

## Making Web Sites for a Flat World

by Scott Mcmillan

In his new book, *New York Times* columnist Thomas Friedman says world economies are “flattening.” The economic playing field is being leveled so that traditional powers, such as the United States, have to compete with countries, such as China and India. Friedman says that eventually even countries in Africa will contribute to the flattening of the global economy. Such a prediction presents a challenge to designers creating web sites for international audiences. [Read more.](#)

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- **Software**

### Where ARE Those Strings?

Sooner or later, most of us who work with international software products find untranslated strings popping up in the middle of our translated user interface (UI). These don't usually prevent the product from running properly, but they are most unwelcome, and we devote a lot of time to eliminating them so that our customers don't find them and complain about them. [Read more.](#)

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- **Professor Grammar**

### Misplaced Modifiers

The Professor recently spent some time tracking down modifying prepositional phrases that weren't where they should be. It all started one sunny afternoon when we were reviewing some online help. We came across many instructions like this....

[Read more.](#)

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- **Nominations**

### PCS-AdCom Wants You

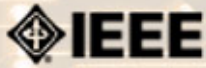
If you are interested in a higher level of involvement in PCS and IEEE, I urge you to consider being a candidate for the AdCom. Elections are held each year to fill six at-large positions with three-year terms. AdCom members-at-large must be both PCS and IEEE members (i.e., a higher level of membership than affiliate). Each year, three members-at-large are selected by vote of the members of PCS and three by vote of the current AdCom. [Read more.](#)

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### Special Issue of IEEE-PCS *Transactions*

This special issue of the IEEE Transactions on Professional Communication will focus on Examining International Outsourcing: Perspectives, Practices, and Projections. Guest Editor will be Kirk St.Amant of Texas Tech University, Department of English. Deadline for submission: 1 October 2005. [Read More.](#)



## Feature

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# Making Web Sites for a Flat World

by Scott mcmillan

## Flatten for the Least

In his new book, *New York Times* columnist Thomas Friedman says world economies are “flattening.” The economic playing field is being leveled so that traditional powers, such as the United States, have to compete with countries, such as China and India. Friedman says that eventually even countries in Africa will contribute to the flattening of the global economy. Such a prediction presents a challenge to designers creating web sites for international audiences.

The solution to the problem of internationalizing a web site can be conceptualized by thinking of countries in terms of fractions. To solve a problem involving fractions, one has to determine a least common denominator. Taking the least common denominator into account is like setting the incline on a treadmill to zero percent. It is easier to walk on a flat surface than to climb a hill. When web sites are “flattened” for a flat economic world, designers put information on the same plane that users can access without much effort on their part.

Internationalization entails working smart, not hard. Designers can reach their target audiences by taking into account four factors related to the idea of “least common denominator”:

- Internet availability
- Hardware available to users
- Graphics
- Word choice

## Internet Availability

Internet availability varies from country to country. For example, roughly 10 out of every 100 people in Peru use the Internet, according to the latest figures from the World Bank Group’s database. There are even fewer Internet users in China (6 percent) and Nigeria (0.5 percent). In contrast, almost 50 percent of the population in Norway regularly accesses the Internet. Regardless, all users connect to a server of some sort. Not all users employ the most popular, up-to-date browser, though. Some users might prefer Internet Explorer while others choose Netscape or Mozilla Firefox.

## Hardware

Hardware usage varies greatly too. A person in Mexico can more easily afford to buy a new computer with the fastest, state-of-the-art processor than someone in Ecuador, judging by purchasing power figures from University of Pennsylvania’s *Penn World Table*. Consider that a person in Peru might be using an old computer with Windows 98 and a Pentium II processor, which greatly reduces his or her ability to download information quickly. Also, some users may be connected to the Internet with a 56K modem, while others use broadband.

## Graphics

Graphics can make a site appealing to the eye and contribute to greater navigability, but they slow down web sites. GIF images may offer better resolution but use more memory than a JPEG file. Macromedia Flash files also require a great deal of memory. Charles Kelly of the Aichi Institute of Technology in Japan says, “Don't use images or use only a few small ones.” He adds that using an image for a page title is acceptable.

## Word Choice

Word choice can make a web site work for a larger audience, too. Idioms in English may be common in speech but they are rarer in writing. Idioms often confuse non-native English speakers. Consequently, it is best to avoid using idioms in web site text. Similarly, phrasal verbs are hard to understand for people whom English is a second language. “Search” is easier to comprehend than “look up.” Finally, choose words that are common in English. Dr. Sharon Myers, a University of Southern California linguistics professor, recommends using a language corpus such as *Collins Cobuild* or the *British National Corpus* for such a purpose. Such corpora offer empirical examples of English words used in real, everyday contexts. The wrong word can affect comprehension. Users should not have to scramble for a dictionary. Again, if doubts arise as to the desirability of a word, designers can consult a corpus.

For information regarding specific countries, consult any of the following links:

*United Nations Population Information Network* <http://www.un.org/popin/functional/statistics.html>

*Penn World Table*

[http://pwt.econ.upenn.edu/php\\_site/pwt61\\_form.php](http://pwt.econ.upenn.edu/php_site/pwt61_form.php)

*World Bank Group World Development Indicator Table*

[http://www.worldbank.org/data/wdi2005/pdfs/Table5\\_11.pdf](http://www.worldbank.org/data/wdi2005/pdfs/Table5_11.pdf)

## References

Friedman, Thomas L. 'Wake Up and Face the Flat Earth' –*YaleGlobal*, 18 April 2005, <http://yaleglobal.yale.edu/display.article?id=5581>.

Kelly, Charles. “Guidelines for Designing a Good Web Site for ESL Students,” *The Internet TESL Journal*, Vol. VI, No. 3, March 2000.

*Penn World Table*, 2004 Center for International Comparisons ( **CIC** ), University of Pennsylvania , [http://pwt.econ.upenn.edu/php\\_site/pwt61\\_form.php](http://pwt.econ.upenn.edu/php_site/pwt61_form.php)

World Development Indicator Table, World Bank Group, [http://www.worldbank.org/data/wdi2005/pdfs/Table5\\_11.pdf](http://www.worldbank.org/data/wdi2005/pdfs/Table5_11.pdf).

