Creating a global website

Challenges for translators and technology solutions

Written by:

Howard Schwartz he Internet has been accepted as the foundation on which our global community is being built. The way we do business and take care of our personal needs is being revolutionized by interaction between Web sites from hundreds of different countries.

More than half of all Web users reside outside of the United States, yet 78% of Web pages are found only in English. English, however, is rapidly losing favor as the language of choice on the Internet as Web users look for content in their native languages. Billions of pages of text, computer code, and graphics images need to be adapted to the preferences of these local users through a process called Web globalization. Central to this process are the translators that adapt the content for the target languages.

Unfortunately for the freelance translator, globalizing a Web site involves more than translating words in a document. Turning an online business into an international venture is actually a complex process that involves technical and logistical tasks that are beyond the capabilities of a single individual. Because many companies require technical assistance in addition to translation work, freelance translators may be passed over in favor of larger web localization companies. Both a lack of opportunity and limited technical expertise can prevent translators from working on Web localization projects.

However, by utilizing Web globalization technology, translators can take part in the rapidly growing demand for translation services on the Web. By providing the back-end technical support and integrating localization management into the globalization process, technology solutions provide the underlying foundation for creating a global Web site or ebusiness. This infrastructure makes it easier for transla-

Global Enablement
Reengineering Web pages
so they can be easily localized

Content Localization
Tailoring content to local markets

Global Content Management
Monotoring and managing
multilingual content across
multiple sites

Stages of Web Site Globalization

assurance testers, and other key personnel to play their roles. In order to see how you can navigate these avenues, it may help to look at the stages involved in Web globalization, the chal-

tors, project managers, quality

Web globalization, the challenges inherent to each stage, and the roles translators can play in helping to solve these problems.

How do you build a Global Web Site?

Web sites are no longer static pages filled with simple graphics and plain text. They have become dynamic, constantly evolving software applications that serve as databases, commerce portals and real-time communication tools, among other things. In order to build a truly global Web site that incorporates the full functionality of the local site, companies must ensure that the stages of Global Enablement, Content Localization, and Global Content Management are properly addressed.

Global Enablement

In order to make sure that these complex Web pages and applications work properly in other languages, they first must be readied for the global environment. Global Enablement, the first stage in a globalization project, involves modifying an application to be "culturally agnostic", meaning it has the ability to recognize and process any language, currency and other culture-specific content. Global Enablement includes the process of internationalization, which involves a one-time reengineering procedure that prepares a Web page so it can be easily localized for any region or locale. Global Enablement also involves looking strategically at the design of a site, so it can be optimized to handle multiple versions in different languages.

One example of internationalization is making the software or Web site capable of processing Asian characters. Early on in the development of computers, when computer memory was a precious commodity, single byte encoding systems were used to designate unique codes for each alphabetical character. With between 127 and 255 unique designations available for each character to be displayed, the European phonetically based languages were easily represented. However, unlike the European languages, Asian languages are based upon unique nonphonetic characters. Two bytes of computer memory are required to encode the numerous ideographic characters. One double-byte standard, called Unicode, has emerged to incorporate thousands of Asian characters, but is not supported by all software. Thus, when globalizing a Web site, scripts and backend applications must be re-coded to handle Asian char-

There are other challenges that must be addressed in the Global Enablement process. Different cultures have different conventions for representing information such as phone numbers, dates, and addresses. If one tries to enter this information into a country-specific Web site, any data that does not fit in the prescribed formula may be truncated, misinterpreted or lost entirely. For example, if an American entered

his February birthday in the American mm/dd/yyyy (02/05/1968) format into a British dd/mm/yyyy site, he would be recorded as having a May 2 birthday rather than a February 5 birthday. Modifications to the underlying application computer code allow the correct data to be captured, regardless of the country of input.

Content Localization

Once the Web site has been enabled for the global market, each piece of content must be specifically tailored to the local area in which it will be viewed; thus, Content Localization is the next step in the globalization of a Web site.

In today's international market, rapid deployment of globalized sites is essential in order to remain competitive, which means that a company may release a site into multiple languages simultaneously. The localization manager may need to track the progress of hundreds of pages of content as it is localized into 5-10 languages or more. At any point during a document's life cycle, it may be reviewed and modified by editors from different departments, such as lawyers, QA team members, or translators. Localization is usually handled by a team of project managers that oversee the routing and modification of each document. However, with the onset of Web sites with hundreds of pages of content, ensuring that each leg of the localization process goes smoothly while cascading all the pre-release changes to the appropriate people is a logistical nightmare.

Once the Web site files are routed to the translator, a new host of problems must be managed. As more Web pages rely on technologies such as JAVA and XML, the actual text that translators work with may be buried within many lines of computer code. Without a Web programming background, translators may not be able to work with this material without accidentally changing the complex code. Thus, in order to translate the text of a Web site, the translator must be able to extract the text from the Web document. If the text could be isolated and the surrounding computer code locked down, the translator would then be able to focus on the text that needs to be translated.

