

# Multilingual Web Sites in Global Electronic Commerce

**Shaoyi He**

*California State University, San Marcos, USA*

## INTRODUCTION

The World Wide Web (the Web), a distributed hypermedia information system that provides global access to the Internet, has been most widely used for exchanging information, providing services, and doing business across national boundaries. It is difficult to find out exactly when the first multilingual Web site was up and running on the Internet, but as early as January 1, 1993, EuroNews, the first multilingual Web site in Europe, was launched to simultaneously cover world news from a European perspective in seven languages: English, French, German, Italian, Portuguese, Russian, and Spanish. (EuroNews, 2005). In North America, Web site multilinguality has become an important aspect of electronic commerce (e-commerce) as more and more Fortune 500 companies rely on the Internet and the Web to reach out to millions of customers and clients. Having a successful multilingual Web site goes beyond just translating the original Web content into different languages for different locales. Besides the language issue, there are other important issues involved in Web site multilinguality: culture, technology, content, design, accessibility, usability, and management (Bingi, Mir, & Khamalah, 2000; Dempsey, 1999; Hillier, 2003; Lindenberg, 2003; MacLeod, 2000). This article will briefly address the issues related to: (1) language that is one of the many elements conforming culture, (2) culture that greatly affects the functionality and communication of multilingual Web sites, and (3) technology that enables the multilingual support of e-commerce Web sites, focusing on the challenges and strategies of Web site multilinguality in global e-commerce.

## BACKGROUND

When the Internet was originally created as ARPANET in 1969, it was only a small computer network interlinking four universities in the southwestern United States. Nowadays, the Internet has become a primary communication medium, with 820 million computers and one billion users all over the world (Computer Industry Almanac, 2004, 2005). Throughout the years, both the Internet and the

World Wide Web have evolved with the monolinguality of English into the multilinguality of more than 1,000 languages (Crystal, 2001). In 1998, the majority (70%) of the Web content was in English (Nadeau, Lointier, Morin, & Descôteaux, 1998), but it dropped to 56.4% in 2002 (Netz-tipp.de, 2005). Also in 1998, the newly created non-English Web sites outnumbered the newly created English Web sites (Crystal, 2001). Global Reach, a marketing communications consultancy that specializes in global electronic commerce, has been tracking the evolution of the English and non-English Internet populations since 1995. In 1996, 80% of the Internet population spoke English while the other 20% were non-English speakers. The English dominance was gone when the non-English Internet population (52%) surpassed the English Internet population (48%) in 2000. In 2004, the non-English Internet population reached 71% while the English Internet population dropped to 29% (Global Reach, 2004). Furthermore, current Internet usage is growing strongly in non-English-speaking countries such as China, Japan, Germany, India, South Korea, Italy, France, Brazil, and Russia (Computer Industry Almanac, 2004). As the number of non-English-speaking Internet users around the world increases, Web site multilinguality has become an important aspect of the Internet and the Web, and is becoming indispensable for companies that want to meet the needs of this increasing non-English Internet population via global e-commerce (Hillier, 2003; Lebert, 1999; Schneider, 2005; Westland & Clark, 2002).

E-commerce refers to the commercial activities that take place over a computer network, usually the Internet and the Web. These activities generally involve the buying or selling of marketing products, providing or obtaining services, seeking or acquiring information, and requesting or transmitting funds (Wikipedia, 2005). E-commerce can be between or among entities in the private sector, government institutions, and/or members of the public, hence the categories of business-to-business (B2B), business-to-customer (B2C), business-to-government (B2G), government-to-government (G2G), government-to-consumer (G2C), and customer-to-customer (C2C). E-commerce makes the best use of any of the Internet applications, such as Web sites, e-mail, instant messaging, online auctions, online forums, Web services,

and Weblogs (Fiore, 2001; Reynolds, 2004; Schneider, 2005). Because of the international nature of the Internet and the Web, the companies that engage in e-commerce would ultimately use the Web sites to conduct their commercial and noncommercial activities in a global e-commerce environment (Schneider, 2005; Westland & Clark, 2002). Furthermore, for any company that is serious about winning the competitive edge in global e-commerce, the better way to success is to build and maintain a multilingual Web site (Ott, 1999; Payne, 2005).

## **WEB SITE MULTILINGUALITY: CHALLENGES AND STRATEGIES**

A multilingual Web site provides the same information in different languages. There have been different approaches to develop and implement a multilingual Web site, and two have been historically adopted for many of the e-commerce Web sites. One is Web site globalization and the other is Web site localization. The former globalizes the content for broadening a businesses appeal to a general international audience, and the latter localizes the content to appeal to customers of a particular nation or culture (Chen, 2002; Dempsey, 1999; Seilheimer, 2004). A typical mature corporate Web site uses both approaches and thus contains a mixture of global content and local content. The global content need be presented in many languages for customers all over the world, and usually covers product information, technical support documents, tutorials, corporate profiles, worldwide branding messages, and the design of the Web itself. The local content has to be written for each target language audience, and usually includes locally available products, local promotions, sales and advertising campaigns, and local points of purchase indices. While the global content is applicable everywhere and is relatively insensitive to national or cultural differences, the local content provides the most relevant information to convince the users that the Web site fits in their culture (Schneider, 2005; Yunker, 2003).