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## Feature

# Where ARE Those Strings?

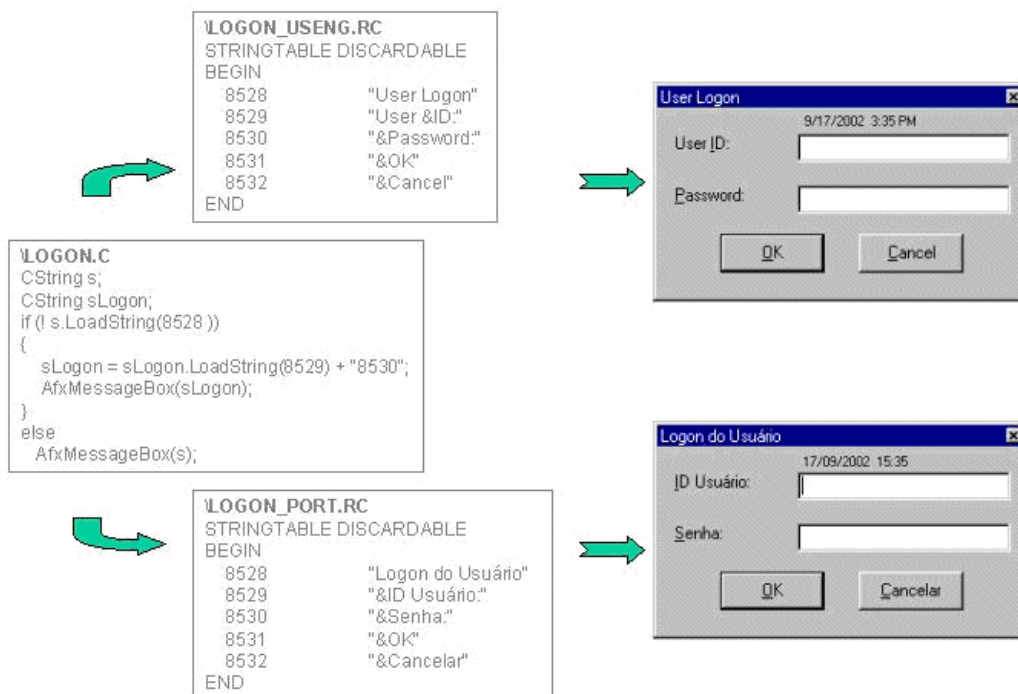
by John white

Sooner or later, most of us who work with international software products find untranslated strings popping up in the middle of our translated user interface (UI). These don't usually prevent the product from running properly, but they are most unwelcome, and we devote a lot of time to eliminating them so that our customers don't find them and complain about them.

As the Pareto Principle suggests, we have taken care of 80% of the strings in the product with only 20% of our effort, but the last 20% of the strings seems to require 80% of our effort. In this article, we'll explore the process of eradicating untranslated strings.

## Background

To properly localize a software product for the needs of particular region, you'll find it best in the long run to first internationalize the software, as in Figure 1, so that no matter how you need to change it for user interface or business logic, the code base at the core of the product is always the same (sometimes called a single worldwide binary). You then externalize those features and characteristics that can change from one region (or locale) to another—language, color scheme and accounting standards, for example—to separate resource files that vary from locale to locale, then call them from your single, common code base.



**Figure 1: Software Internationalization Process**

While it has become easier and easier for developers to internationalize their products in this way, rarely does anybody do it completely right the first time. And, while there are techniques for ensuring that the product has been properly internationalized, most companies new to localization will probably not devote resources to them. So, what we've seen time and again is this process:

- the resource files go out for translation and come back in
- we rebuild the product and perform QA
- we find, in the middle of an otherwise translated screen, untranslated strings
- we take a screenshot, as in Figure 2, and submit it as a bug

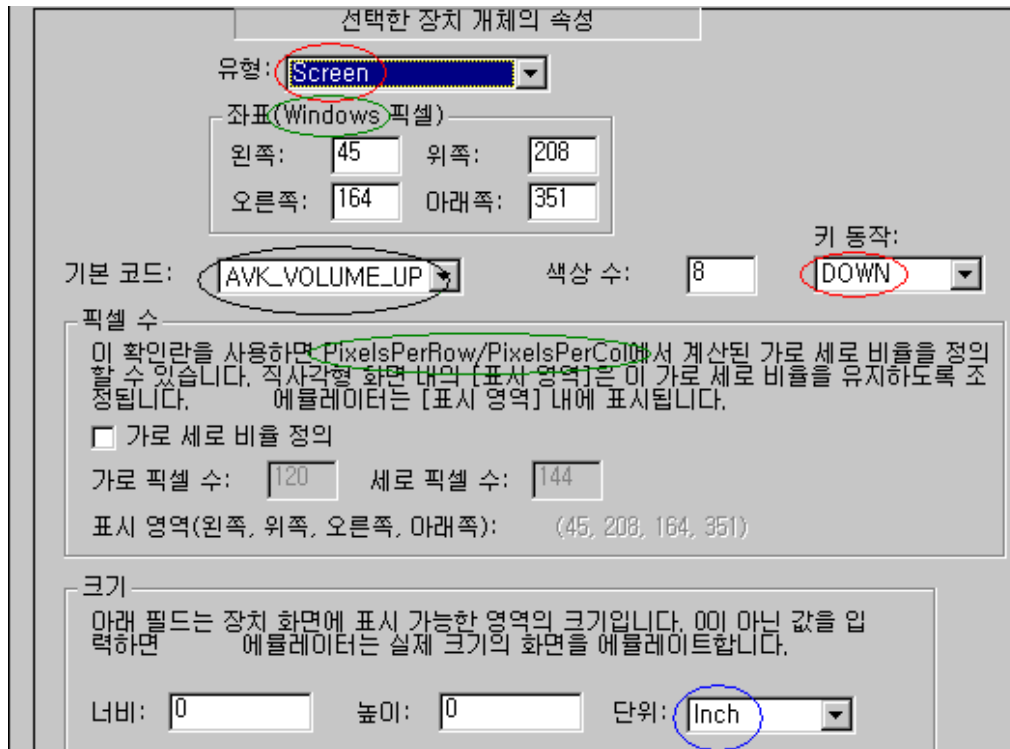


Figure 2: Examples of Possible Localization Bugs

### Did the translator miss them (or choose to skip them)?

This is the first question to ask, because you can usually answer it by examining the translated resource file and discussing your findings with the translator. So, you open the file in a simple text editor and search for each English string, thereby finding the the strings circled in green above:

```
GROUPBOX    "좌표(Windows 픽셀)", IDC_STATIC, 59, 83, 120, 45
and LTEXT    "이 확인란을 사용하면 PixelsPerRow/PixelsPerCol에서 계산된
```

You contact the translator and learn the following:

- “Windows” is still in English because the translator assumed that it refers to the operating system;
- “PixelsPerRow/PixelsPerCol” is still in English because most localization translators know that multiple words without a break are usually a single technical term.

So, while the translator did not miss any of these strings, s/he correctly chose to leave them in English. (Your translators

should already know this, by the way, either because you told them, or because they're familiar with your product.)

However, you cannot find the other untranslated strings in the resource file, so you move to the next question.

### **Are the untranslated strings meant to remain that way?**

Some strings are not intended to be translated, and so deliberately have not been externalized to resource files. The string may be a literal, which the code expects to find exactly as is. In the example “\winnt\system\”, if “system” were to be translated, the software would probably not recognize the path, and would malfunction. Or, if your users are software developers or system administrators, for instance, they may be accustomed to certain English terms, so there is no point in translating them.

You determine from the developers that, even though the string circled in black appears in the UI, “AVK\_VOLUME\_UP” (and all others in that list) should be left untranslated. They expect that users will tolerate and understand these somewhat English strings, and besides, these are the names which the code would look for during execution, so translating them would cause the software to malfunction.

The strings circled in red and blue, however, should appear in Korean, so you continue the search.

### **Are the untranslated strings still in our code base?**

The next place to look is in the code base, in case the strings eluded your developers' first attempts to find them. Since most strings are enclosed in quotation marks, your developers will probably search on " to find any remaining strings, although this will yield lots of false positives. In a Unicode-enabled product, developers will target \_T(" and \_T and L" for more precise searches.

