Chapter IX
Technological Hurdles to Caribbean E-Commerce: Responses by Innovative Managers

William Wresch
University of Wisconsin Oshkosh, USA

Simon Fraser
The University of West Indies, Trinidad

ABSTRACT

Studies summarized by the United Nations Commission on Trade and Development continue to show that Small and Medium Enterprises (SMEs) in developing countries face particular problems with managerial skills, connectivity, branding, logistics, security, and foreign competition. Yet the same studies note that barriers and e-commerce efforts vary considerably from one region of the world to another. To determine if these barriers are significant in the Caribbean region, during July and August of 2004, the principle investigators visited business executives in five Caribbean nations. 36 businesses and government agencies were interviewed. General results showed significant e-commerce efforts underway in these countries with most enabling technologies and business systems in place. However, several major barriers were repeatedly encountered. Logistics challenges, including shipping and customs barriers, as well as recent import controls in the United States were frequently mentioned. Many also described a banking sector unwilling or unable to facilitate convenient electronic payment systems. Nevertheless, executives described a number of e-commerce strategies which could be adopted by other SMEs that wish to increase their e-commerce income. The investigators present four managerial characteristics that were seen in the leading businesses. The authors hope the results of this study will suggest improved strategies for SMEs in developing countries seeking to use e-commerce to expand their markets.
**INTRODUCTION**

We are all well aware of the huge differences in technology diffusion between richer and poorer countries. The United Nations Conference on Trade and Development (UNCTAD) recently described the disparity this way:

*Regardless of how we measure it, there is an immense information and communication technology (ICT) gap, a “digital divide”, between developed and developing countries. A person in a high-income country is over 22 times more likely to be an Internet user than someone in a low-income country. Secure Internet servers, a rough indicator of electronic commerce, are over 100 times more common in high income than low-income countries. In high-income countries, mobile phones are 29 times more prevalent and mainline penetration is 21 times that of low-income countries. Relative to income, the cost of Internet access in a low-income country is 150 times the cost of a comparable service in a high-income country. There are similar divides within individual countries. ICT is often non-existent in poor and rural areas of developing countries. (The Digital Divide Report, 2005, piii)*

This disparity occurs against a backdrop of great hope in the potential for e-commerce to aid the development processes of poor countries. Kamel and Hussein speak for many when they say, “e-commerce… provides unprecedented opportunities for increasing trade, promoting investment, facilitating business transactions, providing a larger and more varied market and supplying an unprecedented marketing tool.” (Kamel, 2002, p.148)

This opportunity for increased sales has motivated considerable interest in ecommerce efforts in developing countries. Yet studies of e-commerce efforts continue to demonstrate that many barriers to success exist, especially for Small to Medium Enterprises (SMEs). UNCTAD’s 2004 annual report notes that barriers differ from country to country and region to region, but the barriers commonly found include:

1. Managerial skills necessary to plan and successfully implement an e-business strategy (UNCTAD, 2004, p.54)
2. Connectivity (quality, speed, cost) (p.54)
3. Branding (customers prefer to put their trust in well-known brands rather than take the risk of buying from unknown companies over the internet (p.30)
4. Logistical networks for the prompt and reliable delivery of products. (p.30)
5. Trust in the legal and regulatory environment (security). (p.51)

At the same time, UNCTAD also notes that SMEs are being driven to use the internet for business by competitors and suppliers. “Global competition is a driver of ICT uptake among SME’s, in particular those targeting the export market.” (p.31)

**LITERATURE REVIEW**

Given so many barriers and so much competition, is it possible for SME’s in developing countries to succeed in e-commerce? Previous studies have found few successes. A recent study of nine least developed nations (Wresch, 2003) found executives at Small and Medium Enterprises (SMEs) were finding little growth in sales from their web sites, and were having significant difficulties gaining visibility through search engines and shipping products to remote markets. Previous research explains why such difficulties persist.

**Managerial Skills Necessary to Plan and Implement an E-Business Strategy**

Summarizing research studies from all over the world, the UNCTAD annual report notes “An
Related Content

Data Integration in the Geospatial Semantic Web
Patrick Maué and Sven Schade (2009). *Journal of Cases on Information Technology* (pp. 100-122).
[www.igi-global.com/article/data-integration-geospatial-semantic-web/37395?camid=4v1a](www.igi-global.com/article/data-integration-geospatial-semantic-web/37395?camid=4v1a)

The Increasing Threat of Legal Liability for Software Developers
[www.igi-global.com/article/increasing-threat-legal-liability-software/51058?camid=4v1a](www.igi-global.com/article/increasing-threat-legal-liability-software/51058?camid=4v1a)

Beyond Development: A Research Agenda for Investigating Open Source Software User Communities
[www.igi-global.com/chapter/beyond-development-research-agenda-investigating/5525?camid=4v1a](www.igi-global.com/chapter/beyond-development-research-agenda-investigating/5525?camid=4v1a)

Business Technology Strategy for a Major Real Estate and Mortgage Brokerage Company
[www.igi-global.com/article/business-technology-strategy-major-real/47216?camid=4v1a](www.igi-global.com/article/business-technology-strategy-major-real/47216?camid=4v1a)