Because of the technical nature of much Web site content and the importance of projecting a homogeneous company image, many companies require certain phrases to be used consistently across projects. The translator may be asked to access glossaries containing hundreds of terms and incorporate any terms that occur into the project. Manually searching through an index of glossary terms would slow a translator down tremendously.

Web sites also have content that is reused on multiple pages or through different projects. The translator may have to repetitively translate the exact same material many different times throughout a project, losing time that could be better spent translating new content. Without the use of translation technol-

ogy, previous translations and work done by other translators cannot be leveraged. The company will find it difficult to preserve coherency in their brand or consistency across different Web pages and versions of their Web site.

Global Content Management

Once a Web site is initially globalized, the process is just beginning. One of the biggest challenges of globalizing a Web site is that the content is constantly being updated and modified. Changes to Web sites are often made weekly or even hourly, and, sites in other languages should ideally be updated simultaneously to reflect these changes. Adding, deleting, or changing content on a Web site can be done virtually instantaneously on the site of origin, and, therefore there must be a way to cascade these changes to the multilingual Web sites that are to be synchronized with this original page.

By immediately updating multilingual Web sites when content on the local site changes, a company is able to maintain fresh information across all of its Web sites, regardless of language. The third stage of Web globalization, Global Content Management, addresses this challenge of tracking changes and synchronizing content across multiple languages. Some structure must be implemented to monitor the original site for changes and then trigger the localization and update process once a change is detected.

As we've seen, globalization is an extremely complex process that involves Global Enablement, with the need for computer programming and engineering skills; Content Localization, which requires technical quality assurance and project management; and Global Content Management, with the need to track and manage every change that occurs on a website. To accomplish this with traditional localization tools and processes, entire new departments may have to be created for each aspect of globalization, and, the independent translator would have little opportunity to participate.

Technology Solutions

Luckily, there are solutions that can minimize the amount of time and labor required. By working with technology and services designed to address these challenges, translators can get involved in Web site globalization without needing HTML programming skills or incurring additional expenses.

Translators should look to partner with technology vendors who can address the challenges of Web globalization that are outside the translator's areas of expertise. For example, globalization vendors have dedicated teams of engineers to address the Global Enablement phase, re-engineering Web sites to handle global content. Once this stage is managed, the localization process can commence and translators can begin to get involved.

Key to this process are technology solutions

designed to accelerate the localization process and make translation faster and more efficient. Because so many different team members need to access files and information, the heart of the solution should be a Web-based application that can be accessed by translators, customers, companies, and anyone else involved in the globalization process. This application should also address workflow, automating routine notifications and file transfers to free the project manager to handle the most important details. This engine should also be capable of detecting delays and alerting key players to problems in the system to ensure that the process continues smoothly and unhindered.

Another key component is the translation software tool to be used by translators. Translation software facilitates the translation process by automatically comparing the source text to a database of previously translated content. Then, using glossaries and translation memory it suggests localized terms or sentences that correspond to the original text. It should be designed to work with the Web based application and access the translation memory and glossaries residing at the central server. By using a Web-based translation memory, the translator can leverage a database of prior translations built by all translators working on any company project.

However, the software should also be capable of being used off-line during the actual translation work so that translators don't need to tie up phone lines and potentially run up high Internet charges. In addition to translation memory, other functions may be useful to the Web Site translator. By locking down HTML code and isolating the text to be translated, software can hide confusing computer code and allow translators to focus on the source text. Additionally, translators should also be able to switch

between the source text and the formatted document to view what the final product will look like.

Globalization solutions may also include a Webbased community—a marketplace where translators and customers can find one another. Translators should be able to market their services to customers that are using the system and customers should be able to find translators by language or by the industry in which they need translations done. By accessing a centralized marketplace, customers do not need to spend time searching for translators to work on their projects.

To complete the process once the localization is completed, technology exists to detect and manage Web site changes. If changes are detected, it can automatically forward the new content to be translated, localized, and routed for approval. The software agent should then upload the newly localized information onto the different language-specific Web sites. By reducing the need for project management and allowing the technology infrastructure to manage the bulk of the updates, revising content is an efficient, inexpensive process.

By leveraging these types of technologies, translators and smaller localization companies can take part in the globalization of Web sites. Working as part of a complete solution helps translators work on large and small projects with a minimum of technical complications and cost. Using the technology venues available to connect with customers allows translators to focus on doing what they do best—translation—and leave the HTML formatting and technical problems to other team members. Today, translators no longer have to let the technical challenges of Web globalization prevent them from taking advantage of an enormous opportunity.