While this is the right way to look in the right place, in this case, your search does not turn up the strings you seek.

### **Do the untranslated strings come from NIH [not-invented-here] software (plug-ins, included files, etc.)?**

Although it might not occur to them until you mention it, your developers may realize that some strings come from NIH (not invented here) parts of the product.

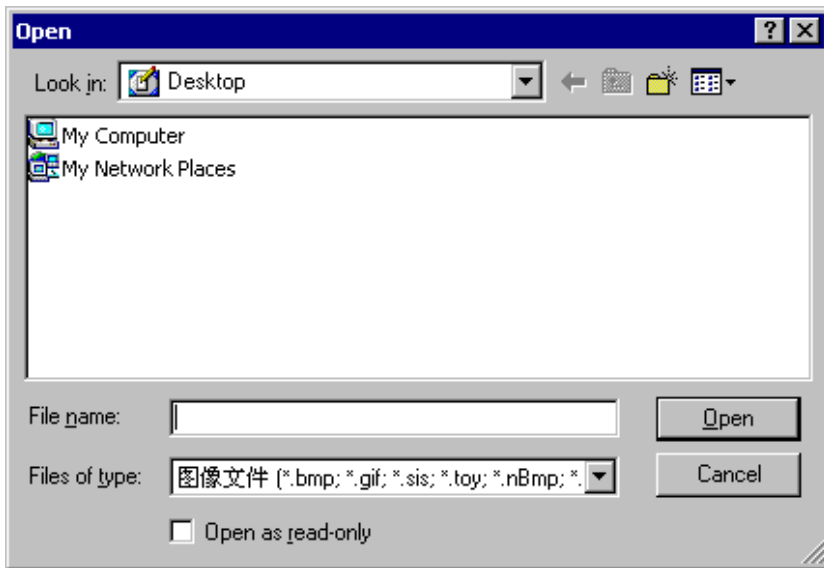
For many products, the most conspicuous piece of NIH is the installer. Few companies go to the trouble of creating their own installers any more because well-behaved, off-the-shelf installers are already available to developers, and their strings are properly externalized and accessible. Not all NIH is that clean, however, and there may be plug-ins or include files or controls—calendar controls have been the worst offenders, in our experience—with hard coded strings you cannot reach.

It may take you several conversations to find the developer who remembers, “Oh, yes, that control in the dialog box is from a toolkit somebody bought six or seven years ago. We don't have the source code for it, and nobody is supporting it anymore. Other than that, it works fine in English.”

You determine, then, that “Inch” (circled in blue) belongs to an NIH control used to convert between English and metric units, and you begin the long process of contacting its author for an internationalized version. If you are unsuccessful, you can shop for another, similar control; try to convince Engineering to write its own, new control (properly internationalized, of course); or leave it in English for now and resolve the matter in the next version.

### **Do the untranslated strings come from the operating system?**

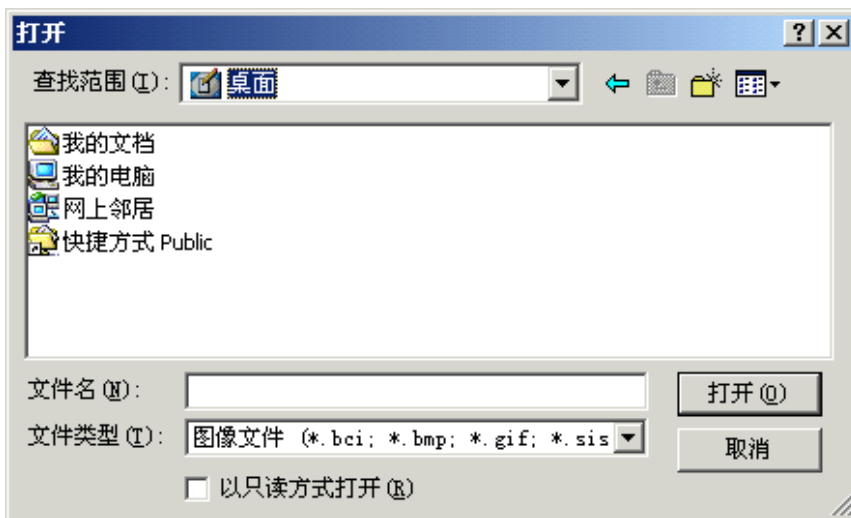
Imagine that you are reviewing the first draft of your Chinese product, and that you see the screen in Figure 3:



**Figure 3: First Draft of Localized Screen**

You may be tempted to conclude that “Look in:”, “File name:”, “Files of type:”, etc. are untranslated strings, and begin your inquiry all the way back at the first question. Another, simpler way of asking this question is, “Does the problem go away when we run the Chinese software on a Chinese operating system?”

Some common dialogs and screens come with the operating system and are not really part of your product. While your product makes use of them, your developers do not need to create them, but merely call them at certain places in the code base. Figure 3 is an example of this. Most of the strings here appear in English because you’re running the software on an English operating system (with just enough support to properly display your Chinese characters). You’ll be better served by working on a Chinese testbench, in which case this dialog box will resemble Figure 4, where the only remaining English text is in the filename extensions (.bci, .bmp, etc.), which, of course, should not be translated anyway.



**Figure 4: Chinese Testbench Screen**

To return to Figure 2, you determine that, even on a Korean operating system, the strings circled in red—“Screen” and “Down” and the other items in those drop lists—are still in English and need to be translated.

## Where ARE those strings?

Finally, you convince a developer to help you by loading the Korean resource file and project into the resource editor in which it was originally written (an extraordinary step, but you'll try anything at this point). The developer is able to see quite clearly that "Screen" and "DOWN" are still untranslated, and he insists that they must be in the resource file. He opens the resource file and realizes that he, too, is unable to find the strings. He then looks through the resource file for the name of that particular drop list—IDC\_COMBO\_OBJECTTYPE—and finds:

```
IDD_QSKINATTR DLGINIT
BEGIN
    IDC_COMBO_OBJECTTYPE, 0x403, 7, 0
    0x6353, 0x6572, 0x6e65, "\000"
```

It's actually a rather frightening thought, but the untranslated strings are preserved in hexadecimal values in this DLGINIT: 0x6353 resolves to "cS", 0x6572 resolves to "er", and 0x6e65 resolves to "ne", which unscrambles to "Screen". These strings were indeed in the resource file all along, but the translator's tools didn't find them, so the translator never saw them.

Your short-term solution is to use the resource editor itself to place the Korean translations of "Screen" and "DOWN" into the resource file. Your long-term solution is to encourage your developers to stay away from DLGINIT types, and to avoid prepopulating any controls with string literals. Rather, they should programatically populate combo boxes and droplists using strings defined in the resource files.

## Summary

By now you've exhausted the most likely places in which untranslated strings can hide, and successfully answered your questions. Be prepared to follow this process again, as your company builds and acquires new software for you to localize.

