faced by technical communicators is acquiring product information for operation and maintenance manuals. When you research the product too early, and designs and other details change, the information becomes obsolete. When you research the product after all designs have been completed, life becomes a series of twelve-hour workdays in an effort to meet the completion deadline. Meanwhile, the rest of the team is already busy with the next project.

Ideally, the technical communicator is in the "information loop" throughout the life of the project. Understanding the theory behind the designs, performance requirements, reasons for design changes, and other background information is critical for effective written instructions. The more immersed in the subject matter technical communicators are, the better the documentation they can produce, yet who can justify endless meetings just to "stay in the loop"?

The answer is to become an active, contributing member of the project team from the beginning, bringing value and ensuring a successful project. The technical communicator is especially well-suited to manage project

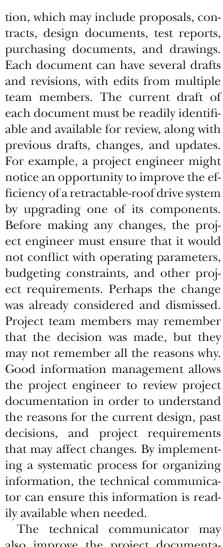
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documentation, including organizing information for easy retrieval, and editing for clarity, consistency, and style. The technical communicator can also play a critical role by coordinating and documenting project hazard analysis, and thereby enhancing project safety and minimizing risk and liability.

Information Management

In my work as a technical communicator, I see the value of contributing to project information management as a way to engage with the project team. My employer, Uni-Systems, is an engineering firm based in Minneapolis, Minnesota, that specializes in creating transformative, mechanized structures that change with climate, need, or purpose. Projects range in size from residential pool enclosures to professional sports stadiums. The larger projects involve teams with members from construction management companies, architectural firms, steel erection firms, and others. The life of the project is usually several years, from project conception through opening day. The amount of information generated from the various team members can be overwhelming, yet managing this information is critical.

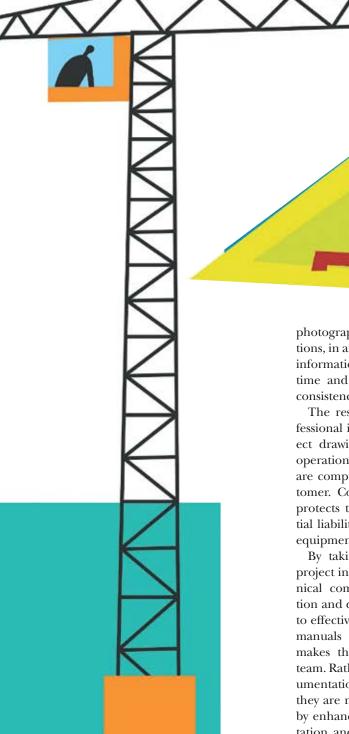
The technical communicator is often best suited to manage project informa-



also improve the project documentation process by developing a system that allows team members to incorporate prewritten information into their documents. Using a retractable roof as an example, an overview of the drive system is required for multiple documents, including the proposal, design descriptions, scope of work, test reports, sales materials, and operation and maintenance manuals. The technical communicator has an opportunity to create the drive system description according to corporate style guidelines, using the preferred terminology, and store the description along with supporting files for easy retrieval. In large organizations, this may entail a sophisticated content management system (CMS) and Darwin Information Typing Architecture (DITA). For our purposes, it simply means filing reusable chunks of information, including written descriptions,

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Technical communicators have the expertise and skill set to effectively implement information management, hazard analysis, and risk reduction throughout the

life of any project.

photographs, drawings, and illustrations, in an organized filing system. This information management system saves time and increases project document consistency and accuracy.

The resulting clarity presents a professional image when test reports, project drawings, design documents, and operation and maintenance documents are compiled and delivered to the customer. Consistent documentation also protects the project team from potential liability that could arise if injury or equipment damage were to occur.

By taking on the responsibility for project information management, technical communicators gather information and develop content that is critical to effective operation and maintenance manuals and, at the same time, this makes them critical members of the team. Rather than trying to develop documentation early in the design process, they are making valuable contributions by enhancing consistency of documentation and saving time for other team members.

Hazard Analysis

Along with project information management, the technical communicator is well-suited to systematically address potential hazards. The process includes documenting each identified hazard, its estimated potential for harm, and the process for eliminating it. Even informal email disucssions about potential hazards should be documented to verify either that the hazard has been eliminated or that, upon further investigation, the hazard does not exist.

Many existing standards and documentation provide procedures and guidelines for identifying potential hazards, the likelihood that they will result in injury, and the potential seriousness of the injury. The guidelines then assist in addressing the hazards based on the analysis. "ANSI B11.TR3-2000 Risk Assessment and Risk Reduction — A guide to Estimate, Evaluate and Reduce Risks Associated with Machine Tools" was developed specifically for machine tools, but it provides useful information for any project. The document provides procedures and guidelines for conducting a risk assessment and for taking measures to achieve tolerable risk.

Hazard analysis begins early in the design process as the team develops operating parameters and other design criteria. The technical communicator collaborates with the team to identify potential hazards related to intended use and foreseeable misuse of equipment. For every hazard, the project team estimates the potential severity of harm, ranging from minor injury requiring only first aid (or no injury at all) to catastrophic injury resulting in death or permanent disability. The team also estimates the likelihood that the injury will occur, ranging from a probability of near zero to nearly certain. Using these estimates, the project team determines the best way to address each identified hazard. Hazards that would be likely to result in catastrophic harm are eliminated through redesign, while hazards that present a remote possibility of harm resulting in minor injury may be addressed through administrative controls, such as training, or may even be ignored. Other means of eliminating hazards may include machine guarding to prevent contact with the hazard, protective equipment and clothing, and instructions and warning labels.

Let's use the example of the University of Phoenix stadium retractable field in Glendale, Arizona, to illustrate how this might work. Uni-Systems designed and built the retractable, natural-grass football field, which is driven between the indoor and outdoor positions along thirteen steel rails embedded in the concrete floor. In approximately one hour, operators can drive the retractable field in or out of the stadium using a pushbutton control pendant, which is positioned at the leading edge of travel, allowing them to monitor the equipment and the travel path throughout operation.

When designing the control system, engineers identified potential equipment misuse if the operator were to tape the push-button into the actuated position and move the field without monitoring it. Without operator supervision, the retractable field might collide with persons or equipment that lay in the travel path. The severity of harm could be potentially serious if a person was trapped under the leading edge of the moving field, however that would be unlikely. It would be very likely though that the field would collide with equipment left in the travel path, causing equipment damage. Engineers reduced this risk by designing safety features into the control system. The push button must be pressed and released once every sixty seconds throughout movement. If the push button is continuously engaged for more than thirty seconds, or if it is not pressed and released every sixty seconds, field movement stops. The safety features require the operator to remain at the leading edge of travel where they can best monitor the travel path and equipment. Risk was further reduced by providing operators with instructions in the operation and maintenance manual and training.

When technical communicators are responsible for both information management and hazard analysis, they are able to systematically document each step of

hazard analysis and risk reduction, and integrate the information consistently throughout project documents. This integration of information is critical to long-term project successes, since even minor inconsistencies in safety documentation can lead to significant liability.

Site Visits

Site visits are an excellent opportunity for the technical communicator to enhance document accuracy and the level of detail. Walking around a job site and viewing the general layout, drive system, control system, safety equipment, and other components is an excellent way to gather required information and to verify hazard analysis and risk-reduction methods. No matter how thorough the design-phase analysis, new hazards will likely become apparent during site visits. Some hazards may be caused by space constraints or by the interaction of several components and may not be obvious in design documents. Other hazards could appear while observing equipment operation. On the other hand, when viewed in the field, it may become apparent that some previously documented hazards are not hazardous at all. Ongoing hazard analysis and documentation during site visits will assure the best results for minimized risk of accidents and injuries.

When possible, technical communicators should observe project start-up and commissioning, including watching engineers operate equipment under various conditions to verify safety and reliability, and make adjustments where needed. Listening to project-team discussions can also help to identify requirements for additional instructions or training. For example, operation may be interrupted due to a missed step, an obstruction, or a system fault, and may be documented to help the system operator avoid such interruptions. While observing project commissioning can provide a wealth of information, the project team is usually too busy to answer questions or provide much information to the technical communicator. A follow-up visit or meeting with members of the project team will help fill in the blanks and answer questions.

No technical communicator should visit the site without a digital camera and cleaning supplies (to spiff up equipment for photography). Photos of equipment layout, operating procedures, and potential hazards are valuable reminders when working back at the office. Additional questions often arise during document development and can be answered simply by viewing the right photo. The right Photos are also an invaluable addition to project documentation, and the technical communicator should keep in mind instructions for operation, inspections, maintenance, and part replacement when photographing the project.

Conclusion

Technical communicators have the expertise and skill set to effectively implement information management, hazard analysis, and risk reduction throughout the life of any project. By leveraging these abilities, the technical communicator becomes a valuable team member, rather than an independent "lone writer," and is also in a position to collect the best information for operation and maintenance manuals and other project documents.

