Business-to-Consumer Electronic Commerce in Developing Countries

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INTRODUCTION

Electronic commerce describes the process of buying, selling, transferring, or exchanging products, services, or information via computer networks including the Internet. In **business-to-consumer electronic commerce**, the sellers are organisations, and the buyers are individuals (Turban, Leidner, McLean, & Wetherbe, 2005). Business-to-consumer electronic commerce provides opportunities for less-developed countries to reduce transaction costs and bypass some of the intermediary linkages to connect to global supply chains (Molla & Licker, 2005). Though predictions vary, statistics seem to point to significant growth of the use of the Internet among businesses and consumers in **developing countries** in the next 10 years (Hawk, 2004). The focus here is to explore the potential for business-to-consumer electronic commerce in less-developed countries. The approach taken is to review the current worldwide usage of the Internet; to identify the factors necessary for **e-readiness**; to explore the barriers to business-to-consumer electronic commerce; and to identify strategies that can be adopted by both the public and private sectors to overcome these barriers.

By the end of 2003, developing countries accounted for more than one third of new Internet users worldwide. Though Internet access is rapidly increasing, most residents of developing countries still have no access to the Internet. For example, Internet access in Africa is less than 2% in a population of over 900 million, the lowest rate of access in the world (Dunphy, 2000; UNCTAD, 2004). Business-to-consumer electronic commerce in less-developed coun-

tries will grow in the future, but progress will be slowed by technological, cultural, economic, political, and legal problems (Davis, 1999; Enns & Huff, 1999). Differences in e-readiness and related **barriers to electronic commerce** will sustain substantial differences between regions of the world, between countries within regions, between urban and rural areas within countries, and between the genders and age groups. Despite the difficulties, when the basic communications infrastructure is available, options do exist to undertake business-to-consumer electronic commerce in less-developed countries.

BACKGROUND

Table 1 shows the number of Internet users in the major regions of the world reflecting vast differences in **e-readiness**. Less than 10% of the population in the developing regions of Africa, Latin America and the Caribbean, and Asia were using the Internet in 2004 as compared to regions such as North America, Europe, and Australasia where 30% or more used the Internet.

Africa

The **digital divide** is largest in Africa, with less than 2% of people having access to the Internet as compared to 50% in most advanced countries. There are some **business-to-consumer electronic commerce** success stories, mostly in the traditional handicrafts area, where the Internet offers the

Table 1. Internet users per 10,000 people, by region, 2005 (Adapted from http://www.internetworldstats.com/stats.htm)

REGION	USERS PER 10,000	% IN REGION (approx)
Africa	144	1.4%
Latin America & Caribbean	1,011	10.1%
North America	6,501	66.5%
Asia	738	7.4%
Europe	3,159	31.6%
Australia & New Zealand	4,735	47.4%
World	**1,385**	**12.7%**

opportunity for a niche player to access the global market of African Diaspora. All African capital cities now have local Internet connection available.

Latin America

Internet use in the region is dominated by Argentina, Brazil, Chile, and Mexico, who among them account for two thirds of Internet users in the region. **Business-to-consumer electronic commerce** is growing, with online car sales, consumer auctions, travel, computer hardware and software, and banking responsible for the highest revenue.

Asia

Among **developing countries**, Asia stands out as the leading user of **electronic commerce**. This is partly due to high population, but also because organizations tend to be more integrated into global trade flows than in other developing countries. Manufacturing enterprises in particular face pressure from their customers in developed countries to adopt electronic commerce. China offers the greatest potential electronic commerce market, and is now considered one of the top five nations in the world in terms of Internet use. While many Chinese are going online for the first time, less than 20% have done any shopping online (Hsu, 2003).

North America/Europe/Australasia

In the developed world, the **business-to-business electronic commerce** continues to grow faster than business-to-consumer, with Forrester Research (Johnson, Delhagen, & Yuen, 2003) forecasting that 26% of business-to-business sales in the United States will be traded online by 2006. **Business-to-consumer electronic commerce** has progressed significantly in some sectors particularly those offering digital products, such as software, music, and travel services.

E-READINESS

An **e-readiness** assessment is an attempt to gauge how prepared a country is to benefit from information technology and electronic commerce. It is used to measure a country's ability to take advantage of the Internet as an engine of economic growth and human development (GIPI, 2001). An e-readiness assessment looks at infrastructure, the accessibility of information and communication technology (ICT) to the population at large, and the effect of the legal and regulatory framework on ICT use.

Over 15 different e-readiness assessment tools are currently available, and the assessments use a range of questionnaires, statistical methods, reports of best practice, and historical analysis (Bridges.org, 2002). Some tools look specifically at the e-economy and how ICT's can be used to improve the economy, whereas others are concerned with the broader picture, trying to measure the emergence of an e-society and assess how ICT's are improving social equality.

The assessment methods tend to include a common core of questions covering the areas of telecommunications infrastructure, levels of ICT usage throughout society, human

Figure 1. Factors commonly used to assess e-readiness
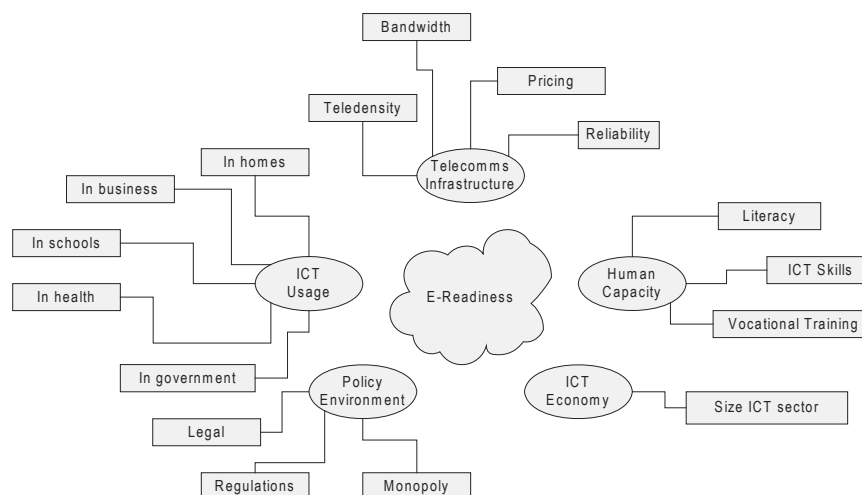
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