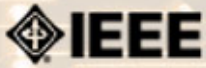
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## Professor Grammar

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### The case of the misplaced modifier

by Professor grammar

The Professor recently spent some time tracking down modifying prepositional phrases that weren't where they should be. It all started one sunny afternoon when we were reviewing some online help. We came across many instructions like this:

[Click Save to save your changes to the desktop in the database.](#)

and this:

[Click on the configuration server that you want to link the list manager servers to in the Configure Server Name field.](#)

and this:

[Type the name of the table you want to change in the database in the Table Name field.](#)

We understand that most English-speaking Americans would have little difficulty following the instructions as given. We suppose some might even get it on the first read.

Consider, though, the non-native English-language user. A literal dissection of the first example gives ownership of the phrase "in the database" to the word "desktop." But the phrase is actually modifying another phrase: "changes to the desktop." Here is the foolproof way to write this instruction:

[To save your changes in the database, click Save.](#)

Can we assume the user knows the changes are to the desktop? Certainly--if the procedure is "Changing your desktop." And if it's not, well, that's another problem entirely.

Now let's look at the second example:

[Click on the configuration server that you want to link the list manager servers to in the Configure Server Name field.](#)

A good rule to follow is to first "orient" the reader, then specify the action. So we have:

[In the Configuration Server Name field, click the name of the configuration server that you want to link the list manager servers to.](#)

Adding "the name of" improves the clarity (and the preciseness, which the Professor is very fussy about), because one cannot click on a server.

If you do not like ending a sentence with a preposition (something that the Professor really doesn't mind, if it sounds natural), you can rewrite the end of the instruction like this: "...the configuration server to which you want to link the list manager servers."

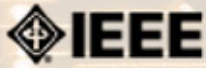
As for the third example, we are getting tired of our lecture, as we are sure our audience is also. We are also sure we have lectured enough for any of you to understand how to rewrite the final example so that the Professor would have no complaints about it whatsoever.

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## President's Column

# President's Column

by Eduardo Clark

### What is Documentation Localization?

It is not just language translation; it is the process of adapting documentation (often written in English and targeted for the U.S. market) for use in other countries, considering their culture, standards, regulations, and technological conditions.

**Culture.** The culture includes the values, customs, conventions, and language usage among other things. From the point of view of localization, the cultural aspects to consider include the following:

- Sort order (accented characters, double-consonants, phonetic for non-alphabetic characters, etc.)
- Format to display date and time (“month, day, year” versus “day, month, year”)
- Currency (unit, symbol, use of the symbol before or after the amount, separator for cents, etc.)
- Units of measurement (Imperial system: U.S. and Liberia, metric: rest of the world)
- Color meanings (red: stop/love, danger; green: go/environment, etc.)
- Capitalization (nouns, accented letters, etc.)
- Quotation symbols (“quotation”, [quotation], etc.)

**Standards.** National standards include accepted conventions for measuring quantitative attributes, as well as for benchmarking qualitative attributes such as quality, safety, and performance. The standards also specify means for transmitting and using electrical energy, formats and protocols for exchanging and retrieving electronic information, etc.

**Regulations.** The regulatory aspects include product compliance with local environmental, electrical, and other applicable ordinances. Software is subject to intellectual property claims and hardware to warranty terms. Normally, the documentation must reflect that the product complies with all applicable regulations, industry norms, and standards. The documentation must also spell out the intellectual property claims and the corresponding licensing terms and conditions plus the warranty terms and limitations.

**Technology.** Even though technological development is not dictated by geographical location—that is, the state-of-the-art in technology is basically a global condition, the dissemination and availability of technology differs geographically. For example, computer resources are more widely available in developed countries than in developing countries. When localizing documentation, it is important to consider that users in advanced nations are more likely to be receptive to online documentation than users in other parts of the world. This can be an important consideration when deciding on the use of online versus hardcopy documentation.

### What is I18N?

Internationalization, or I18N for short, is the business process of modifying or creating a product free of cultural considerations and ready for localization.

In the case of product documentation, it refers to the process of developing documentation in simplified English devoid of colloquialisms, idiomatic expressions, and cultural biases, which can be readily localized by translation and by reflecting the product's adaptation to applicable regulations, standards, and technological conditions in a given locale.

### **What is a Locale?**

A locale is the combination of the culture, standards, and regulations for a specific geographical area. For example, Spain and Mexico, share many cultural aspects, yet they are different locales. A product for sale in Spain, must be documented in Castilian Spanish, designed for 220-volt operation, and be compliant with European Community regulations. The same product for sale in Mexico, must be documented in Latin-American Spanish, designed for 110-volt operation, and be compliant with the North American Free Trade Agreement.

### **What is G11N?**

Globalization, or G11N for short, is the business process of developing a product that can be successful in any target market of the world, without major modification.

The automakers pioneered the concept of a global product. Since the 1980s, they have been trying to develop an automobile that meets safety, quality, and regulatory standards worldwide and can be sold with almost no modification in any locale. In the 1990s, software developers have discovered that global software sells better than English-only software and are actively pursuing the global market.

### **Why Use Contractors for Documentation Development?**

Small, start-up companies seldom can afford to have a documentation team of their own, with cost being the major consideration. Hiring outside resources is usually a cheaper and more flexible option, especially in the short-term.

### **Advantages**

- Cost only when actively used.
- Create minimal or no overhead cost, especially if contractors work in their own facilities and provide their own development tools.
- Contractors are more likely to be free of organizational commitments. This means that they devote more time to actual work than company employees, who have to attend meetings and training sessions, report results, get involved in office politics, etc.

### **Disadvantages**

- Do not represent the company interest. Being paid by the hour, contractors are less likely to manage time and conserve resources. In the case of documentation, contractors are more likely to overdocument and overload the documents with "special effects."
- Many contractors overpromise and underdeliver just to secure a contract. Being proactive is good, but is no replacement for necessary skills.
- Often have to be inducted into the company's culture and trained in the company's way of doing business.
- Cannot afford to oppose questionable practices. Contractors have to please everybody • at least most of the time.
- Companies using mostly contractors are less likely to achieve a consistent corporate "look and feel." Are also less likely to have structured procedures to document products and to leverage previous experience.
- Inconsistent use of tools and authoring software from contractor to contractor.
- Varying skill sets and quality from different contractors.
- Source and version control becomes harder to maintain when using outside resources.

When it comes to localization, only the largest corporations can afford to have dedicated translation teams. Usually, translators are hired on a contract basis and paid by the word. Additionally, management and formatting fees are quite usual and are levied on a per page or per hour basis. In many cases, formatting fees are also paid to port the information into a specific authoring software and to give it the “look and feel” of the original.

### Why Produce Online Documentation?

The trend toward online product documentation seems irreversible. As software products become more complex in spite of user-friendly graphic interfaces, their documentation grows correspondingly, mostly because of added functionality. Another reason for the growth, is the increasing availability of multilanguage support for international audiences. Online documentation has become more prevalent because, compared to printed manuals, online documentation is:

- Cheaper to produce because it saves the cost of printing, binding, packaging and shipping.
- Easier to maintain because of the shorter development cycle without the time involved in printing, binding, packaging and shipping the manuals.
- Easier to distribute because of its electronic format which allows dissemination over the Internet and on magnetic or optical media. The Internet has made documentation not only more available to a broader audience but also more current. Updates can be posted and available for download almost immediately.
- Easier to search and navigate. You cannot do automated searches on hardcopy.
- Friendlier to the environment by sparing the trees to produce paper.
- More compact. An optical disc can easily contain a whole suite of documentation in several languages.

