Thinking Locally

By Leslie Downey

July 12, 2004

Ask any person on the street these days what he or she thinks of "globalization," and you're almost certain to get an opinion. Ask about "localization," and you'll probably get a blank stare. But "the localization and translation industry accounts for about $26 billion in worldwide revenue," according to Michael Anobile, Director of the Localization Industry Standards Association, or LISA, based in Geneva, Switzerland. "And its growth is accelerating as U.S. companies realize they must do more to make their products marketable in other countries."

Language translation is a key element of the localization process. Web sites, product promotion and training material, software, and legal agreements may all need translation. But localization also includes careful consideration of subject matter, graphics, and colors, to appeal to and avoid offending people in the target country market.

"Only one in four of the world's population speaks English to some level of competence," Anobile notes. "That leaves nearly five billion people who are unreachable without translation, and a growing percentage of those are accessing the Internet." These facts, along with the current growth of the world economy, are spurring U.S. companies to think harder about how to tailor their products for greater acceptance in individual countries. "Today more than half the Web sites of U.S. IT companies are in English only," says Anobile, "leaving a lot of untapped opportunity."

Translation is costly, since it is labor intensive and often requires establishing relationships with translators outside the U.S. who have specialized knowledge of an industry. During the past decade, companies like Sunnyvale, California-based Trados, London-based SDL International, and ATRIL in Barcelona, Spain have developed software that automates part of the translation process. Their products save translators from having to translate terms and phrases more than once. The context-sensitive algorithms and database technology enable storage of translated material in "translation memory" for subsequent reuse. In 2003, these companies signed up more than 400 new customers worldwide.

Despite significant improvements in translation technology and standards in recent years, most U.S. companies that localize their products don't do it all themselves. For help they turn to the estimated 450 localization services providers, according to Renato Beninatto,

Principal at Common Sense Advisory, a research and consulting firm based in Chelmsford, Massachusetts, specializing in the localization industry.

Localization services providers tap technology from companies like Trados, but also employ their own tools and processes to speed localization. Plus, they know the minefields that can set back a project. For example, text in German consumes about 30 percent more space than English, so a company should take that into account when planning its web site. The Chinese language, with an alphabet consisting of several thousand characters, requires two bytes to store each character, instead of the single byte required by English letters. Also, putting statements in positive form in the "source language" document, and avoiding ambiguous, "auxiliary" words like "would," "may," or "should," saves mistranslation and confusion.

Planning for localization when the product is created can significantly reduce costs later. "If the people creating a product that will later be localized for sale in other countries do not factor that future localization into their plans, the localization effort ends up being far more time consuming and expensive," says Leslie Yewell, Senior Project Manager at Welocalize, a localization services provider in Frederick, Maryland. "There are many up-front considerations, including the database software, programming language, character encoding, placement of text within programs for easy extraction, and formatting of text to facilitate uniform and accurate translation." Founded in 1995, Welocalize has for three years running been named one of Maryland's "Fast 50," awarded to the state's fastest growing technology companies by Deloitte & Touche. Its customers span the gamut from giant manufacturers like General Electric and CISCO Systems to small professional services companies like Rockville, Maryland-based LEARNWRIGHT.

How Localization Works

Welocalize recently collaborated with LEARNWRIGHT, creator of Web-based training courseware for pharmaceutical and biotechnology companies, to localize an existing English-language on-line training course on safe chemical manufacturing practices for use in Germany and Switzerland. Since the course contained audio and animation segments in addition to text, Welocalize needed to manipulate numerous and complex files in order to perform the translation. "Taking apart the many multimedia and database files in preparing for translation was like peeling an onion," said Jennifer Lui, Engineer at Welocalize, "and after translation it was equally challenging to reassemble all these elements for seamless execution of the software."

The three-month deadline required careful planning so that as much of the process as possible could take place concurrently. This meant quickly lining up engineers, database and multimedia specialists, and translators, including a German expert in chemical manufacturing who would ensure that all words would sound "native" to German and Swiss trainees. A recording studio was set up for the audio translation. Since more words are used in German to express the same concept, the German audio segments were alternatively edited down or sped up in order to track with the video portion of the course. As with most localization projects, industry-specific English and German

glossaries were procured as the basis for much of the translation memory that would be created in the Trados system used by Welocalize and its translators. "Its role in ensuring uniform translation makes the glossary the pillar that everything else stands on," says Yewell.

The images used in localized material are as important as the language. The depiction of people is a matter of great sensitivity; likewise, a particular animal may be the object of reverence in one country and repulsion in another. Colors draw widely different reactions, too. In many countries, the color green is associated with environmental safety, but in a number of countries containing dense jungles, it's associated with disease. Localization usually involves maintaining a balance between brand consistency and customizing the material for cultural acceptance. "The LEARNWRIGHT course contained a quiz in the form of game show featuring Alex Trebek from 'Jeopardy,'" notes Yewell. "Few Germans would recognize Trebek, so we substituted a generic name."