Rather than hoping that subject-matter experts will remember to forward relevant information for projects, the technical communicator actually collects, develops, and organizes information. By taking on the responsibilities for information management and hazard analysis, the technical communicator becomes intimately familiar with product subject matter and also makes contributions that are critical to the project's success. •

Beth Frampton (bframpton@uni-systems.com) is the technical communications manager at Uni-Systems, an engineering firm based in Minneapolis, Minnesota. She has been a member of STC since 2003. In 2007 her entry Cardinals Stadium Retractable Field Mechanization Operation and Maintenance Manual won Best in Show and an award of Distinguished Technical Communication in the STC International Technical Publications Competition.

Moving Toward a

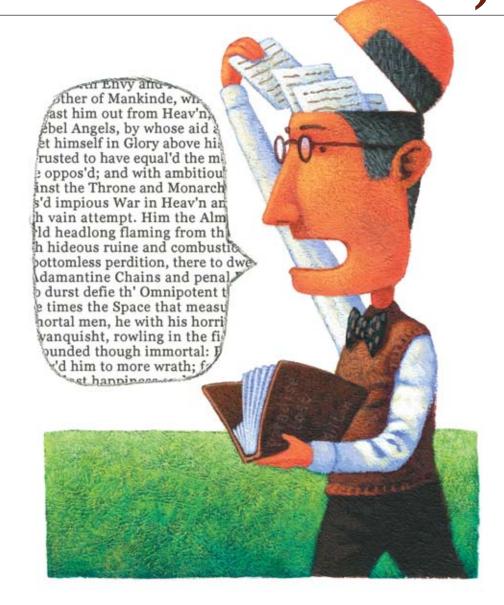
CONTENTREUSE BY JEANETTE P. EVANS, Associate Fellow, AND

By Jeanette P. Evans, Associate Fellow, and Julianne K. Forsythe, Senior Member

re you thinking about moving toward a content reuse strategy? If so, consider our method: We started by selecting a small team to research current trends in content reuse and determine possible applications. From there, we formed task forces to benefit from broad experience as we worked on specific aspects of our proposed strategy. We then began implementing changes slowly to minimize the impact on the department and our ability to meet project deadlines.

Our technical communication group comprises forty-eight members with 14,000 active publications in two major product divisions. The group participating in the content reuse initiative has twenty-four members, including managers, specialists, information architects, editors, and information developers (technical communicators), and produces roughly 400 new or revised publications per year.

Our documentation supports a global company that provides stand-alone industrial components and enterprisewide integrated systems for customers in a variety of industries, including automotive, food and beverage, oil/gas, life sciences, material handling, and packaging.



Slowly and Carefully

Exploring the Possibilities

As the concepts of topic-based authoring, content reuse, and content management started to take hold in the industry several years ago, we began to wonder whether we could use these strategies to more fully leverage our technical content as a business asset. After discussions with management, we were given the green light to form a pilot team to explore the possibilities. Eight people with diverse technical communication backgrounds, including department managers, were selected to develop and execute the project.

The group outlined the following goals for the project:

- Test industry-leading methodology for structuring and chunking content into topics.
- Try new roles different from the current "technical communicator" role.
- Demonstrate a few examples of information reuse and highlight the potential for further repurposing across media types and deliverables.
- Create draft versions of information product models, content models, and topic-based authoring guidelines.
- Drive out technology requirements to support the new methodology.

The four-month project culminated with a presentation to management,

summarizing lessons learned and proposing a plan for the future. The conclusion: in addition to the benefits of content reuse—increased consistency, accuracy, and efficiency—the team envisioned a much larger opportunity in the focused delivery of topic-level information to customers, who rely on our technical content to select, install, configure, use, and maintain our products.

The pilot participants developed a plan and outlined strategies to address critical success factors. One of these strategies included forming task forces to involve the whole department in reshaping our processes.

Working in Task Forces

We organized task forces of six to eight members to work on key aspects of our content reuse strategy. Each task force established a mission statement and deliverables for its area of focus. For several months, the task forces met to complete their deliverables.

• Information Modeling Task Force

This group worked on models that would provide the foundation for moving the group forward into a topic-based authoring environment. They created a library of content types along with information models based on user-needs analysis for our various publication types.

- Process and Workflow Task Force
- This group examined current processes and workflows to identify changes required to support our content reuse initiative. They considered the flow of information between people and systems, as well as the product life cycle. The task force created process and workflow diagrams showing the technical communicator's role in the flow of information through a product life cycle and the required steps to produce information products in this new environment. This helped define new roles to be filled in a topic-based authoring environment.
- Style Task Force
 - This group created an updated style guide to support topic-based authoring and content reuse and defined the editors' role and responsibilities. The style guide documented ways to write with a unified voice, to write for online and print deliverables, and to create topics as stand-alone information.
- Tools and Technology Task Force
 This group researched potential tools and technologies to support topic-based authoring objectives. They created a requirements document and an evaluation plan to test authoring tools.

Introducing Change

As the individual task forces met their goals and completed their deliverables, we began to introduce pieces of our content

usability

strategy to the department. To start, we held a two-day face-to-face workshop, gathering our people from all locations, to talk about breaking down content creation silos and to promote working together. Additionally, we reorganized the department around the new roles of editor, information developer, information architect, and technology specialist in order to support our evolving content strategy.

Periodic training sessions helped to explain, clarify, and reinforce new content development practices while giving department members an opportunity to voice opinions and discuss the changes. This training included our own topic-based authoring workshop, which introduced new writing standards based on the DITA concept, task, and reference topic types. We also created a topic standards handbook to help information developers put these techniques into practice.

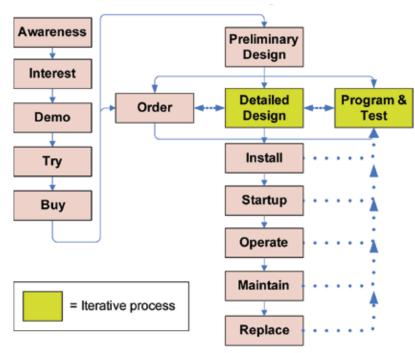
Here are some of the other activities we completed:

- Published an updated style guide to promote consistency in writing style and voice.
- Initiated a controlled vocabulary project to standardize commonly used terms and phrases within our content.
- Introduced a formal editing process with a levels-of-edit approach.
- Conducted a user information lifecycle analysis to guide our ongoing content model development (see Figure 1).
- Released a formal content model for installation instructions, defining optional and required components for a typical publication.
- Introduced new Adobe FrameMaker templates designed to transition information developers toward thinking semantically rather than thinking in terms of formatting.
- Began a pilot program with XML authoring tools and DITA.

Where We Are Now

One of the biggest challenges in this transition has been addressing process changes required to support topicbased authoring. We have to be sensitive to the impact of each new change

Figure 1. User Information Life Cycle



User information life-cycle analysis is a strategic component in planning for topic-based authoring and content reuse strategies. Understanding information requirements at each stage in the customer experience drives out content models and deliverables.

Many organizations can benefit from implementing a content

Strategy. You may have done your research and mapped out a transition plan, but no matter how thorough you are, you're bound to run into some surprises. Moving slowly and carefully can make the transition smoother.

on our ability to meet project deadlines. Looking forward, we need to consider the conversion of legacy documentation and the impact of that on existing translations. In addition, we face the challenge of managing topics instead of documents. Transitioning from a traditional, book-based approach to topic-

based writing requires many changes. Our near-term goals are to create content models, identify content reuse opportunities, develop a unified writing style and voice, and encourage our information developers to think and write in topics. While making the transition, we've purposely kept a slow pace in order to meet the demands of product releases and tight schedules. •

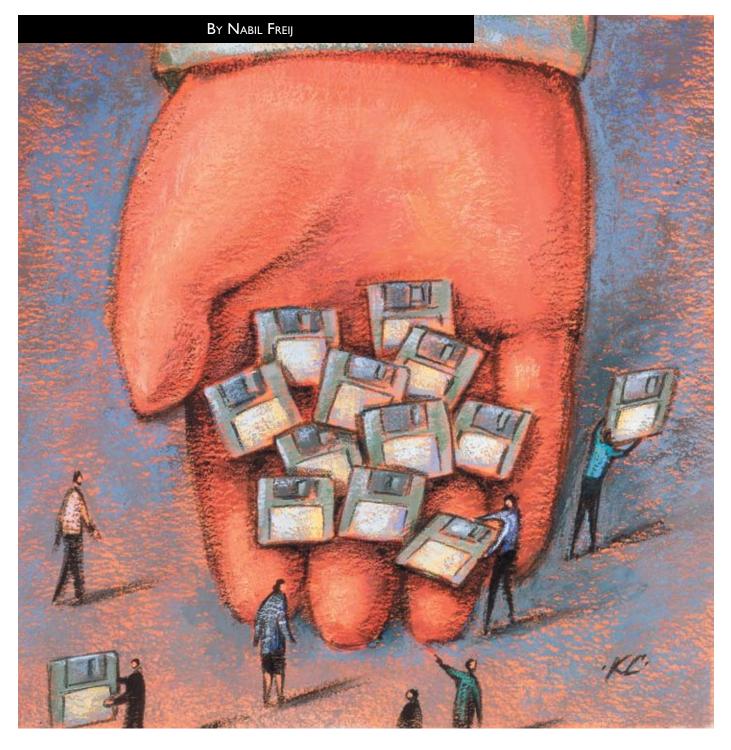
Jeanette Evans (jeanette.evans@sbcglobal.net) is an information developer at Rockwell Automation and holds an MS in Technical Communication Management from Mercer University. For the content reuse strategy described here, she was a member of the Style Guide and Process and Workflow task forces and is currently working toward implementing the strategy.