### Localizing English Documentation for Spanish-Speaking Audiences

When approaching a localization company for a Spanish translation, you will likely be asked which Spanish do you want: Latin-American or Castillian for Spain. The differences between these two Spanish modalities are equivalent to those between British and American English. Some nouns are used differently; for example, the word for computer in Spain is ordenador (similar to the French word ordinateur) while in the rest of the Spanish-speaking world the word is computadora. Additionally, in Spain they use second-person plural addressing, which is almost never used in Mexico and is used differently in the rest of Latin America. However, it is possible to use a simplified set of Spanish words that are generally accepted.

Avoiding colloquialisms is a must to ensure a translation suitable for the Spanish-speaking world. Many words in Mexico's Spanish come from the language of the Aztecs (Nahuatl) and they are virtually unknown in the rest of the Spanish world. A few words, like chocolate, have become universal, but is better to avoid others like tlapaleria (hardware store) and papalote (kite), which are understood almost exclusively in Mexico.

The following are cultural considerations to consider when localizing documentation for Spain and Latin America:

- **Date format** – It can be “dd, mm, yyyy” or “mm, dd, yyyy” as in the U.S. In Mexico, Roman numerals are used sometimes to indicate month and differentiate it from the day, regardless of the order.
- **Time format** - Differences are not great, at least for Mexico, which uses both the 24 hr (US military) format and the AM/PM format. Mexico recently adopted daylight savings time, which simplifies communication, travel, and commerce.
- **Form of addressing readers** – It is usually more formal in Spanish than in English.
- **Alphabet sorting order** - Spain no longer considers double consonants (ch, ll, rr) as single letters. However, other countries in Latin America still do. Additionally, the ñ is a letter that does not exist in English and it sorts after n in the Spanish alphabet.
- **Colors** – Colors generally have the same meaning in Spanish-speaking cultures as they have in the US. For example,

red, for stop/danger, green for go/clean environment, etc.

- **Same word, different meanings** - Some Spanish words have identical spelling as English words, yet they have different meanings (for example: actual, means present or current in Spanish, not real, as in English).
- **Surnames are used differently** - It is not the last name that counts for sorting lists or for addressing a Spanish-speaking person. Also, honorific and professional titles are more widely used in Spanish-speaking countries: Don, Doña, Lic., and C. (which stands for Ciudadano, or citizen, and is only used in government official communications -- an inheritance from the French revolutionaries), have no exact equivalent in the English language. Also, the just call me Bill approach is not appropriate for formal, first-time contact between people of high rank in the Spanish cultures. In Mexico, Bill Clinton is referred to as William Clinton in the newspapers. Bill is just not considered appropriate for the president of a country.
- **Numbers** - The decimal number scheme is the same in Spanish, except for the billion entity. In Mexico, a billion is a million of millions or 10<sup>12</sup> and not 10<sup>9</sup>.
- **Units of measurement** - The U.S. and Liberia seem to be the only countries still attached to the Imperial system. The rest of the world has gone metric, including all Spanish speaking countries. Units like miles per gallon are particularly meaningless to Spanish speakers. The unit feet still seems to be universally used for altitude and the yard for football, which is known as American Football in other countries where soccer is the football they play and watch more frequently.
- **Do or else attitude** - Spanish-speaking countries are mostly high-context cultures in which personal or business relationships evolve progressively and not immediately, regardless of the business opportunities. The no-nonsense, money-centered approach to business can be perceived as rude in these countries. Trust is not automatically conferred and needs to be earned in high-context cultures. A good business deal can be meaningless if the person offering it is not a trusted party. And, strangers, are by default not to be trusted • just like we now teach children in the U.S.
- **Technical terms** - In general, Spanish is a rich language for everyday communication but not for technical communication. Simple words like hardware and software are not directly translatable. They are either used in English or translated into several other words. In general, a Spanish version of a computer application will require larger text fields on the computer screen and 25-50% more pages on the hardcopy documentation.

### How Do I Chose a Translation Company?

Translation companies have proliferated in recent years and many of these companies have merged with other translation companies in different parts of the world, resulting in multinational translation conglomerates. The emergence of the European Union and the enactment of the North American Free Trade Agreement have fueled this proliferation, which probably started with the Nixon Administration's opening to China.

Most of these companies are reputable and professional but some are not. The translation business is not very regulated and practically anybody can work as a translator. Some translators are certified by translation associations, like the American Translator's Association, but translators do not have to meet state or federal licensing requirements or be certified to practice.

A reputable translation company usually offers its clients the following resources:

- A glossary of industry- and company-specific terminology and acronyms to be translated into the targeted languages. Professional translators do not work without a glossary.
- An automated method to count words, and means to leverage previously translated words for the client.
- An FTP or Web site to upload and download electronic files to and from the translator, with separate password-controlled areas for the different clients.
- Translators who are native speakers of the target language and fluent in the source language. The best companies

offer in-country translators or at least native speakers who have lived recently in the country where the target language is spoken.

- Translators with technical expertise. Ideally, the translator should be conversant in the subject matter of the translation, but this is a qualification seldom found because technically proficient people tend to work in their fields of expertise and not in the lower-paid translating field.
- Expertise in commonly used authoring packages for both online and hardcopy documentation. Also, the localization company should be able to deliver camera-ready copy on film, electronic format, or whatever the client requires with a similar "look and feel" as the source.
- Archival resources to deliver the translated materials on suitable format for the client's archival and future reuse.
- Native language operating systems for computer-based material. If the localized application is supposed to run and display correctly in say, Windows in French, the translator should have access to and expertise on this platform.
- Assistance and guidelines on how to develop I18N-ready source documentation for later localization.

Even after choosing a competent translator to the job, it is important to have an independent party validate and proof the translation. Distributors and international sales representatives proficient in the target language, are normally good choices to do this validation. They are usually familiar with the target locale and with the product's technology and terminology. And, many times, they might do it as a favor without creating additional expense, because they will likely benefit from having localized documentation.

### **How Can I Develop I18N-Ready English Documents?**

The following are some common-sense guidelines for developing I18N-ready documentation:

- Avoid hidden plurals (example: sparkplug wireset, does it mean several wires for one spark plug?)
- Disambiguate modifiers (example: Professional Communication Society, what is professional, the communication or the society?)
- Avoid colloquialisms, slang, and idiomatic expressions, which do not port well into other cultures (example: a ballpark figure is a meaningless expression to non-English audiences).
- Keep in mind that American measurement and quality standards are not necessarily applicable in other locales. Even more so for environmental, communications, and electrical regulations. Even within the U.S., the environmental regulations are more stringent in California than in the rest of the country. A good example of communications standard variation is the modem. It seems like every country has different telephone standards. The variation starts with the ringer equivalent number and extends to the plethora of different telephone connectors used around the world. Even within Europe, a modem certified for use in one country may not work or even be approved for use in other European countries.
- Leave plenty of white space in your documents. Translations are usually longer than the original English. You should make allowances for the so-called translation expansion or stretch.

