Persistent Barriers to E-Commerce in Developing Countries: A Longitudinal Study of Efforts by Caribbean Companies

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ABSTRACT

Studies summarized by the United Nations Commission on Trade and Development show that companies in developing countries face problems executing e-commerce strategies. To determine which barriers might be transitional and which might be persistent, a longitudinal study was conducted of companies in five Caribbean countries. Interviews were conducted with 23 companies in 2004. Interviews were repeated in 2008 with those companies that were still in operation. Some improvements were found in general telecommunications support, but persistent barriers were found in logistics services, and new problems were identified in increased competition and increased shipping costs. As a result of these changes, the general focus of managers shifted from establishing web sites and making them visible to more general managerial tasks connected to finding a place in an increasingly competitive environment. The results of this study suggest improved strategies for companies in developing countries seeking to use e-commerce to expand their markets.

Keywords: Caribbean Business, Developing Countries, E-Commerce, ICT for Development, Infrastructure, IT Skills, Managerial Competence, Shipping

INTRODUCTION

As this decade began, there was great hope for the potential impact of e-commerce initiatives on the economies of developing countries. Kamel and Hussein spoke for many when they said, “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 & Hussein, 2002, p.148).

But as we approach the end of this decade, evidence of significant success in such efforts is difficult to find. Molla and Heeks summarize their research and that of others with this disappointing conclusion: “our findings about the benefits of e-commerce for business in South
Africa suggest that, by and large, the potential for e-commerce in developing countries … is not being realized” (Molla & Heeks, 2007, p. 105).

Studies of e-commerce efforts in developing countries acknowledge there are many barriers to be faced (“Internet Use”, 2005; Travica et al., 2007; UNCTAD, 2004a; Wresch, 2003). The United Nation’s Commission on Trade and Development annual report of 2004 noted that barriers differ from country to country and region to region, but the barriers commonly found included:

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

While those barriers were significant early in the decade, we know that neither business theory nor technology is static. Over the course of the decade we could expect managerial skills to improve in relation to e-commerce, connectivity to be faster and cheaper in most of the world, branding to be performed more effectively, logistical networks to improve and laws to be established. In short, we expect to see some areas of progress in e-commerce efforts.

To determine where progress is being made, a longitudinal study was conducted of companies engaged in e-commerce in five Caribbean countries. Twenty-three companies were interviewed in 2004. Results of those interviews were published in this journal (Wresch & Fraser, 2006). Efforts were made to interview the same twenty-three companies in 2008. The purpose of the interviews was to determine which companies were still making active efforts to reach customers via e-commerce, which barriers to success had changed over the four-year interval, and what company responses had been found to be helpful in addressing these barriers.

**LITERATURE REVIEW**

One approach to understanding the necessary conditions for e-commerce success has been the concept of “layers,” first posited by Travica et al. in 2002 and refined in 2007. A similar model has also been proposed by Sridhar and Sridhar (2006). These models recognize that e-commerce requires multiple favorable conditions for success. Travica and associates offer this set of layers:

- Customer e-commerce propensity
- Expertise (Technical and managerial)
- Legislation (regulatory environment)
- E-payment/banking facilities and support
- Software services (web development, security, database systems)
- Telecommunications (internet access, speed, and cost)
- Delivery services (postal services or alternatives)
- Traffic infrastructure (safe traffic routes)

Inherent in these models is the belief that barriers in one or more “layers” can severely hamper the success of e-commerce efforts. The use of the term “layers” however may be somewhat problematic in that it implies a relationship and an ordering between these barriers, such that each supports the next “layer” above. But one could easily imagine a situation where people have a great propensity to shop on-line, but are stymied by poor or expensive delivery services. Rather than be concerned about ordering these barriers, it seems more helpful to consider these as necessary conditions for e-commerce efforts to be successful. The suggestion that there are eight such necessary conditions helps explain how vulnerable e-commerce efforts may be.
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