Julianne Forsythe (jkforsythe@ra.rockwell.com) is a content management specialist at Rockwell Automation, with a BA in Business Administration from Baldwin-Wallace College. For the project described here, she was a member of the pilot team and led the Tools and Technology Task Force; she continues to support implementation of this project.

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How to Correctly Initiate a New Localization Project

rndertaking a localization project is like making a Pixar movie; it involves both science and art. Each step of the process needs to be correctly planned, orchestrated, and executed to avoid a box-office flop. There are many steps involved in a new localization project that, if considered beforehand, will significantly improve the chances of a successful release.



Collect all necessary files for localization.

It is imperative that you know which files require localization. For instance, if you are attempting to localize a software product, you will need to collect and zip the following set of files, which will make up the localization kit.

- 1. Graphical User Interface files: These files come from your software application and contain the string tables and dialog coordinate information that the software uses to display the interface to the user. These files come in many formats, including Microsoft resource files (.rc), ASP .net (.resx), binary (.dll or .exe), Java files (.properties), PHP, XML, among others.
- 2. Online Help files: These include HTM, XML, or other formats that will provide the user with online instruc-

(EULA), Readme, Release Notes, or others that come with your software.

If you are localizing a Website, the entire set of files needed to run the Website should be identified and collected. This includes databases, images, Flash, Java scripts, HTM, ASP, PHP, PDFs, and all other source files requiring localization. For more information about localizing Websites, please read the InfoMail: Localizing your Website, www.globalvis.com/news/InfoMailQ4_06.shtml.

What languages are needed?

Once you have collected the files, your localization vendor can run analyses on them and determine the word, page, and image count, as well as the engineering and desktop-publishing time necessary to complete the localization effort. Your vendor can give you cost-

Derive a feasible preliminary schedule.

A preliminary schedule should include all necessary tasks for the project. Based on the territorial tier, some languages may need to be completed before others. While creating the project plan, make sure you include your localization vendor or group in the process and account for all required tasks so that key steps in the process are not overlooked. This will ensure the success and timely release of the localized product.

Pin down hand-off specifics.

Identify the delivery format for each file and make sure that your proofreaders can read these formats. Decide how feedback should be included so that it can be folded accurately into the product and the translation databases. For

Each step of a **localization project** needs to be correctly planned, orchestrated, and executed to avoid a box-office flop.

tions. It is best to collect all the source files (XML/HTM, images, and project files) that are needed. If these files are not available, the compiled help (.chm or .hlp) can be used to recreate the source files.

- 3. Manuals: These are the User Guides, Quick Start Guides, What's New Guides, Getting Started Guides, Tutorials, Training, and any other manuals that need to be localized. They are often authored in a desktoppublishing tool such as FrameMaker, XMetaL, InDesign, Quark, or Word. Source files are generally preferred over PDFs. Make sure you include any images, fonts, and other support files so that another party can open the files correctly.
- 4. Miscellaneous files: This could include installation scripts, license agreements

based scenarios for the various parts of the product you want localized. This is when you need to determine the languages and your budget for the localization efforts

Companies often divide territories based on tiers. For instance, a first-tier territory may include the English-speaking countries Japan, China, and Germany; a second-tier territory may include France, Italy, Spain, Latin America, and Korea; and a third-tier may be Russia, Poland, Czech Republic, and Hungary. Based on these tiers, budgets can be identified and allocated to the localization of the multiple parts of the product. For instance, tier one will require all GUI, Online Help, and Manuals to be localized; tier two will have only the GUI and Help; and tier three will require only the GUI to be localized.

instance, if your proofreaders print the files and make their edits on paper, it will be hard to provide the changes to the localization team for insertion into the product and databases. If intermediate files containing the source and target strings are used instead, and changes are entered with revision tracking in Microsoft Word, the localization team can easily receive files via email or FTP, check the changes for accuracy, apply them, and then update the translation database accordingly.

Also identify the format of the finished files. Most files should remain in their native formats, which will eliminate any file processing on your side. Indicate if you want the translation memories along with the files, which will allow you to run an analysis against the source files to check for completion. Incomplete TMs

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will increase the costs of future updates. Inform your vendor if you also want the intermediate files in order to create the databases or use ContextTM.

For GUI files, indicate what language encoding should be used. When the source is English, it is easy to go from one format to another; when it is a double-byte language such as Japanese or Chinese, the correct encoding will save you many headaches.

If you are going to print localized manuals, identify what paper size is appropriate. For example, European manuals are often printed in A4 size as opposed to US letter. Tell your vendor up front about this requirement to eliminate additional desktop-publishing work. Do you want PDFs as well for the manuals? Should they have bleed or registration marks? What resolution should they be? There are a slew of questions to be asked and answered before the project starts.

Decide on the communication and file-transfer methods.

How will you initiate a project: via email or an online collaboration solution such as a translation management system (TMS)? Also decide on the method for transferring files back and forth: will it be through email, FTP, or an online medium? Work out how often you should receive status updates and through what means (telephone, email, or online solution). Ensure that you can track progress when the project manager is away: identify who will coordinate queries from translators and other staff, assign the appropriate contact person to answer them, as well as plan the standard turnaround time.

Helpful Tips

It is useful to pin down the details so that expectations are met. Many clients initiate a project by sending their vendor an email asking for a proposal and uploading the localization kit on an FTP server. Some companies offer an online solution that allows their clients to initiate a project and post files online for review and estimates.

Communication between vendor and client often happens via email and, in

Feasible Preliminary Schedule

For a feasible preliminary schedule, the following tasks need to be considered and planned for:

- Analyze files and prep to ensure correct processing and avoid last-minute problems and debugging. You may need to invest in creating a special macro or filter to effectively handle certain file formats or tags that are embedded in the GUI files.
- 2. Identify the process to follow for translation reuse and translation memory building. Should all files rely on the same translation memory, or should you break up the GUI from the Help and manuals? This step is critical to minimize long-term costs and delivery time during future updates of your product.
- 3. Allocate the time needed for translators to review any style guides, terminology tables, and perform the translation work to deliver adequate quality.
- 4. Allocate time for a second translator review of the source against the target.
- 5. Identify who will be doing your in-country proof and allocate the necessary time for it. Language proof, which gives your users the ability to check the localized product and offer feedback before its release, is an important step that is often neglected (read Selecting In-Country Reviewers, www.globalvis.com/news/InfoMailQ3_04.shtml). Proofreaders need to be an integral part of the team before the localization project starts. They can tremendously improve the quality of the localized product with their advanced product knowledge.
- 6. Plan for engineering work needed to resize dialog boxes, and perform precompilation file processing and localization quality assurance (QA).
- 7. Establish an adequate plan for post-compilation QA. When the localization application is run on the required platforms and operating systems, post-compilation QA helps to verify that there are no problems with the translation, resizing, or other engineering problems that have to be addressed before the release. Read Localization QA, www.globalvis.com/news/InfoMailQ2_07.shtml, for more info.
- 8. Plan for bitmap or image capturing (images of the GUI that are used in the online help and manuals) after the software GUI is localized and finalized (see www .globalvis.com/news/InfoMailQ3_03.shtml).
- 9. Ask your desktop publisher to make sure that the online help files are properly formatted, links are not broken, tables and images are properly sized, and that manuals are laid out correctly with the correct pagination, tables of content, indexes, and overall formatting. You may want to consider another proof for the final Help and Manuals at this point.
- 10. Account for any changes in the source files that will occur after the localization has started. It is best to plan for an acceptable number of updates and control them, rather than use an ad hoc process that will dampen the localization team's momentum and cause frustration. Although engineering cannot be stopped from adding and making changes to the product while localization is in progress, it is important to control when the localization team gets the updated files. To plan for these updates, read Are Last-Minute Updates Wreaking Havoc with Your Localization Budget?, www.globalvis.com/news/InfoMailQ2_03.shtml.

tools of the trade

urgent cases, by phone. An online solution will help keep track of all open issues and any specific requirements for the project in a central database available to all stakeholders. The client database is like a knowledge base that builds in depth and importance over time.

