Chapter XIV

A Managerial Perspective on E-Commerce: Adoption, Diffusion and Culture Issues

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ABSTRACT

From a trading perspective, Internet-based e-commerce (electronic commerce), the most widely known form of e-commerce, refers to the exchange of products and services via electronic networks that may include value-added networks (VANs), the Internet, corporate intranets and extranets. E-commerce can be described and discussed from a strategic perspective using the ICDT framework (information exchange (I), communication (C), distribution (D) and transaction (T)) as well as the Four Layer framework. This chapter aims to discuss the issues of adoption and diffusion of e-commerce at the macro level in relation to the Four Layer and the ICDT frameworks. The influences of cultural differences among countries on diffusion and success of e-commerce are briefly discussed in relation to organisational models of national cultures. Future areas of research are pointed out at the end.
INTRODUCTION

Electronic commerce (or e-commerce), defined somewhat narrowly here as the exchange of information, goods, services and payments over the Internet, is projected to rocket from $657 billion in 2000 to $6.8 trillion in 2004 (Forrester Research, 2000). It has until now been concentrated mainly in North America, but it is expected to reach the threshold level for hyper-growth in Japan and key European economies by the beginning of the new millennium or shortly thereafter (The Economist, 1999). Table 1 shows the e-commerce growth projection worldwide, classified by regions and countries. North America leads the rest of the world, but the projection for growth rates in Europe and Asia are remarkably higher than for North America.

Table 1 is an indication of proliferation of e-commerce among the economies of regions of the world. The proliferation varies significantly among the regions, and even more significantly among the economies within a region. South Korea, for example, whose economy is trade oriented, and whose firms are well placed in the global supply chains of key industries such as electronics and automotive, was expected to reach e-commerce hyper-growth in 2002. Meanwhile, India is held back, probably until 2006, by its restrictive policies on trade and foreign investments, its underdeveloped telecommunication system and low PC (personal computer) penetration (Forrester Research, 2000). Opinions differ as to whether e-commerce will widen or narrow the development gap between richer and poorer economies (PricewaterhouseCoopers, 2000). It can be an “equalizer” that provides some emerging economies and their firms a means to leapfrog into a knowledge-based economy, or at least to strengthen their competitive posture. Yet, it can leave others further behind for their inability to invest in costly, fast-changing information technology and/or to adapt to the complexity of competing in highly interconnected markets and industries.

The importance of e-commerce goes far beyond conducting transactions online. E-commerce is about defining and implementing a meaningful Web presence.

Table 1: Worldwide e-commerce growth (Source: Forrester Research, 2000)

<table>
<thead>
<tr>
<th>Region</th>
<th>Year 2000</th>
<th>Year 2001</th>
<th>Year 2002</th>
<th>Year 2003</th>
<th>Year 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (billions US$)</td>
<td>$ 657.0</td>
<td>$ 1,233.6</td>
<td>$ 2,231.2</td>
<td>$ 3,979.7</td>
<td>$ 6,789.8</td>
</tr>
<tr>
<td>North America</td>
<td>$ 509.3</td>
<td>$ 908.6</td>
<td>$ 1,495.2</td>
<td>$ 2,339.0</td>
<td>$ 3,456.4</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>$ 53.7</td>
<td>$ 117.2</td>
<td>$ 286.6</td>
<td>$ 724.2</td>
<td>$ 1,649.8</td>
</tr>
<tr>
<td>Western Europe</td>
<td>$ 87.4</td>
<td>$ 194.8</td>
<td>$ 422.1</td>
<td>$ 853.3</td>
<td>$ 1,553.2</td>
</tr>
<tr>
<td>Latin America</td>
<td>$ 3.6</td>
<td>$ 6.8</td>
<td>$ 13.7</td>
<td>$ 31.8</td>
<td>$ 81.8</td>
</tr>
<tr>
<td>Rest of World</td>
<td>$ 3.2</td>
<td>$ 6.2</td>
<td>$ 13.5</td>
<td>$ 31.5</td>
<td>$ 68.6</td>
</tr>
</tbody>
</table>
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