Remodel The Net's Tower Of Babel

Real-time translation tools can help companies and customers connect

By David M. Ewalt (InformationWeek)

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"That it uses the fact that the enterprise which is smart improves they enterprise the flag total translation execution is the technique which is possible."

Doesn't make much sense, does it? That's what you get if you use AltaVista Co.'s Babel Fish translation Web tool to convert the sentence "Machine translation is a viable technology that smart enterprises are using to improve their business" into Korean, and then back into English.

OK, so there are still a few glitches in machine-translation technology. But things are getting better. Plug the same sentence into the site for an English-to-French-to-English translation, and the system returns a lucid "Machine translation is a viable technology that the smart companies employ to improve their business."

And more sophisticated offerings from companies such as Alis Technologies, IBM, SDL International, and Systran are upping the ante. Improvements have been driven by forces as disparate as academic research on linguistics, advances in software intelligence, and even increased Department of Defense investment. As the software grows increasingly accurate, it's starting to prove its usefulness in real-time business environments.

In particular, machine translation technology has the potential to help companies improve their relationships with customers and increase their revenue.

C.R. Laurence Co., North America's largest distributor of glass supplies and equipment, has used machine-translation tools to convert its entire 25,000-product Web-based parts catalog into Spanish, German, and French. The catalog pulls information for customers from a constantly updated database, so "we could not go with a static approach to any translated version," says Dan Roach, VP of systems. "To manage it in English is overwhelming. To manage it in four languages is just unthinkable."



C.R. Laurence uses software called the Enterprise Translation Server from SDL International. "It runs as a server within our network and does translations on the fly," Roach says. Now its French-speaking customers in Canada, its Spanish-speaking constituents in Mexico and South America, and its German clients overseas can do business with C.R. Laurence in the language they prefer. The company wouldn't disclose the cost of these deployments but says the expense is justified because it helps it better reach an ever-growing international clientele.

"The application of this cool technology to real business problems will be what drives the use of these tools," says Rob Lancaster, senior analyst at the Yankee Group. Market penetration of the software is still small, but growing, as large companies expand internal search initiatives and attempt to gain market share overseas. Another reason for business-to-consumer companies to get onboard, he says, is "because there is such a large number of foreign-language-speaking citizens in the U.S."

But getting Web sites and the back-end databases that drive them set up to provide catalogs or other documents in the language the customer wants to use takes some work. The SDL system has a 15,000-word vocabulary, but users have to add words it doesn't know; the software supplies a list of those words after scanning a company's documents. Some of the most challenging work involves preparing the software to deal with a particular industry's jargon.

"A classic example might be the word 'finish," C.R. Laurence's Roach says. "In normal, everyday English, 'finish' typically means 'to end.' But in my industry, the word 'finish' most often represents a color." So Roach had to load some new rules and custom phrases into the software's dictionary. It put in a translation that indicates the words "brass" and "finish" used together are related to color, but the phrase "almost finished" doesn't mean color.

The project has been so successful that C.R. Laurence is planning to add more languages, starting with Italian. Complaints about poor translations have been rare, but optimization of the system remains a maintenance task. "That was and is an ongoing process," Roach says.



To maintain accuracy as the New York State Department of Motor Vehicles translates its Web site into Spanish, it's taking a thorough approach, Vang says

The New York State Department of Motor Vehicles faces similar challenges. It's beginning to translate customer-service information on its Web site into 20 languages to serve New York's diverse population, starting with Spanish. After 11 months, out of 333 documents, only 4% have been through the process. That's because the department is taking a thorough approach to assure accuracy, says Richard Vang, a project assistant in the department's Internet services office.

Vang and his team members, who also use the SDL software, are first standardizing each page into plain English versus bureaucrat-speak. Using the MAXit Controlled English Checker from Smart Communications Inc., they're painstakingly going through page after page on the site, making sure terminology is standardized, text is in active tense, and so on. It takes three or four days to complete an average-sized document, and after it's translated it goes through two levels of checking by employees who are native speakers. For a typical Web page, Vang figures it could take six months for a document to get all the way through the process.

The cost of the project, which the department declined to disclose, is justified, Vang says, by the 90% to 95% accuracy rate of translations. In a sense, the process is even better than using human translators, he says, since new pages can be translated in real time, thanks to all the work the department has done to build a smarter system and a detailed custom dictionary. That means a page that hasn't been reviewed or standardized can still be translated with 75% accuracy. In these cost-constrained times, that beats the alternative. To actually hire somebody to translate full time for each language wouldn't be very cost effective, Vang says.

Businesses might not even need bilingual employees to talk to customers in real time, either online or in the real world. Enterprise translation engines are already capable of instantly translating conversations in a chat room, says Richard Kreidler, who advises clients on machine-translation projects for the Mesa Group. In the months and years to come, the software is even likely to power handheld devices that can interpret speech. The U.S. Department of Defense is already developing such a project, he says.

"One of the first steps in globalization is to remove the language barriers," Kreidler says. As more consumers are getting onto the Net, "people are becoming empowered. They're saying, 'This is not acceptable. Talk to me in my language. Respect me, and I'll respect you.""