### **Conclusion**

Localization of documentation has become an everyday business task for companies engaged in global business. Knowing how to develop I18N-ready documentation not only simplifies the task of localization but also prevents costly rework and missed deadlines. An understanding of the target locales' culture avoids embarrassing misunderstandings and promotes a good climate for conducting business and achieving long-term relationships with your international customers. Choosing a competent localization contractor can help you ensure that your localized documentation projects will succeed by being delivered on time and in a culturally correct presentation.

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*This article originally appeared in the 1999 IPCC Conference Proceedings. Ed Clark is president of IEEE-PCS.*

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## Editor's Column

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### Conference, Internationalization, and Other Things

by Kit brown

I apologize about the issues with the newsletter last month. We had some technical difficulties with uploading the files, and that, combined with a server migration and the conference, made for some stressful moments. In case you missed last month's issue, you can read it in the Archive under [July 2005](#). Please pay particular attention to the [Call for Transaction](#) papers, which I've also included in this issue.

A huge thank you to Brenda Huettner for handling things for me while I was in Ireland.

#### Conference

The University of Limerick is a gorgeous campus and the facilities were grand for a university dormitory (almost made me wish I could turn back the clock and go back to school). The day I arrived was cold and rainy (in other words a typical Irish day), but the weather broke the second day, and by Monday, it was in the high 30s C (90s F)--very unusual for Ireland. The heat and humidity made for some very warm conference rooms, but colleagues who sweat together then drink beer together, so it all worked out.

About half the attendees were from Europe, Asia, or South Pacific. The other half were from North America. It was great fun to meet people face-to-face and to share some fun moments, such as Kim Campbell's husband getting thrown in the dungeon at Bunratty, six of us cramming into Michael Fritz's very tiny rental car for a night of Irish music and Guinness, the guys joking around with the man statue in the courtyard, and so on. (A photo album will be posted shortly.)

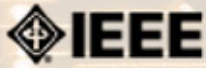
Our hearts went out to all those caught up in the London bombings. It was a major topic of conversation throughout our stay in Ireland, and security was tighter coming home. Some day, I fervently hope that we learn to communicate more effectively with each other and to respect each other so that this kind of thing never happens again.

#### Internationalization

Appropriately enough, our theme this month is internationalization. There were several great sessions on this topic at the conference; look for them in the proceedings. We are fortunate this month to have two features, one that focuses on the software side and one that focuses on global website development. In addition, Ed's column discusses internationalization from the perspective of someone who straddles two cultures, US and Mexico.

Next month, the theme is Content Modeling, which enables you to modularize your information design and makes it easier to make the transition to structured authoring and enterprise-level content management.

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## Reviews

### Internationalization Resources

Compiled by Kit Brown

As a consultant, I work with companies that need help internationalizing their documentation and with integrating localization into their processes. Here are some of the resources that I use regularly:

- Boiko, Bob. *The Content Management Bible*. (2001) John Wiley and Sons, Inc.
- Esselink, Bert. *A Practical Guide to Localization*. (2000) John Benjamins Publishing Company. Amsterdam, The Netherlands.
- Hackos, Joann. *Managing Your Documentation Projects*. (1994) John Wiley & Sons, Inc.
- Hoft, Nancy. *International Communication: How to Export Information About High Technology*. (1995) Wiley Technical Communication Library: New York.
- Horton, William. *The Icon Book: Visual Symbols for Computer Systems and Documentation*. (1994) John Wiley and Sons, Inc.: New York.
- Buehler, Mary Fran et al. *Levels of Edit*. (revised 2000) Jet Propulsion Laboratory.
- Johnson, Jeff. *GUI Bloopers Don'ts and Do's for Software Developers and Web Site Designers*. (2000) Morgan Kaufmann Publishers.
- Krug, Steve. *Don't Make Me Think!* (2000) New Riders Publishing.
- *Multilingual Computing and Technology*. (<http://www.multilingual.com>) This is the trade journal for learning about technical issues associated with localization and internationalization. They regularly publish guides that have more in-depth articles about a specific topic.
- Rockley, Ann. *Managing Enterprise Content: A Unified Content Strategy*. (2003) New Riders Publishing.
- STC conference proceedings and journals.
- SH3, Inc. *How to Win at the Foreign Language Game*. 2003. Kansas City, MO: SH3, Inc.
- Savourel, Yves. *XML Internationalization and Localization*. 2001. Sams.
- Yunker, John. *Beyond Borders: Web Globalization Strategies*. (2003) New Riders Publishing.



# Newsletter



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## Tidbits

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*Editor's Note: I am always looking for strange, fun, or interesting technical communication tidbits. Please contribute freely.*

## Bulwer-Lytton Winner

Contributed by Bill Burns

Dan McKay of Great Plains Software, Inc. in Fargo, ND has the dubious distinction of being this year's Bulwer-Lytton contest winner. This contest rewards the best worst opening sentence. It is named for a Victorian novelist named Edward George Bulwer-Lytton, of "T'was a dark and stormy night..." fame. To peruse the entries, go to <http://www.bulwer-lytton.com/>...

## Engrish.com

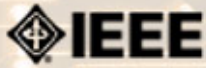
For some hilarious and badly translated instructions, signs, and so on, go to <http://www.english.com/>. Caution: some content not appropriate for all audiences.

## Babelfish

Need to understand something that is written in a foreign language? Go to <http://babelfish.altavista.com/>. This handy web tool enables you to type in a phrase, sentence, or short paragraph and get an instant translation. If you want to understand how contextual errors can get modified during the translation process, try entering a relatively simple sentence in your native language, translate it into a second language, then take the translation and translate that into two or three additional languages before translating it back into the original language. The results are very interesting.

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# Newsletter



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## Society News: Members

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### Call for PCS AdCom Nominations

by Deb Bosley

The Professional Communication Society is managed by an administrative committee (AdCom) comprised of 18 volunteers who work to ensure that our society serves its members, the IEEE, and the field of technical and professional communication.

If you are interested in a higher level of involvement in PCS and IEEE, I urge you to consider being a candidate for the AdCom. Elections are held each year to fill six at-large positions with three-year terms. AdCom members-at-large must be both PCS and IEEE members (i.e., a higher level of membership than affiliate). Each year, three members-at-large are selected by vote of the members of PCS and three by vote of the current AdCom.

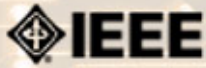
Typically, AdCom members attend three business meetings each year. For the past two years, however, one of those meetings has been held via conference call. AdCom members also engage in e-mail discussions between meetings.

Each member-at-large has an opportunity to provide leadership in the society by, for example, chairing a standing or ad hoc committee, by serving as a society officer, or by playing a lead role in an upcoming International Professional Communication Conference (IPCC). Although AdCom members are volunteers and are expected to seek travel support from their employers, PCS currently provides up to USD 1200 yearly for attending the three meetings; the travel allowance is USD 2000 for AdCom members outside North America.

If you're interested, or know someone who might be, please contact **Deborah S. Bosley**, chair of the nominating committee, by **August 15**. You can learn more about our society by visiting <http://www.ieeepcs.org/>.