Queries about the source files can be sent over email as a Word file or, better yet, in an Excel spreadsheet. If your vendor offers an online wiki-like solution, it may be the best option as all entries will become part of the knowledge base and available to all users.

Status reports are usually provided on a weekly basis or on project urgency. An online solution that keeps track of the project tasks can be used to replace weekly updates with on-demand access to project status.

Anticipate and plan for the unknown.

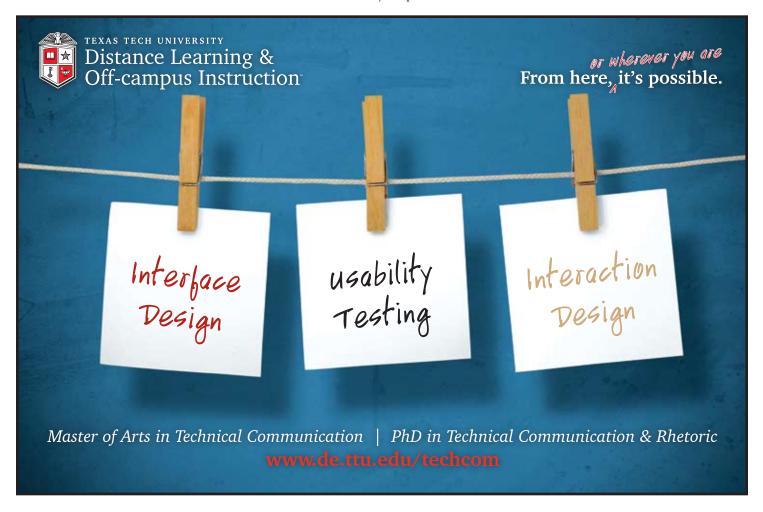
Software release dates are notoriously known to change. Without major dollar commitments, such as a manufacturing line and labor-force investments awaiting the release, it is typical for the source-code freeze, beta release, and production release to slip by weeks or months.

Delays may cause problems for your localization team because they depend heavily on the availability of translators to accommodate the delivery schedules. This is why contingency plans should be in place to allow for source-file availability lulls. In addition, your localization vendor or group needs to be flexible and accommodate any reasonable delay without your incurring additional costs or grievances.

When you work with professionals who account for all of the above *before* the initiation of your next localization project, your product will be released on time, with minimal problems, and without stress. You will also enjoy your work more since you will be able to take a well-deserved vacation immediately after the release of your product!

*Note: For more information and to become better acquainted with the issues localization projects face, I have written a white paper, 10 Tips on Achieving Quality in Localization and Translation. If you need a copy, email me and I will send you one. •

Nabil Freij (nabil@globalvis.com) is the president, founder, and owner of GlobalVision International, Inc. (www.globalvis.com), and a software localization and translation specialist. He is trilingual and holds an MSEE from Brown University and an MBA from Bryant University. Freij has worked for twenty years in the hardware, software, and localization industries. He has traveled the world and lived in five countries. He is frequently published and quoted.



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Atlanta: A Harmony of Beauty and History

By Sara C. McCorkendale, Member

The city of Atlanta, Georgia, offers a wide variety of things to do, combining the beauty of the area with a rich history. Birthplace of civil rights leader Martin Luther King Jr., home of literary giant Margaret Mitchell, world headquarters for Coca-Cola, and home to the world's largest aquarium (to name just a few things), Atlanta hosts truly diverse options for sightseeing, historical knowledge acquisition, and contemplative natural scenery.

Historical and Tourist Sites

The Fabulous Fox Theatre, in nearby Midtown Atlanta, opened in 1929 as both a temple for the local branch of Shriners and a movie theater palace run by movie mogul William Fox. In the intervening years since it's opening, the Fox Theatre has survived depression, mortgage foreclosure, bankruptcy, competition, television, real estate development, and age. This beautiful building is now a designated National Historic Landmark and Georgia Museum Building. Visitors to the Fabulous Fox Theatre will "encounter an indoor Arabian courtyard with a sky full of flickering stars and magically drifting clouds, a spectacular striped canopy overhanging the balcony, [and] stage curtains depicting mosques and Moorish rulers in hand sewn sequins and rhinestones." Take a tour or see a show; you won't be disappointed.

The World of Coca-Cola at Pemberton Place is the "only place where you can explore the complete story—past, present, and future—of the world's best-known brand." This site features Coca-Cola paraphernalia from around the world illustrating both the brand's long history and diverse distribution. The World of Coca-Cola also features interactive exhibits, such as a 4-D movie, a fully functioning bottling line, the world-famous Coca-Cola Polar Bear, and a tasting room with over 60 products from around the world.

The world's largest aquarium, the Georgia Aquarium, is located next to the World of Coca-Cola, "with eight million gallons of fresh and marine water and more aquatic life than found in any other aquarium." This fun site features such exhibits as Cold Water Quest, Georgia Explorer, Tropical Diver, Ocean Voyager, and River Scout. Watch beluga whales, laugh at frolicking otters, or shiver with the penguins.

For *Gone with the Wind* enthusiasts, not only is Atlanta Margaret Mitchell's final resting place (see details on Oakland Cemetery

below), it is also home of the Margaret Mitchell House where she wrote the majority of her famous novel. Through photographs and archival exhibits, this 60- to 90-minute tour will illuminate the woman behind the story.

Atlanta is also the birthplace of Civil Rights leader Martin Luther King Jr. His birthplace home and The King Center, established in 1968 by Coretta Scott King, inspire visitors from all over the world with Martin Luther King Jr.'s message of justice, peace, and equality. Visiting the center, paying homage to this great leader, and learning about ongoing efforts to spread his message and vision will be time well spent.

Atlanta is also home to several museums, including: Imagine It! The Children's Museum of Atlanta; Fernbank Museum of Natural History; Center For Puppetry Arts; Jimmy Carter Library and Museum; and Turner Field: Atlanta Braves Museum & Hall of Fame.

Outdoor Activities

For outdoor enthusiasts, Atlanta offers a wide variety of beautiful landscape both in the city and the surrounding countryside. The Atlanta Botanical Gardens offer a year-round panorama of beautiful flora. Outdoor collections include winter, herb, rose, and Japanese gardens as well as a beautiful hydrangea collection that peaks in late May with stunning blooms of pink, blue, and white. Indoor collections include displays featuring the Tropical Rotunda, Desert House, and Orchid Hall.

Another beautiful stroll is the historic Oakland Cemetery where such luminaries as Bobby Jones, Margaret Mitchell, and Maynard Jackson are buried. Founded in 1850, this garden cemetery is a "showplace of sculpture and architecture, and a botanical preserve with ancient oaks and magnolias." Just a few minutes from downtown, this idyllic spot also presents a gorgeous view of the Atlanta skyline.

Also located a few minutes outside Atlanta is the soothingly beautiful Sweetwater Creek State Park complete with Civil Warera textile mill ruins, a bubbling waterway, and sunlit walking paths. The 215-acre park also features fishing and canoeing. Supplies and souvenirs can be found in the Visitor Center (www.gastateparks.org/net/content/item.aspx?s=32917.0.1.5)—the most environmentally responsible building in Georgia (LEED-NC PLATINUM).

Take a short drive outside the Atlanta perimeter to visit the historical Stone Mountain Park. Stone Mountain is home to the world's largest piece of exposed granite, featuring three confederate generals carved into the side. This five-acre tract features hiking, fishing, golf, and spectacular views. There are shops reminiscent of bygone centuries; railroad, riverboat, and Duck tours of the park; and great entertainment including a laser show set against the mountain. This must-see destination was cited by the *Atlanta Journal-Constitution* as one of "35 Natural Wonders in Georgia You Must See Before You Die."

For More Information

For more information on any of these attractions, visit their Websites (listed below). Also be sure to check out *Atlanta City Pass* at www.atlanta.net/tourtravel/seedo/cityPass.html for discount-

ed combination passes to many of these attractions and more $\,$ *All quotations from respective Websites. in the Atlanta area. \bullet

Fabulous Fox Theatre	www.foxtheatre.org
World of Coca-Cola	www.worldofcoca-cola.com
Georgia Aquarium	www.georgiaaquarium.org
The King Center	www.thekingcenter.org
Margaret Mitchell House	www.gwtw.org
Fernbank Museum of Natural History	www.fernbankmuseum.org
Imagine It! The Children's Museum of Atlanta	www.imagineit-cma.org
Center For Puppetry Arts	www.puppet.org
Jimmy Carter Library and Museum	www.jimmycarterlibrary.org
Turner Field: Atlanta Braves Museum & Hall of Fame	atlanta.braves.mlb.com
Atlanta Botanical Gardens	www.atlantabotanicalgarden.org/home.do
Oakland Cemetery	www.oaklandcemetery.com
Sweetwater Creek State Park	www.gastateparks.org/info/sweetwater
Stone Mountain	www.stonemountainpark.com



Preliminary Program Available in Late January

The *Preliminary Program* for the Technical Communication Summit, STC's 56th Annual Conference—scheduled to be held 3–6 May 2009, in Atlanta, Georgia—will be available in late January.

