Chapter V

International User Interfaces

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INTRODUCTION

The developing global information infrastructure (GII), together with strongly supported initiatives promoted by the World Trade Organization (WTO), is making it possible for electronic commerce to become a truly international activity. Quite clearly, in order to realize the potential of the Internet as a conduit for the development of an international marketplace, there will need to be changes to the current business and economic paradigms that underpin the working of successful offline businesses. In almost every country worldwide, new models of commercial interaction are being developed to support businesses and consumers so that they can fully participate in, and benefit from, the expanded marketplace.

However, to make a success of such an activity requires more than enthusiasm by the international trading community, or an appreciation of new online business and economic paradigms, or access to modern computer-based communications technology; it also requires customers to be able to navigate and use the interface with success and understanding. This means that the developer and owner of the system, in addition to having a knowledge of online business, must have a keen understanding of the cultural and language attributes of their customers.

In this chapter, the focus will be concerned partly with issues relating to the cultural interaction of the customer with the system, partly with the development of an international user interface, and partly with examining some of the technical problems relating to the design and implementation of multilingual interfaces.
International Users

The use of the Internet is no longer limited to English-speaking peoples. In fact, the percentage of users accessing the Internet using the English language has fallen below 50% (Table 1). Global Reach (2000), after gaining feedback from a number of informed sources, has concluded that the percentage of English-language users will fall below 35% by the year 2002. This prediction is based on the phenomenal increase in online users using Asian languages such as Chinese, Japanese, and Korean. The growth of Internet users in China is due, in part, to the surge in computer sales and a drop in telephone and Internet access fees. Furthermore the number of Chinese Internet users is likely to increase further if China, as expected, joins the World Trade Organization.

A comparison of the total language population of each group and the level of Gross Domestic Product (GDP) each population generates is shown in Table 1. If an expansion of e-commerce leads to a growth in trade and services worldwide, then the percentage of Asian language users is likely to increase even further. This in turn could see an increase in the level of GDP for many poorer, yet highly populated countries. However, there are many opponents of the initiatives of the World Trade Organization (WTO) who reject this scenario, as a quick visit to the Internet’s numerous discussion fora on this subject would attest.

Growth of Internationalization

The Web is becoming a multicultural and multilingual environment where many sites are becoming available in the native language of the audience. Many

<table>
<thead>
<tr>
<th>Language Family</th>
<th>Internet Access (M)</th>
<th>% of Online World Population</th>
<th>Internet Access in 2003 (M)</th>
<th>% of Online World Population</th>
<th>Total Population</th>
<th>GDP</th>
<th>% of Total GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>189.6</td>
<td>49.6</td>
<td>225.0</td>
<td>32.2</td>
<td>322.0</td>
<td>11070.0</td>
<td>35.2</td>
</tr>
<tr>
<td>European languages</td>
<td>113.8</td>
<td>29.8</td>
<td>223.0</td>
<td>31.9</td>
<td>1089.0</td>
<td>10550.0</td>
<td>33.6</td>
</tr>
<tr>
<td>Asian languages</td>
<td>78.6</td>
<td>20.6</td>
<td>250.0</td>
<td>35.8</td>
<td>1441.0</td>
<td>9824.0</td>
<td>31.2</td>
</tr>
<tr>
<td>Total</td>
<td>382.0</td>
<td>100.0</td>
<td>698.0</td>
<td>100.0</td>
<td>2852.0</td>
<td>31444.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(1) English
(2) European (excludes English)
(3) Asian (includes Arabic, Chinese, Hebrew, Japanese, Korean, Malay, Thai)

Note: The figures in the second column correspond to the number of people online in each language in millions. There is some overlap between English and non-English figures since many people access the Web in two languages. (The 1990 U.S. Census states that 32 million American people who are online do not speak English at home.) The total population column refers to the total number of people in each language family.
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