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## Society News: Members

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### Your Vote Matters

by Brenda Huettner

As we've seen recently in other elections, every single vote is important to candidates running for office. It's no different within IEEE. Our organization is run by a 32-member Board of Directors that you, the membership, elect each year. These are the people who are responsible for governing IEEE and making the decisions that impact our future as an organization and as an industry. Please take the time to learn about the candidates, make an informed decision, and most importantly, **VOTE!**

#### Learn about the candidates

The Board of Directors consists of an Executive Committee (President, President-Elect, Past President, Treasurer, Secretary, and 5 Vice-Presidents), a Director/Delegate for each of the 10 geographic regions, and a Director/Delegate for of the 10 Divisions representing the Societies. We in PCS belong to Division VI (Engineering and Human Environment), and you each also belong to a geographic region.

A list of the candidates for each of the open positions is on the IEEE.org site. Simply select the IEEE Annual Elections option from the menu on the left side of the screen to see the list. Click on the job title (such as IEEE President-Elect) to view the official statements and photos of each candidate. Many of the candidates also have websites of their own linked from this page. Feel free to talk to any candidate, and ask the questions that are on your mind. They may not know all the answers, but they should be able to point you in the right direction. And if they're going to be a leader, you'll want to know how they handle inquiries from the membership (that's you!)

Another good way to learn about candidates is to talk to people you know. You've heard of the "six degrees of separation?" In an organization like ours, it's even less--you probably already know someone who personally knows each candidate (that's only two degrees). Ask around, talk to people in your chapter or Society. Find out which candidates the people you trust are endorsing.

#### Make an informed decision

Once you've heard what the candidates have to say, consider each candidate's record of contributions. Have they participated in local, regional, or society activities? Do they have a successful record of leadership? Have they been recognized for their work or for their contributions to IEEE?

Most importantly, make sure to read the statements from each candidate. You'll also want to consider whether the candidate's position on a variety of issues matches your own. Remember, the candidate you elect will be making decisions for all of us, often for several years.

#### **VOTE!**

You'll be receiving a paper ballot, and you'll also receive instructions for voting online if you choose to do so. Note that

your ballot will only show the positions for which you can vote--for example, if you're in Region 1, you won't be able to vote for the Director-Elect/Delegate-Elect of Region 5.

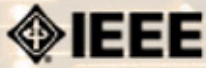
Your vote must be received by 12 noon, GMT-6 (Central Time), on 1 November 2005. This gives you plenty of time to read about the candidates and to make your decisions.

\*\*\*\*\*

***Brenda Huettner** is the IEEE-PCS Membership Chairperson. She also owns and operates a technical communication consulting business, **P-N Designs, Inc.***

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## Society News: AdCom Meeting

### July 2005 AdCom Meeting Highlights

by Muriel Zimmerman

The PCS Administrative Committee (AdCom) met on 10 July 2005, at the IPCC conference site at the University of Limerick in Ireland. The meeting was chaired by PCS vice president Luke Maki, in the absence of president Ed Clark. We'd need a lengthy column to describe Ed's unsuccessful attempt to fly from Texas to Ireland. Needless to say, he was missed. The AdCom considered a variety of topics, including future conferences, publications, and regional activities.

#### Conferences

IPCC 2006 is scheduled for 23-25 October 2006 at the Gideon Putnam Hotel and Conference Center, Saratoga Springs, New York; Beth Moeller is conference chair, and Roger Grice is program chair. The conference theme is *Racing to the Future*, and issues related to the convergence of technology and professional communication will be explored from a range of perspectives. The call for papers is complete and due date for proposals is 10 January 2006. Further information is available from [Roger Grice](#).

IPCC 2007 is scheduled for 1-3 October 2007 at the Crowne Plaza in Seattle, Washington; Mark Haselkorn is conference chair, and David Farkas is program chair. The conference theme is *Engineering the Future of Human Communication*, and IPCC 2007 will also be an occasion to celebrate the 50th anniversary of PCS.

Montreal has been selected as the location of IPCC 2008, and conference chair Kirk St. Amant is developing a network of contacts. Potential locations for IPCC 2009 will be discussed at the September 2005 AdCom meeting.

#### Publications

The September 2005 special issue of *PCS Transactions, Research Reality Check*, guest edited by Laurel Grove is now in press.

Future special issues of *PCS Transactions* include *Communication Issues in User-Database Interaction* (guest editors Hock Chuan Chan and Keng Siau), with a tentative publication date of March 2006. The September 2006 issue, *Insights from Corpus Linguistics for Professional Communication* (guest edited by Tom Orr), is also in the planning stages. The March 2007 issue, *Examining International Outsourcing* (guest edited by Kirk St. Amant) has just been announced.

#### Regional Activities

The mission of the Committee on Regional Activities (RAC) is to encourage and support PCS activity at regional levels, in order to better serve PCS members. RAC chair Thomas Orr announced that seven of the twelve positions on the Regional Activities Committee have been filled (one with two temporary representatives), and communication at the regional level has begun, primarily through regional email lists.

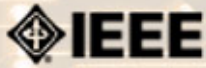
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*Muriel Zimmerman is the IEEE-PCS Secretary.*

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## Society News: Members

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### More Member Benefits

Contributed by Brenda Huettner

You probably know already that your membership in IEEE includes some terrific publications (like this newsletter!), as well as the opportunity to network with your peers. Here are a few more member benefits that you may not have known about:

- **Job Hunting Help** (<http://careers.ieee.org/>)

This site has a wide variety of resources, including an employer directory and regular newsletter.

- **Email Alias** (<http://elecomm.ieee.org/personal-aliases.shtml>)

This exclusive member benefit identifies you as an IEEE member with an @ieee.org email address while forwarding all incoming mail to your real Internet account. All incoming attachments are automatically scanned for viruses with the latest antivirus software.

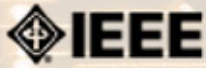
- **Travel Agency** (<http://www.ieeetravelonline.org/>)

Book airline, car, or hotel reservations at a terrific group discount. Even if you don't use the online reservation features, there are all sorts of travel tools like an ATM finder, currency converter, airport information, and more (<http://www.ieeetravelonline.org/travelmanager.html>).

- **Group Insurance** (<http://www.ieeeinsurance.com/>)

Offerings vary by country, but include life, health, disability, and business insurance plans.

These are all available to Associate, Member, Senior Members, and of course, to Fellows. If you're an Affiliate Member and want to take advantage of any of these offers, upgrade your membership first with the online form at <https://swwww8.ieee.org/membership/Affiliate/affiliate.htm>.



# Newsletter



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## Society News: PCS Events

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### 2006: Call for Proposals

by IPPC 2006 Conference Committee

The IEEE Conference on the Convergence of Technology and Professional Communication will be held 23-25 October, 2006 in Saratoga Springs, New York USA.

We welcome proposals for this conference, which explores dimensions of professional and technical communication in an environment that places increasing emphasis on effective use of technology and on communication as an essential tool for management and innovation.