The Technical Communication Summit is the world's largest gathering of technical communicators. It provides a terrific opportunity to talk with professionals who share your interests, to discover new employment prospects, and to learn about fresh tools and strategies that can make your job easier. The Preliminary Program includes general information about education sessions, networking opportunities, preconference workshops and tutorials, certificate sessions, Leadership Day, lodging and transportation, and registration details. Make sure you watch for the Early Bird special registration rates.

As the conference approaches, don't forget to check the STC Website at http://conference.stc.org for more detailed information and updates. We look forward to seeing you in Atlanta! •

STC's Academic Programs Database

BY SALLY HENSCHEL, Member

Perhaps you are interested in continuing your education and need help finding the right program of study. Or maybe you are a member of an STC community seeking involvement with student organizations for events and scholarship programs. Or perhaps you are an educator seeking research partners in nearby universities. Whatever your purpose, if you need to find information about university technical communication programs, STC's Academic Programs Database (www.stc.org/academic/index.aspx) can make your search much easier.

In the autumn of 2006, the STC Academic Liaison Committee and the STC office staff undertook the task of redesigning the Academic Programs Database, a database of institutions offering programs of study in technical communication. The redesigned database offers much more information than the previous version. Expanded search options allow users to narrow their searches by location, type of program, and method of course delivery. Also, the listings in the database are generated dynamically, and all updates appear immediately. The new database was completed in late August 2007.

Information on Programs of Study

The Academic Programs Database contains information on programs of study that many STC members seek. Career advancement through academic programs is always a hot topic among STC members. In the STC Forum (http://stcforum.org), under the topic of Technical Communication, the most active forum is Careers, Training, and Education. Practicing professionals seeking information and advice on continuing their education can supplement their knowledge by searching the new database.

Online Programs

To date, 36 institutions have created records for online programs. Examples of online programs include noncredit courses, undergraduate or graduate certificates, graduate diplomas, and bachelor's, master's, and even doctorale degrees. The database contains information about online programs in several topic areas, including technical communication, technical communication and rhetoric, multimedia writing, professional writing, information design, communication management, information design and technology, instructional design, content development, and visual communication and graphics.

For STC Communities

The Academic Programs Database provides needed contact information for STC communities seeking involvement with student organizations. The information in the database might also help communities seeking recognition through the Community Achievement Awards (CAA). In past years, the activities necessary for a Community of Distinction award in the CAA included encouraging student participation in community events and sponsoring events related to technical communication

at local colleges. The Academic Programs Database provides contact information that can help chapters compete for these awards

Contacting Interns or Research Partners

Members in industry who are seeking interns or research partners can use the database to find up-to-date contact information on the academic community.

Whether you seek to continue your education or to make contact with academic program directors, you will find that a visit to STC's Academic Programs Database provides an interesting, informative snapshot of current programs in technical communication.

Search the Academic Programs Database:

www.stc.org/academic/index.aspx

Add a school to the Academic Programs Database:

www.stc.org/academic/adminHome.aspx

If you have any questions about the Academic Programs Database, please contact STC Academic Liaison Committee member Sally Henschel (*sally.henschel@mwsu.edu*). •



Marian Norby Scholarship Applications Due 15 February 2009

In 2003, the STC Board of Directors resolved to create a scholarship fund in the name of longtime member Marian O. Norby, who passed away in 2002 at age 85. In her will, Norby left almost \$200,000 to fund a scholarship program.

The Marian Norby Scholarship benefits female US federal government employees who are interested in obtaining training in technical communication to improve their employment opportunities.

About Marian Norby

Norby was a feminist activist, a founding member of the Washington, DC chapter of the National Organization for Women (NOW), and a member of various service and advocacy organizations. During World War II, she worked for the Library of Congress and the Foreign Economic Administration (FEA). In response to the gender discrimination she witnessed

in government agencies, Norby developed a training program for FEA secretaries. She later accepted a secretarial position in the White House and traveled with President Harry Truman during his 1948 election campaign. After the election, Norby served as a writer and technical editor for the US Air Force.

Norby served as a competitions judge for STC's Washington, DC chapter and contributed to the chapter newsletter. She also managed the STC Tellers Committee, which tallied the results of Society elections for 16 years. Norby was named an Associate Fellow in 1992.

About the Scholarship

The deadline for receipt of applications for the Marian Norby Scholarship is **15 February 2009**. One scholarship of \$2,500 will be awarded. Application forms and additional information can be found on the STC Website at www.stc.org/edu/scholarship Info01_norby.asp. Completed applications should be sent to the following address:

Scott DeLoach 834 C Dekalb Avenue NE Atlanta, GA 30307 **0**

Good Year for Member Benefits

Afew days before the STC Technical Communication Summit in Philadelphia, MadCap Software alerted STC staff that it would be announcing a special, 10 percent discount to STC members on its software offerings. During the conference, ComponentOne followed with a 15 percent discount on two of its premier offerings: Doc-To-Help 2008 and DemoWorks. The savings for members taking advantage of the discounts would be worth hundreds of dollars, much more than the cost of STC dues.

Later in the year, as economic uncertainty caused some companies to endure layoffs, putting technical communicators on the street, activity in STC's Career Center (www.stc.org) doubled. Many members were pleasantly surprised to learn that they have access to an exclusive, 14-day advance look at all new job listings, giving them a two-week jump on their competition. Those looking for new positions were also able to improve their networking at chapter meetings and virtually on SIG listserves.

The enhanced data for STC's Salary Database, an exclusive membership benefit, showed an overall growth in technical communication jobs of 3.1 percent, with 60 percent of states indicating an increase in the number of jobs. The 2007 data, provided by the Bureau of Labor Statistics, also named Georgia as the state with the largest increase and Florida with the sharpest decrease in technical communication jobs.

The results of new research on best practices were offered as part of the Society's goal to provide STC members with the latest industry research on technical communication. Two surveys, *Documentation Goes Global* and *The Migration from Unstructured to Structured Authoring*, were completed and published in partnership with Aberdeen Group. For one year, members have *free* access to the results of these studies in Aberdeen's library—a \$995 value in the market place.

Members also received monthly issues of *Intercom* exclusively—no subscriptions are sold to nonmembers. The magazine's updated mission is to serve the technical communication professional by presenting articles on trends, tools, techniques, and professional development. The Society's peer-reviewed, quarterly journal, *Technical Communication*, serves the profession by presenting scholarly papers and research that advance the Body of Knowledge.

"It's been a good year for membership benefits," expressed STC Executive Director Susan Burton, CAE. "Most of these new benefits go directly to improving the members' bottom line, and many are available only to members." The 2008 membership period ends 31 December. Renewal notices with member record update forms were sent to members in October and November. "We're very pleased to be meeting the needs of members with tangible, cost-saving benefits." •

24 intercom December 2008

the XML strategist

Casting a critical eye on the Next Big Thing in technical publishing.

What Do Movable Type and XML Have in Common?

By Sarah O'Keefe, Associate Fellow

n the mid-1400s, Johannes Gutenberg developed a printing press that used

movable type. He began printing the famous Gutenberg Bible around 1452. Movable type was the enabling technology that made printing economically feasible.

Instead of creating printing plates as single-use, pagebased stamps, Gutenberg broke down the granularity of printing to the individual letter and made the letters themselves reusable. This technique greatly reduced the cost of printing—before movable type, books were precious, rare objects and were usually copied by hand over a period of months or years. A large library, such as one owned by a prince, a wealthy monastery, or a leading university, might boast of owning 1,000 books. Today, many of us have a comparable number of books on our shelves at home.

Gutenberg changed the economics of information distribution, and I imagine that many of the artisans who devoted their lives to creating glorious, hand-copied books complained bitterly about boring printed books. It's also worth noting that many of Gutenberg's Bibles were illuminated (by hand) after printing, and those illuminations were

specifically commissioned by the buyer. That is, there was a transitional period in

which printing and illumination were combined to create the finished book.

Like movable type, XML changes the economics of publishing. But where movable type

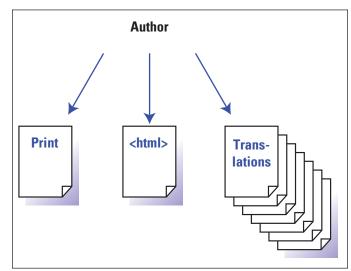
changed the economics of a mechanical process—creating printed copies—XML changes the economics of content authoring, formatting, and customization.



The Economics of Authoring with XML

Since the 1980s and the adoption of desktop publishing as the dominant workflow, authors have been responsible for not just writing and editing but also document formatting and production—the process of finalizing content for delivery. With XML, production

Figure 1. In a traditional workflow, each output format in each language requires a production effort.



responsibilities are stripped away, and authors focus solely on writing and editing their content. XML also enables the creation of *enforceable* document templates. The decrease in authoring responsibilities results in increased efficiency and productivity for authors.

