Chapter 1.20
E-Readiness and Successful E-Commerce Diffusion in Developing Countries:
Results from a Cluster Analysis

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ABSTRACT

This chapter explores the impact of organizational and environmental e-readiness factors on the successful diffusion of e-commerce. It presents a conceptual framework of e-readiness and e-commerce success, identifies the constructs and variables to operationalize the framework and reports the e-readiness and e-commerce success assessments of a sample of business organizations from South Africa. Business managers and policy makers, by understanding the e-readiness factors affecting e-commerce diffusion can make effective decisions to exploit specific e-commerce opportunities. Furthermore, researchers can use the developed framework to study the level of e-commerce adoption, the success of the process that led to it and the benefits to users, organizations and the economy

INTRODUCTION

The volume and value of transactions on the Internet are still on the rise and are predicted to continue unabated for the foreseeable future. Likewise, national and international institutions are commissioning strategies to facilitate the conduct of e-commerce. However, global e-commerce diffusion is uneven. Particularly, the participation level of developing countries is still insignificant. The relatively slow e-commerce diffusion in developing countries is mainly attributed to their lack of e-readiness to transcend technological, legal, financial, business and social obstacles. Hence, understanding the relationship between e-readiness and successful e-commerce diffusion is highly important.

Although existing e-readiness literature does help to identify macro level inhibitors of e-commerce diffusion, the drivers of successful e-com-

merce diffusion at a firm level have not been well studied. In particular, what is missing from the existing literature is: (1) a relevant framework underlining the relationship between e-readiness and successful e-commerce diffusion in developing countries, and (2) an empirical assessment that explicates such relationships. This chapter aims to address these gaps.

BACKGROUND

Of late, the notion of e-readiness has gained popularity in the e-commerce in developing countries literature. However, the concept of readiness can be traced to prior literature in organizational change, information systems (IS), business process reengineering (BPR) and innovation (Todd, 1999; Raymond et al., 1998; Jay & Smith, 1996; Guha et al., 1997; Clark & Cavanaugh, 1997; Grover et al., 1995; Stoddard & Jarvenpaa, 1995).

Most consider readiness as a necessary pre-condition (or set of pre-conditions) for the implementation of change or information systems or BPR projects. A few (Raymond et al., 1998; Guha et al., 1997) extend this to relate readiness to the success of such projects, but stop short of explic-

Table 1. Summary of national level e-readiness studies

Author and Source	Variables
APEC (Asian Pacific Economic Cooperation) www.**ecommerce**.gov/**apec**	Basic infrastructure and technology, access to network services; use of the Internet, promotion and facilitation, skills and human resources; positioning for the digital economy.
CID/HU (The Center for International Development at Harvard and IBM) http://www.cid.harvard.edu/ciditg	This guide measures 19 different categories covering network access, network learning, network society, network economy, and network policy.
CSPP (Computer Systems Policy Project) http://206.183.2.91/projects/readiness/	Rate communities on infrastructure access, applications and services, economy; and "enablers" (policy, privacy, security, ubiquity).
The Economist Intelligence Unit http://www.ebusinessforum.com/index.asp	Gauges countries "e-business environment" and network "connectivity" based on 70 different indicators such as the strength of the economy, the outlook for political stability, the regulatory climate, taxation policies and openness to trade and investment.
KAM (World Bank, Knowledge Assessment Matrix http://www1.worldbank.org/gdln/kam.htm	Uses 61 metrics to assess the economic and institutional regime, educated and skilled population, dynamic information infrastructure, and an efficient innovation system of firms, research centers, universities, and consultants.
McConnell and WITSA http://www.mcconnellinternational.com/ereadiness/default.cfm	It assesses connectivity, e-leadership, information security, human capital, and e-business climate.
M-N (Metric-Net E-Economy Index) www.metricnet.com	Statistics on country's technological sophistication and strength using metrics of knowledge jobs, globalization, economic dynamism and competition, transformation to a digital economy and technological innovation capacity.
MQ (Mosaic) http://som.csudh.edu/fac/lpress/gdiff/	Assesses the diffusion of Internet in terms of, pervasiveness, geographic dispersion, usage within the economy, technology infrastructure, the Internet service market, and sophistication of use.
CIDCM (University of Maryland, Center for International Development and Conflict Management) http://www.bsos.umd.edu/cidcm/projects/leland.htm	The method gauges the background and history, key players in Internet development, Internet development and ICT policy over time, and negotiations of a country.

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