Chapter 1.3
International E-Commerce: Language, Cultural, and Infrastructure Issues, Challenges, and Solutions

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ABSTRACT

The phenomenal worldwide growth of the Internet and the World Wide Web has made it an important vehicle for both business-to-business (B2B) and business-to-consumer (B2C) commerce. While the Web offers great opportunities for international electronic commerce by eliminating the barriers of time and space, language, cultural, legal, and infrastructure issues present major impediments to global Internet commerce. In this chapter we address language, cultural, legal, and infrastructure issues as barriers to international electronic commerce. Specifically the chapter presents a framework for identifying and addressing language, cultural, legal and infrastructure issues. The goal is to help organizations meet the challenge of providing online international visitors with a high quality experience, regardless of location, language, business practices, and culture, while complying with legal requirements.

INTRODUCTION

The phenomenal worldwide growth of the Internet and the World Wide Web has made it an important vehicle for both business-to-business (B2B) and business-to-consumer (B2C) commerce. Forrester Research predicts that in 2004, online commerce for both B2B and B2C will reach $6.8 trillion (Worldwide eCommerce Growth, 2001). International Data Corporation predicts that while only 26% of Internet commerce was conducted outside the US in 1998, the ratio is expected to be over 50% in 2004 (Glasheen, Gantz & Emberley, 2004). The opportunity is particularly great for certain countries with current low participation rates, like China, who in 2003 had about six million Internet users, but potentially can have over a billion users in the future.

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In this chapter we address language, cultural, legal, and infrastructure issues as barriers to international electronic commerce. Specifically, the chapter presents a framework for identifying and addressing language, cultural, legal and infrastructure issues. The goal is to help organizations meet the challenge of providing online international visitors with a high quality experience, regardless of location, language, business practices, and culture, while complying with legal requirements.

The chapter is organized as follows. A background section introduces the concepts of localization, internationalization, and globalization, presents the main issues of the chapter, and provides a literature review emphasizing the importance of the issues. The section entitled “Language Issues” addresses important issues of translating Web sites to other languages. These issues include what to translate, writing for translation, language tone and formality, automated translation and maintenance, translation for different dialects, text expansion from translation, translating graphics, serving the correct localized site, directing traffic to a multilingual site, and content management workflow. The section entitled “Cultural Issues” addresses considerations for developing Web sites for different locales and cultures. These issues include cultural subtleties, local standards and conventions, graphic and design elements, color, layout, and cultural attitudes toward e-commerce. Legal issues are tackled in the “Legal Issues” section and include discussion of jurisdiction, recognition of electronic contracts, consumer protection, dispute resolution, and privacy. A discussion of Infrastructure as a barrier of electronic commerce follows and includes issues of limited bandwidth, language representation technical issues, local connection costs, and support infrastructure. Finally the chapter concludes with a summary and discussion of future and emerging trends.

**BACKGROUND**

It is estimated that about 70% of the Internet content available today is in English, yet 93% of the world are non-native English speakers, and about 65% of today’s Web users are non-English speaking (Global Reach, 2004). Over the next few years, Internet use is expected to grow by 79% in Asia, 123% in Latin America, and over 2000% in Japan. As a result, by 2004, it is expected that more that two-thirds of Internet users will be outside the United States and that 65% of Web use and 52% of electronic commerce sales will involve at least one party outside the United States (Glasheen, Gantz & Emberley, 2004). Further, research have shown that customers are more likely to buy goods and services from Web sites in their native languages, even if they can speak and understand English well.

Realizing the global potential of the Internet, many companies in their efforts to reach customers in other countries begin by providing local language versions of their sites. However, translation alone is usually not adequate. Web sites need to be localized for each national audience by taking into consideration multiple elements of the local environment. Localization involves translating and culturally adapting software user interfaces, Web pages, visual and graphical elements, help files, documentation, and other content for one specific national audience (Schwartz, 2000).

Numerous studies in the literature stress that, in order to attract and retain more customers, it is vital to adapt the Web site to a local community. For example, Nielsen and Del Galdo (1996) emphasize that localization should encompass more that a “surface-level” adaptation, by acknowledging underlying cultural differences such as interface design preferences and the local culture’s perception of usability. Evers and Day (1997) discuss the role of culture in interface acceptance. Barber and Badre (1998) suggest the existence of cultural markers, Web design elements that are prevalent in Web sites of different