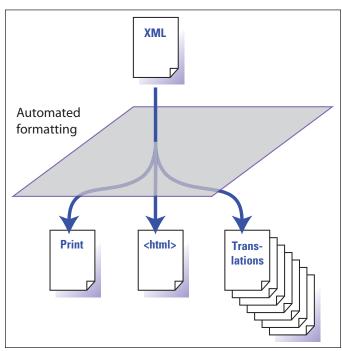
It's worth noting that we are talking here about authors who are equally skilled in the two workflows. A person who is familiar with desktop publishing and just learning about XMLbased authoring will face a significant learning curve before becoming productive in XML authoring. Perhaps it would be better to say that XML-based authoring has the potential to increase efficiency and productivity over what's possible in a desktoppublishing environment.

The Economics of Formatting with XML

In an XML-based workflow, content is formatted automatically when the final output is produced. Instead of formatting content as it's written, formatting is added as a separate layer. From a cost perspective, this results in eliminating an ongoing cost (formatting while authoring), and replacing it with a one-time cost (development of automated formatting). The cost savings realized from automated formatting are multiplied when you have multiple output formats and, especially, multiple output languages.

For very small organizations with no localization requirements, the cost of implementing XML may exceed the savings realized today. Over time, the

Figure 2. In an XML workflow, authors create XML files without formatting instruction, and production is automated.



tools and technologies will improve and the implementation cost will drop, making XML appealing to smaller and smaller groups.

For organizations with large amounts of content, however, the cost savings are compelling. Manual page layout and copy-fitting may result in higher-quality printed documents but, like medieval manuscript illumination, it is destined for obsolescence because it costs too much.

The Economics of Customized Content with XML

Content customization is a thorny problem in traditional workflows. The best possible solution has been to use conditional text or to build tags to flag information as conditional, and then to generate several versions of the output files. With XML, it's possible to ship a single set of content and then display different information depending on the requestor's profile.

You can achieve a limited amount of customization without XML. If you need a dozen or fewer variations of the final output, the conditional text/build tag approach will likely work. XML, however, gives you the ability to do the following efficiently:

- Set up large numbers of variations.
- Filter the content when the user requests information, rather than when the content is published.
- Create multidimensional conditional content, such as information that is filtered by customer and also by platform.

It's not impossible to do any of the preceding items without XML, but it's prohibitively expensive.

The Vision of Content Integration

Automated formatting and more sophisticated conditional processing are important but incremental steps forward in publishing. XML technology can also provide the foundation for a new approach to technical content. The automated processing enabled by XML is what makes automated formatting and production possible. But we can take XML content much farther and begin to use it as the foundation for many different types of uses. For instance, imagine an XML file that contains error messages, descriptions, and troubleshooting strategies. This content would be processed to create an error message appendix in documentation, but it would also be used to generate the error messages displayed by the software. That is, the XML file would be the source file for technical content and be an integral part of the software.

It's also possible to integrate user-generated content, such as wikis, blogs, and forums, with the documentation created by professional technical writers. Here, XML can serve as the enabling technology that makes it possible to mix content from many different sources and deliver it to the end user in a unified presentation. Provided that each type of content is stored as XML, we can build software that reaches into the various types of content and extracts the relevant chunks of information. This

content integration is the new frontier for XML-based information delivery, and I look forward to seeing it evolve over the next few years.

Opening Up New Possibilities

More than 500 years after the fact, it's easy to see the impact of Gutenberg's invention. From our vantage point inside the upheaval caused by XML, it's much harder to assess where XML might take us. I believe, however, that we have barely begun to explore what structured content can do for us. •

SUGGESTED READING

For an excellent description of Gutenberg's impact on printing and the historical context, refer to Jean-Marie Dodu's *The Gutenberg Bible: A Commentary* (Paris: Editions Les Incunables, 1985).

The British Library has a Gutenberg Bible online, along with background information: www.bl.uk/treasures/gutenberg/homepage.html.

Sarah O'Keefe (xmlstrategist@ scriptorium.com) is founder and president of Scriptorium Publishing Services, Inc. (www.scriptorium.com), based in Research Triangle Park, North Carolina. She is senior member of the Carolina chapter and of the Consulting and Independent Contracting and Management communities.

Thanks to Terry Smith of Scriptorium Publishing who created the graphics for this article.

business matters

Are you self-employed? Would you like to be? This column explores the joys and challenges of managing your own business in technical communication. Please share your experience and ideas. Contact Bette Frick at *efrick@textdoctor.com*.

The Best Job I Never Took

BY ELIZABETH (BETTE) G. FRICK, Senior Member

y father was a gambling man, reformed by my mother to playing poker only once a month. On Saturday mornings after poker club, still smelling of cigars,

he'd wake me up singing, "You've got to know when to hold 'em, know when to fold 'em." It wasn't until I was an independent business owner that I understood the wisdom of Kenny Rogers' song.

This article will explore decisions that independents and other technical communicators make in accepting or rejecting potential paid work. Please note: I'm not writing about decisions we all make at the beginning of our career or business. Most of us take on work without the luxury of being able to say, "No, not at this time," because we are establishing ourselves in the field. When I first opened shop, I took any and every contract that came along, grateful for the work then and grateful now for all those learning experiences.

Selectivity as a business strategy has helped save me time, stress, and money. I first subscribed to the concept of selectivity when I read Attracting Perfect Customers: The Power of Strategic Synchronicity by Stacey Hall and Jan Brogniez. This workbook asked me to list all the quali-

ties of my best client and then think about accepting only similar clients in the future. (See my article, "Developing a Strategic Plan," in *Intercom* July/ August 2005.)

What impressed me most was the workbook's suggestion that we all have a "tiny inner voice, the one that speaks for your instincts, which [can say to us], 'Be careful. This one could be more trouble than he's worth. This customer is not meant for you.'"

Wow! They must have been reading my email! I was still smarting from a disaster with a new client that had ended with her snarling, "What part of 'No' don't you understand?" I submitted my deliverable and left the project immediately; however, I was still "grinding" on what had gone wrong.

Looking back, this new client had questioned every line item on my bid, trying to get me to lower the price without reducing deliverables. That should have alerted me to a problem right away. By contrast, my "perfect customers" never questioned my very reasonable bids; when I provided them with options, they usually selected quality over cost and showed respect for my suggestions. Every new contract proceeded to a good conclusion and more work for me.

After studying the message of Attracting Perfect Customers. I used my newfound intuition to decline work. I was asked to teach writing to the employees of a Public Works department of a local city. The director disparaged the writing of his employees but could not share any specific examples. I asked to interview a few of the writers, who told me that the director read every word of their communication, demanded changes in their texts based on his own quirky writing standards, then rewrote their revised texts back to their original version. The three employees I interviewed were frustrated almost to tears. I asked them if they thought the director would be open to coaching or suggestions or even might attend the class. They had no hope for such an intervention. I declined to pursue the contract because I recognized how emotionally charged the classroom could become and how ineffective I would be. Although I would have liked the revenue from this contract, I felt that it was not going to be worth it.

Alice Jane Emanuel, who lives in the Netherlands and owns a communication company called Comma Theory, shared a similar story.

A few weeks ago, I interviewed for something that looked great on paper: They would meet my current salary, they offered decent benefits, and the position was technically challenging.

The warning signs started to show up immediately with my first impression of the company: a chaotic and dirty office space. The person interviewing me, who would be my boss, said he would be changing jobs within the company soon but that he did not know what he would be doing. "For now, assume I would be your boss." Fine.

We discussed the company. He mentioned they would soon relocate to a larger open-plan office situation. They would be closer to the railway station and he would expect "eight more minutes of productivity per employee per day." The co-interviewer, an exhausted-looking corporate communication manager, met my eyes in one of those dead stares that says, "Just don't react." Nothing I can't handle, maybe, but I'm starting to get an unpleasant feel about the company.

Both interviewers then began to describe the man who would be my chief subject matter expert. "Can you work with difficult people?" they asked. "All my career," I answered. "Piece of cake." They loosened and described him as "challenging" and "not always easy to work with." I know that it's a Dutch trait to

"Once we've learned ... when to 'fold 'em,' we can share it with others."

speak plainly, so I take this in with ease.

The SME entered the interview. We spoke for a few minutes in a relaxed way and he mentioned that he brought material along to explain his product's technology. "No other so-called technical writer has been able to understand it," he said. I asked to see it. He reared back, "I'm not used to being bossed around by a candidate!" It really was almost a shout. I smiled but did not otherwise react.

At that point I realized I could not possibly take the position. To do so would be to fight every single working day just to be able to do my job. It was a blow, but I comfort myself when I scan the job postings: That company is still looking for someone.

Suzanne Guess of 210 Communications, a fellow member of the Consulting and Independent Contract ing Special Interest Group (CIC-SIG), has worked out a way to recognize warning signs.