A properly designed multilingual Web site targets information to a given audience and adequately meets their information needs. For example, having a Chinese Web site will make it easier to promote information relevant to a Chinese audience. It would also help to overcome potential cultural barriers when users are able to navigate, understand, and interact on the Web site in the native language. Also, a properly designed multilingual Web site is one of the most cost-effective ways of marketing the company, giving its brand an international outlook, building relationships with clients, and showcasing the company across the globe. By having the Web site

accessible to non-English-speaking users looking for products or services, it would be easier to capture their attention and they would be more likely to become new customers. In addition, a properly designed multilingual Web site has potential for an increase in sales. If an e-commerce Web site is translated into a few of the major world languages, such as Spanish, French, German, and Italian, there is potentially a 400% increase in sales (Payne, 2005).

One of the most visible challenges of Web site multilinguality includes overcoming the barriers of language, culture, and technology in global e-commerce, which have been observed and studied since the early days of the Web (Ott, 1999; Schneider, 2005; Vehovar, Batagelj, & Lozar, 1999). The language barriers not only refer to the historical dominance of the English language, but also refer to the present multilinguality of the Internet and the Web. Since 2000, there have been more non-English-speaking users than English-speaking users on the Internet (Global Reach, 2004). The culture barriers mean that cultural differences may cause misinterpretation in communication. Something that is appropriate and acceptable in one culture may not be appropriate and acceptable in another culture. The technology barrier mainly refers to the problems with character sets—there is no ASCII analogue for the non-Latin characters used by the Chinese, Japanese, Arabic, Hebrew, and other languages. Furthermore, on a multilingual Web site, the use of symbols, icons, images, colors, values, rituals, idioms, metaphors, and salutations needs be appropriately chosen according to cultural contexts, thus avoiding being misunderstood or offensive (Chen, 2002; Hillier, 2003; Singh & Matsuo, 2004; Schneider, 2005; Sun, 2001). When designing a multilingual Web site, the content and structure of the Web site should make sense for the eyes of people in that culture. If only the language was translated, the users in different cultures would experience difficulties of using and understanding the Web sites (Hillier, 2003).

Another major challenge of Web site multilinguality is related to the minority of non-English-speaking countries (Vehovar et al., 1999). Non-English-speaking countries face several language-related problems. In general, it is unrealistic to globally promote a company's Web site in a non-English language. If a non-English-speaking country were technologically undeveloped with a small number of Internet users, it would be very difficult to establish an audience large enough to justify the investment needed for elaborated applications on the Web. Such small non-English-speaking audiences can hardly enable the development of Web applications such as bookstores, travel agencies, search engines, portals, and news agencies in their own language (Ott, 1999).

4 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/multilingual-web-sites-global-electronic/12636](http://www.igi-global.com/chapter/multilingual-web-sites-global-electronic/12636)

## Related Content

---

### Information Security for Legal Safety

Andreas Mitrakas (2006). *Encyclopedia of E-Commerce, E-Government, and Mobile Commerce* (pp. 620-625). [www.irma-international.org/chapter/information-security-legal-safety/12603](http://www.irma-international.org/chapter/information-security-legal-safety/12603)

### Management & Delivery of Digital Print via the Web: A Case Study of Gaia Fulfilment

Savvas Papagiannidis and Feng Li (2005). *International Journal of Cases on Electronic Commerce* (pp. 1-18). [www.irma-international.org/article/management-delivery-digital-print-via/1473](http://www.irma-international.org/article/management-delivery-digital-print-via/1473)

### Exploring the Relationship between Sport Fan Identification and Addiction to Digital Sports Media

John S. Clark and Jill K. Maher (2016). *Journal of Electronic Commerce in Organizations* (pp. 1-12). [www.irma-international.org/article/exploring-the-relationship-between-sport-fan-identification-and-addiction-to-digital-sports-media/165146](http://www.irma-international.org/article/exploring-the-relationship-between-sport-fan-identification-and-addiction-to-digital-sports-media/165146)

### Decision Factors for the Adoption of an Online Payment System by Customers

Fang He (2009). *Selected Readings on Electronic Commerce Technologies: Contemporary Applications* (pp. 352-383). [www.irma-international.org/chapter/decision-factors-adoption-online-payment/28595](http://www.irma-international.org/chapter/decision-factors-adoption-online-payment/28595)

### The Client-Supplier E-Relationship Management: A Case Study In The European B2B Office Furniture Industry

Marco Tagliavini and Elisa Ghiringhelli (2008). *Electronic Commerce: Concepts, Methodologies, Tools, and Applications* (pp. 1082-1102). [www.irma-international.org/chapter/client-supplier-relationship-management/9533](http://www.irma-international.org/chapter/client-supplier-relationship-management/9533)