Having completed the German localization of the LEARNWRIGHT training course, Welocalize is now creating a Spanish language version. Besides translating language and modifying presentation, this project involves changing some of the text to reflect the different regulatory environment in the target Spanish-speaking countries. After the Spanish language course is finished, Yewell foresees that sometime in the future there will need to be some "retranslations" in German and Spanish as the source language course in English is updated. When that happens, Welocalize will use its own technology to identify the updated material that needs to be translated, then the Trados system to identify possible matches from existing translated phrases in its "translation memory," to translate the updates as efficiently as possible.

The Localization Decision

How do companies decide whether or not to localize a product for a particular national or linguistic market? "Of course, there are strategic considerations, but usually it comes down to a financial analysis comparing the incremental revenue from localizing to the incremental costs," says Tim Hussey, Senior Director of Globalization for San Francisco-based Macromedia.

Most U.S. companies charge "core product development" expenses against their U.S. sales. So in the financial analysis regarding localization they consider only the incremental expenses to localize. Of course, in some cases a product can still be marketed to another country "as is," without localization.

Whether or not a company decides to localize, it must consider issues such as how it will distribute the product and provide customer support. "Deciding to market a product in a different country involves long-term commitment," says Ulrich Henes, Director of the Localization Institute, a localization training organization in Madison, Wisconsin. "If you go into a market and then pull out, you'll damage your brand."

At present, the majority of U.S. companies that have localized products have done so only for the largest linguistic markets, typically French, German, Italian, Japanese, and Spanish. Many are beginning to localize for China. Large companies like IBM and Microsoft have localized their products for many smaller linguistic markets. In addition to the primary languages, Macromedia, a medium size company, translates some of its packages into Korean, and is continually evaluating whether to localize for new linguistic markets.

"Overall, payback from our localization efforts has been very good," observes Hussey. "However, deciding whether to localize for a new target country or whether we've over-invested in a past localization effort is not always straightforward. There are numerous factors affecting a product's success in a market, and isolating the impact of localization requires some judgment. Plus, measuring the cost of localization usually means separating out the time spent by internal staff who have other functions as well. It's a lot easier to measure those costs outsourced to services providers."

According to a 2001 survey performed for LISA by Geomarkets.com, the cost of a localization project can vary from $100,000 to over $1 million. This same survey says the average company's localization activities generate incremental expenses ranging from one to five per cent of its product and web development budget. A 2002 survey by SimulTrans L.L.C., a localization services provider in Menlo Park, California, indicated that average localization spending amounted to 19.5 percent of localization revenue. LISA's research indicates that on average a dollar spent on localization produces ten dollars accumulated revenue over multiple years, and that this return is increasing thanks to the growing sophistication of localization tools and techniques.

To get a current, industry-wide perspective on the financial return from localization, the Localization Institute's Henes plans to poll about 30 IT companies engaging in significant localization. Companies participating in this "Localization Metrics Initiative" will report their investment in localization and the revenue produced by that investment, as well as the minimum return they expect when investing in localization for a new linguistic market, among other data.

As part of this Localization Metrics Initiative, a core group of companies, including Macromedia, Palm, Sun, PTC, and Symantec, collaborated with Henes to develop a set of metrics that they would commonly use to report revenue and costs. The data gathering will be completed this summer. "Having the results will be very helpful," says Hussey, project leader of the Initiative. "When we're on the fence about localizing for a particular market, we'll be able to look at the experience of peer companies that have already done it."

Thanks to Open Standards, return on investment (ROI) and quality are Improving. "It's important for companies to see payback on their localization investments, and LISA has been working with localization vendors to ensure that the quality of translation improves at the same time," says Anobile. Defining metrics designed to improve that quality and

enable interoperability of localization technology systems has been the cornerstone of LISA's work.

LISA is best known for two open source standards, Translation Memory eXchange (TMX) and TermBase eXchange (TBX), designed to improve quality and ROI in creating and maintaining multilingual documentation. Based on the widely used Extensible Markup Language (XML) for the Internet, these standards were developed and are maintained by a committee of LISA members including IBM, PeopleSoft, SAP, Sun Microsystems, GlobalSight, Welocalize, RWS Group, SDL International, and TRADOS.

LISA publishes the popular QA Model, an automated, standardized quality assurance model for software localization, developed in collaboration with IBM, Microsoft, Rank Xerox, and a group of translation services providers. "We also promote the so-called J2450 Language Translation Quality Metric that's now used worldwide in the auto industry for more consistent translation," notes Anobile.

In a new initiative, LISA is actively involved in defining and assessing translation quality metrics for the American Society for Testing and Materials, which touches dozens of industries-metals, petroleum, construction, and the environment, to name a few. Anobile confirms that there is much left to be done. "With the pace of both technology development and globalization accelerating, we've got our work cut out for us for the foreseeable future."

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