A direct mail supplier in town wanted graphic design services as well as freelance writing, and I have resources for both. We signed a contract and started work, but I could not nail him down on requirements (warning sign #1). Soon he was calling me at night and on weekends. When I didn't answer, he would call my staff directly (he called the graphic designer at 2 AM), even though our agreement was to work through me (warning sign #2). After five weeks, he still had not paid the 30 percent down payment (warning sign #3). When I talked to him about it, he became verbally abusive (warning sign #4). After that conversation, I checked my state's online court records (strategy #1) and found that several companies had sued his company for nonpayment—and won. The next day, I called him and exercised the clause that allowed me to get out of the contract without any repercussions but still sue for services provided (strategy #2). I followed up with a letter and then sued him in small claims court (strategy #3).

What it really boils down to is that I started to realize that he was sucking a disproportionate amount of energy based on the contract dollar amount he brought in. And then there was the verbal abuse not only to me but to the people who work with me. Having their loyalty is far more valuable than any dollar from him.

Another CIC-SIG member. Thea Teich of Teich Technical and Marketing Communications, suggests increasing rates as another alternative to turning down a difficult client. Thea explains that "a Madame D [code name for a difficult client] project could lead to incipient ulcers, headaches, eyestrain, and extreme frustration.... Only one [colleague] is still working on projects for Madame D. And, while I don't know exactly how much this writer is charging her, I know it's more than what I did. But she's put up with the aggravation factor for a long, long time."

CIC-SIG member Carol Elkins, still smarting from a "project from hell," believes that having an airtight contract will at least begin to cover the difficulties she encountered on a recent project and may help avoid legal costs down the road. "It's sometimes hard to read the signs that a client may be difficult. I'm wired to keep going and hope for the best. In this case, that didn't serve me well." Carol's company is A Written Word.

As the Kenny Rogers' song suggests, recognizing when to turn down potential work ("know when to fold 'em") will help you spot good work when you see it ("know when to hold 'em"). Experience teaches us these decisions, but we could all lessen our learning curve by asking questions and relying on fellow independents for wisdom. I'll admit that I've found it hard to ask for help; I often feel isolated as an independent.

Recently, I had a colleague, Donna Marino, ask me for advice about a bid she wanted to make on a project she had never done before. Part of our interaction was her recognition that, "Because of tough financial times, it seems I'm always willing to cut my rates, but I know that's a bad idea. Then I feel resentful for doing work at lower rates than everyone else. It's not a good cycle and I've been trying to break it. It's just that when I can't find work, some money seems better than none."

Together, Donna and

I walked through the work required (a lot) and the money offered (not enough). Then, she wrote, "Well, now I'm having second (third?) thoughts. This is a sticky situation because a friend referred me and I'm concerned that I'll impact his relationship with the client if I refuse to take the project at this point (he is also concerned about that). Nothing is ever easy, is it?!"

Eventually, Donna turned down the work and immediately received another, more appropriate, contract from a client. It was wonderful to be a part of the discussion, to recognize the need we all have in keeping work and making money, and to watch someone else choose the right path and be rewarded for it.

Once we've learned our own priceless lesson of knowing when to "fold 'em," we can share it with others. We'll all advance in our careers through this valuable process and improve our individual and company performance. •

Elizabeth (Bette) Frick (efrick@ textdoctor.com), the Text Doctor®, teaches technical and business writing in Denver and in companies and organizations both nationally and internationally. Her interactive classes and practical workshops help improve communication skills. She holds a PhD in English from the University of Minnesota. She served as president of the Twin Cities chapter (2003–2004) and recently served the Rocky Mountain chapter as seminar manager.

information design

This column focuses on the basic principles of information design, the branch of technical communication that uses an understanding of how we humans process and understand information to develop more effective techniques to present that information. Please send your comments, questions, articles, and suggestions for future articles to the column editor, Geoffrey J. S. Hart (ghart@videotron.ca).

Typography 101B: The Role of White Space in Making Words Readable

By Geoffrey J. S. Hart, Fellow

n the previous article, we looked at how line length

and line spacing affected readability. In this column, we'll carry that analysis to a more micro level by examining the spaces between words and characters.

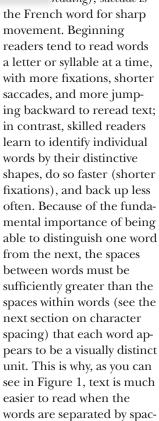


If you look closely at a page, you'll notice that your eyes only encompass a certain amount of text in sharp focus—typically no more than half a dozen letters on either side of the point where your eyes come to rest, which is known as the *point of fixation*. The farther an object lies from that point, the fuzzier it appears. The portion of the line of text containing your fixation point will be quite clear because it corresponds to the region of foveal vision, which represents the part of the visual field processed by the fovea, the part of your eyes that specializes in sharp detail (http://en.wikipedia.org/ wiki/Fovea).

Within each field of vision, your eyes use white

space to recognize where each word begins or ends,

and make a series of tiny subconscious movements called *saccades* between words or small word groups (http://en.wikipedia.org/wiki/Eye_movement_in_language_reading); saccade is



es than when they are not. Although skilled readers can still pick out the words even without the spaces, Figure 1 shows why overly tight word spacing can decrease readability: The task is more difficult when the words aren't distinct. On the other hand, the space between words must not be so large that the words no longer appear to be part of the same line of type or so that the spaces appear more prominent than the words; when that happens, more saccades and back-tracking are required and reading slows.

Figure 1. Why word spacing is important. Compare the readability of the unspaced (top) and spaced (bottom) text.

Wordsnotseparatedby spacesaredifficulttoread.

Words separated by spaces are easier to read.

Character Spacing (Kerning)

As is the case with spaces between words, spaces between characters must be sufficiently small that the letters form a single visual unit (i.e., a word) rather than having each letter appear to be a distinct word. In addition, the spaces between characters must be sufficiently large that the characters do not blur together, sacrificing their

distinct shapes. Special characters called ligatures in professional versions of computer fonts make the problem obvious: although ligatures such as ff and fi are typographically elegant, modern readers (those who have grown up since the age of computerized typesetting) are less familiar with them and may misread them (respectively, as a stylized capital H and lowercase h). The same problem occurs with other letter pairs that lack specific ligatures, such as nn: If the two letters fall too close together, they're easily misread as an m.

Kerning is a typographic technique based on the different internal amounts and distributions of white space in each character. When you kern, you shift pairs of characters closer together or farther apart to optimize the use of this space. If you compare a W with an A, for instance, you can see large amounts of white space under the leftmost and rightmost (\and /) strokes of the W, whereas a similar amount of white space appears above the leftmost and rightmost (/ and \)strokes of the A. In this case, it's obvious how the strokes of the A could nestle under the strokes of the W, whereas the rigid crossbar of a T prevents the letter from coming any closer to the vertical stem of an I (see Figure 2).

Many factors interact to affect optimal word and character spacing.

Figure 2. Good kerning (top) efficiently retains only the white space required to separate adjacent characters, as in the AW combination; excessive kerning (center) brings adjacent letters so close together that they merge into a single character, as in TI. In contrast, overly loose kerning (bottom) makes the spaces within words appear the same as the spaces between words.

 $A W \rightarrow AW$ $T I \rightarrow TI$ $a \text{ and } b \rightarrow a \text{ a n d b}$

Most modern software provides some form of automatic kerning that attempts to optimize the white space within and between letters. This information is usually embedded as a "kerning table" within a computer font file, but you can usually fix any problems resulting from a designer's injudicious choice of kerning values by means of optical kerning, in which you manually adjust the space between two letters to account for perceived changes in spacing that arise when you enlarge or shrink the type. Most modern software also offers a *tracking* option that adjusts the spacing between all selected groups of characters, whether adjacent letters can easily slide closer together (as with A and W) or cannot (as with T and I). For this reason, kerning is generally more successful

than tracking at efficiently using tight space without sacrificing legibility.

The problem with kerning and tracking is that you can easily render an otherwise perfectly legible typeface illegible, either by specifying such tight kerning that the characters merge and lose their distinct identities, or by using such loose kerning that the characters within a word no longer appear to function as a single unit. Both problems compromise reading efficiency, since they make it more difficult to recognize words and that the words function as single

Accounting for Other Factors

As in the case of line length and spacing, many factors interact to affect optimal word and character spacing. Type size is probably the most important. Word spacing must typically increase at large type sizes. For example, the amount of space between two words in this article would clearly be insufficient if the words were scaled to billboard size; the spacing must expand proportionally. Similarly, character spacing must change with type size. The standard kerning tables that accompany a font are usually designed for a specific and narrow range of type

sizes, and the pair-kerning built into each font works well only for those sizes. For much smaller or larger sizes, optical kerning does a better job of preserving legibility.

Practical Implications

In the previous article, we explored typographic aspects related to lines of text (line length and spacing), and here, we explored aspects related to words (word and character spacing). But this is all very theoretical. What does it mean in practice? This is where we enter into the realm of typeface choice, which we'll discuss in the next article. •

Missing Your Intercom?