The conference will be held at the Gideon Putnam Hotel in Saratoga Springs ([www.gideonputnam.com](http://www.gideonputnam.com)), located New York's Capital Region and emerging "Tech Valley." Sessions will include paper presentations, panel discussions, workshops, opportunities to "share a table with a member of various professions," and "the winners' circle"—a forum for the free and lively exchange of ideas on a variety of topics.

Proposal topics suggested, but not limited to, are:

- Information Usability
- Web Development
- Managerial Communication
- Innovation in Education
- Communication in High-Tech Environments
- Collaborative Design and Communication
- Innovations in Communication
- Information Evaluation and Testing
- New Communication Media

Send 1-2 page proposals by 10 January 2006 to **Roger Grice**.



## Society News: Call for Papers

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# Call for Papers: Special issue of IEEE Transactions on Professional Communication

Contributed by Kim Sydow Campbell

This special issue of the *IEEE Transactions on Professional Communication* will focus on Examining International Outsourcing: Perspectives, Practices, and Projections. Guest Editor will be Kirk St.Amant of Texas Tech University, Department of English.

### Deadline for submission: 1 October 2005

International outsourcing (or offshoring) has become a topic of increased interest and concern, primarily because of the effects it is having on the nature of knowledge-based work. While a great deal has been written on the effects of international outsourcing on the information technology (IT) and the customer service industries, relatively little has been published on the effects that international outsourcing is having on professional communication.

Similarly, relatively little has been written on how international outsourcing practices might change the nature of specific technical communication practices or change the field in general. Such perspectives, however, are essential to technical communicators who must re-think the nature of their jobs in an age of global business practices. In addition, such perspectives are important for educators who train the technical communicators of tomorrow.

This special issue will examine how international outsourcing is affecting professional and educational practices in technical communication and how international outsourcing could shape future practices in both areas.

### Topics

Topics of interest for this special issue include, but are not limited to, the following:

- Which technical fields seem poised to engage in large-scale international outsourcing in the future? What implications will such outsourcing have for technical communicators working in related industries?
- What technical communication tasks or practices are particularly susceptible to international outsourcing?
- What lessons can technical communicators learn from how international outsourcing has affected other professional fields?
- Which nations seem poised to become international outsourcing providers for technical communication tasks? How well prepared are workers in those nations to perform such tasks?
- How have international outsourcing practices in other fields shaped the ways in which technical communicators interact with SMEs in different nations?
- What technology developments can facilitate the international outsourcing of technical communication practices? What developments could affect how technical communicators interact with SMEs located in other nations?
- Which international legal factors affect international outsourcing practices? How do technical communicators fit into

that legal framework?

- How should educational practices change to train technical communicators to work effectively in an environment of international outsourcing?
- What implications does online education have for the training of technical communicators in other nations? How might such situations affect the outsourcing of technical communication practices?

## Submissions

Please email abstracts (200-500 words) to **Kirk St.Amant**.

Please include the following information in your abstract:

- Title of the proposed article
- Name, institutional affiliation, and contact information for author(s)
- Overview of proposed article topic
- Discussion of the contribution this article will make to research, teaching, or other professional practices in the field of technical communication

## Timeline

Abstracts due: October 1, 2005

Invitation to submit full papers for peer review: October 15, 2005

Full papers due: December 15, 2005

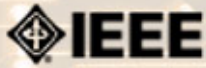
## Guidelines

Guidelines for submitting full papers for review can be found online at **[http://ieeepcs.org/activities\\_publications\\_transactions\\_authors.php](http://ieeepcs.org/activities_publications_transactions_authors.php)**

Note: The invitation to submit full papers for review does not mean a paper has been accepted for publication. Rather, all full papers will undergo a peer review process, the results of which will be used to determine if the paper will be published in this special issue of the IEEE Transactions on Professional Communication.

## Questions

Email questions to the **Kirk St.Amant**. Prospective contributors are welcome to contact the guest editor to discuss prospective topics for an article.



## Guidelines

# Newsletter Article Submission Guidelines

by **Kit Brown**

Submit articles by the 15th day the month before you want the article to appear. The newsletter is published monthly around the 1st of the month. The [editorial schedule](#) provides the proposed themes for each month. Additional suggestions are always welcome.

If you have questions, comments, or suggestions, please contact [Kit Brown](#).

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**Guidelines:** Moving the newsletter from a print to an electronic format has necessitated some changes in the submission guidelines. Please review the following information when submitting articles or regular columns to the newsletter:

- **Submit articles electronically in MSWord or RTF format to [pcsnews.editor@ieee.org](mailto:pcsnews.editor@ieee.org).** These formats are more easily available to me than other word processing applications.
- **Provide articles that are 200-700 words in length.** People tend to scan rather than read in an online environment. Short, well-written and relevant articles will be more beneficial to the audience than longer ones.
- **Provide a short bio (~25 words) and contact information.** Readers want to know about you. At a minimum, write a bio that tells your name, company, primary job title, email address and why this topic is of interest to you or what experience you have in the area you wrote about. (This doesn't count as part of your word count.)
- **Indicate whether the article is time sensitive.** Because of size considerations and editorial schedule, newsletter articles may not be published immediately upon submission, unless it is date critical (e.g., information about the upcoming conference or an article about a current event that relates to technical communication.)
- **Indicate copyright information if applicable.** If you own the copyright for an article, indicate this with your submission so that we can provide appropriate attribution. If you don't own the copyright, but think an article is interesting, provide the article, along with the contact information for the copyright holder and the name of the publication where it was originally published.
- **Insert the URL into the text so that I can easily create the link.** For example, if you want to reference the w3c, you would say "refer to the W3C (<http://www.w3c.org>) guidelines". Don't create the hyperlink in Word.
- **Provide complete bibliographic information for references.** Include author(s), title, date of publication, publisher, page numbers, or URL.
- **Use a friendly, casual tone.** We want to invite people to read and to make the information as accessible as possible.
- **Use 1-inch (2.54 cm) margins; don't indent paragraphs.** I have to reformat the text so it's better to minimize the formatting you include. Instead of indenting, put an extra line between paragraphs
- **Avoid using lots of formatting within the text.** I will have to format the articles for the online environment, so don't

put lots of bold and italic in the text.

- **Use subheadings generously.** Subheadings help the reader identify the information that is important to them. Subheads are especially helpful in orienting the reader in the online environment.
- **Use active voice and short sentences.** At least 40% of our audience is outside of N. America. For many members, English is their second (or third) language. Short sentences and active voice are easier to absorb and understand than complex sentence structures.
- **Avoid jargon and "big" words when a simpler term will work.** Approximately 90% of our audience is engineers who need to write effectively on the job. Avoid using writer's jargon, or explain the term in the context. By "big" words, I mean complicated, less commonly used words that may have the same or similar meaning to other, more commonly used words (e.g., instead of "obfuscate", just say "confuse").
- **Avoid idioms.** Idiomatic phrases are those colorful sayings we use to mean something else. For example, "once in a blue moon", "jump right in", "on the fly". Unfortunately, these sayings often have no equivalent in other languages, and can be difficult for non-native English speakers to interpret.
- **Submit graphics as JPGs or GIFs.** Web graphics need to be in one of these formats for most browsers. SVGs and PNGs are not yet universally accepted. If you want graphics included in your article, you need to give me the JPG. Don't just embed it in Word.

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