The STC office receives emails each month from members who report that they're missing issues of *Intercom* or *Technical Communication*. If you experience an interruption in delivery, please contact the office at +1 (703) 522-4114. Once we learn that you're missing issues, we take the following steps:

- 1. Verify that we have your correct mailing address.
- 2. Verify that the address in question is deliverable (undeliverable magazines and other mail from STC will be returned to the office).
- 3. Ensure that your STC membership is active.
- 4. Check your membership type. E-members and student members receive only online access to *Intercom* and *Technical Communication*.
- 5. Check the date that your membership became active. Often new members do not receive an issue because they joined STC after the mailing labels for that issue were printed.

Sometimes magazines are simply lost in the mail. Unfortunately, STC cannot track individual issues. If you're an active member with a deliverable address but you aren't receiving STC publications, the following suggestions may help solve the problem:

- Call your local post office and/or your mail carrier to discuss the matter with them directly.
- Change your mailing address with STC from your work address to your home address.
- If you prefer to receive STC publications at work, check with the mail room in your building to see if the problem lies there. •

Where

F.Y.I. lists information about nonprofit ventures only. Please send information to *intercom@stc.org*. For STC's complete calendar of events, visit *www.stc.org/edu/relatedEvents01.asp*.

- 1. Dublin, Ireland
- 2. Fort Worth, TX
- 3. Chicago, IL
- 4. Orlando, FL
- 5. Portland, OR
- 6. Pittsburgh, PA
- 7. Atlanta, GA

8-12 December 2008

The Localization Industry Standards Association (LISA) Forum Europe will be concentrating on the business impact of operating without standards in the globalization industry. The LISA Forum Europe will be held in Dublin, Ireland, at the Radisson SAS Royal Hotel. For more information, please contact:

Alexandra Kulikova +1 (312) 881-7318 events@lisa.org www.lisa.org/Dublin.613.0.html

26-29 January 2009

The Annual Reliability and Maintainability Symposium (RAMS) will hold its 55th conference, "Reliability as a Competitive Advantage — From Theory to Practice," in Forth Worth, TX. For more information, contact:

+1 (828) 898-6375 www.rams.org/

12-16 February 2008

the Advancement of Science (AAAS) annual meeting brings science and technology professionals from across disciplines and around the world to gather and discuss new research, emerging trends, and exciting new possibilities. The Annual Meeting will be held in Chicago, IL. For more information, please contact:

The 2009 American Association for

+1 (202) 326-6450 meetings@aaas.org www.aaas.org/meetings/

17-22 April 2009

AAAS

The International Society for Performance Improvement (ISPI) will hold its annual conference in Orlando, FL, at the Walt Disney World Dolphin Hotel. For more information, contact: ISPI

+1 301 (587)-8570 conference@ispi.org www.ispi.org/AC2009/

23-25 April 2009

5.

The American Society for Indexing (ASI) will be holding its annual conference, "Scaling the Heights," in Portland, OR, and the Doubletree-Lloyd Center Hotel. For more information, contact:

kmertes@hotmail.com www.asindexing.org/site/conferences/ conf2009/index.shtml

1-5 May 2009

6.

The Council of Science Editors (CSE)

will hold its annual meeting, "Show me the Data—The Science of Editing and Publishing," in Pittsburgh, PA, at the Hilton Hotel and Towers. For more information, contact:

CSE

+1 (703) 437-4377 CSE@CouncilScienceEditors.org www.councilscienceeditors.org/events/ annualmeeting09/index.cfm

3-6 May 2009

7.

The Technical Communication Summit, the annual conference of the **Society for Technical Communication (STC)**, will be held at the Hyatt Regency Atlanta in Atlanta, GA. For more information, please contact: Lloyd Tucker +1 (571) 366-1904 lloyd@stc.org http://conference.stc.org/

my job

Up on Two Wheels: What a Wild Ride!

BY PAT HUNKINS, Member

hen asked to write a "My Job" article for Intercom, I thought I would put a small twist on it and encompass the career path and some of its surroundings that brought me to such a phenomenal company: my present employer Harley-Davidson Motor Company.

My technical writing career started back in 1994 while working for Generac Corporation, a standby, portable, and prime power generator manufacturer. I was originally hired as a parts analyst and migrated into technical writing after taking on an extracurricular project of engine service and cataloging info. This eventually led to a job as a Technical Support Coordinator there (in charge of specialty publications such as microfiche, CD-Rom programs, and special documents such as engine service manuals).

I then left Generac to explore an opportunity at Cooper Power Systems (Kyle Distribution Switchgear division), creating kit instructions for high-voltage switchgear products. This was an exercise in attention to detail as this is an incredibly serious product because of its extremely dangerous nature. At Cooper, I was tasked with being part of the Cautions and Warnings database team (responsible for reviewing, updating, and generating cautions and warnings),

the Literature Fulfillment program via Kanban (responsible for consistent available stock and reorder levels of current revisions of literature and literature distribution worldwide), and the Vendor Evaluation program (which reviewed our vendor's performance and rated them on a quarterly basis).

From Cooper, I migrated into agency life as a directto-hire employee for a while, and I met many interesting people and clients. Through my stints at two separate agencies, I had some great opportunities to meet key people at various companies including Great Dane, TRAK International (a division of Textron), Simplicity Lawn and Turf Equipment, John Deere, and American Honda. It was also through an agency that I had the good fortune of working with my present employer, Harley-Davidson Motor Company.

I began working with Harley-Davidson as a visiting contractor. Initially, I worked on a very top-secret project that was unannounced to the public at the time but promised to come out like a bombshell when released. Little did I know that this new project was the VRSC V-Rod ("the first street-legal Harley to feature a liquidcooled power plant," according to the Harley-Davidson Website). I had the opportunity of working on special



Pat Hunkins, technical writer for Harley-Davidson Motor Company

tools—i-sheets (instruction sheets)—for a product that didn't exist as far as the public knew—what a cool feeling! I felt like a secret agent working on something that required my sworn silence. I couldn't talk about it; I couldn't even let fellow writers know about it. It was an awesome and unique experience.

It wasn't until January of 2003 that I would become a full-time Harley-Davidson employee—and it has been one wild ride. I have worked Daytona Bike Week, getting to know our customers; I have ridden many motorcycles, getting familiar with each model's nuances; and I have met many great people. On top of all that, I have had the extreme pleasure of having a special technical publication (referencing a manual that I had written) mentioned in a popular motorcycling magazine. When was the last time you saw a magazine discuss how good and thorough a technical publication manual was? That was a truly flattering moment for me. Since being hired full time, I have worked on many Harley-Davidson service publications and some Buell Motorcycle service documents as well.

This winding road has provided opportunities to use many interesting programs, software, and computer platforms, such as XML, HTML, WYSIWYG layout tools, Framemaker, SGML, Adobe Photoshop, QuarkXPress, Microsoft Front Page, and IPA. I have gained important skills including individual project management, job quoting and estimations, and proficiency with both Mac and PC platforms.

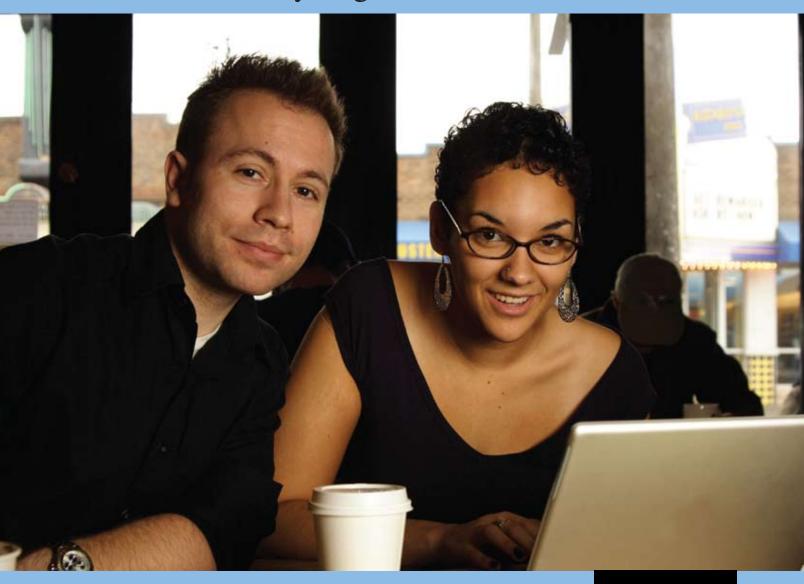
In the interim, I have also taken on some side tasks of a more personal nature within the writing arena. My wife and I released a children's book called *Herbie the Erbie—What Are These Things Called Feelings?* and I have also written song lyrics. In addition, I am currently studying for a degree in Business Marketing. Always busy ... this with three children to boot!

All in all, technical writing and writing in general has been a kind career to me, and it has taken me many places where I've met talented and interesting people. The fact that I work for a company like Harley-Davidson is just the cherry on top because it has afforded me some unique opportunities like riding motorcycles and working with an iconic product that is such a part of American heritage.

Wherever the winding roads of technical writing take me in the future, I'll always have the experiences of Harley-Davidson under my belt, my helmet, leathers, boots, and *ride on* and *write on*!

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