

Advancing E-Commerce Beyond Readiness in a Developing Country: Experiences of Ghanaian Firms

Richard Boateng, PearlRichards Foundation, Ghana

Richard Heeks, University of Manchester, UK

Alemayehu Molla, RMIT University, Australia

Robert Hinson, University of Ghana Business School, Ghana

ABSTRACT

This paper identifies factors affecting the assimilation of electronic commerce in Ghana and the solutions that Ghanaian firms have developed. Drawing from the elements of two electronic commerce readiness frameworks, the study analyzes the readiness of Ghana to support the conduct of electronic commerce at the firm-level. The study covers the government, technology, market and culture readiness factors. Findings suggest that social networks, managerial capabilities and government commitment have an attendant effect on adoption and use of tangible resources like electronic commerce applications. The findings imply that future research and practitioner efforts should focus on developing a broader perspective to address electronic commerce challenges encompassing issues like how firms can advance to more complex forms of e-commerce after initial e-commerce adoption.

Keywords: Developing Countries, Electronic Commerce Strategy, Ghana, Managerial Capability, Social Networks

INTRODUCTION

The Ghanaian government has made efforts over the last decade to build a 'knowledge-based economy'. A National Information and Communication Technology (ICT) for Accelerated Development policy was introduced in 2003 with the objective of engineering an ICT-led

socio-economic development process. Several ICT projects have been set up with the support of several international donor and UN agencies. These projects include an e-government portal for Ghana supported by the International Institute for Communication and Development (IICD) and an ICT Centre which provides training skills to link academia and industry supported by the Governments of India and Ghana. The use of the Internet in Ghana has also

DOI: 10.4018/jeco.2011010101

seen significant increases since the liberalisation of the telecommunication industry in the 1990s. The country had about 18 Internet users per 1,000 people in 2005 as compared to one Internet user in 1999 (ITU, 2007). In relation to its progress to bridging the digital divide, the ITU/UNCTAD's Digital Opportunity Index ranked Ghana 21st out of 51 African countries surveyed in 2006, improving by four places between 2005 and 2006 (ITU/UNCTAD, 2007).

With the relative progress in ICT development, Ghana seems serious about using ICT as an engine of growth and as a means of diversifying from its traditional major exports, cocoa, gold and timber (Mainsah & Ikezi, 2004). E-commerce can be a potential application of ICTs to achieve this goal. However, the institutional context of Ghana as a developing country has an attendant effect on e-commerce adoption and creation of benefits at the firm-level. The question of concern is whether e-commerce is practicable in Ghana?

This paper analyses the readiness of the environment to support the conduct of e-commerce at the firm-level. The paper is structured into six sections. The first section is the introduction to the paper. The second section presents a brief overview of e-commerce and develops a research framework which evaluates four readiness factors: government (or policy), technology, market forces and culture, based on the PERM Model (Molla & Licker, 2005b) and CPT Framework (Bajaj & Leonard, 2004). The third section discusses the research methods used in this research. The fourth and fifth sections present the assessment of the four readiness factors in Ghana and the discussion of findings, respectively. The last section concludes the paper with research and policy implications.

E-COMMERCE: AN OVERVIEW

E-commerce has been defined as “sharing of business information, maintaining business relationships, and conducting business transactions by means of telecommunications

networks” (Zwass, 1996). To conceptualise e-commerce from Zwass' definition and for this research, it can be argued that depending on the type of technology involved and the extent of integration into the business processes in the value chain, e-commerce may constitute part of the business processes or the entire processes. It may also embrace several forms of transactions (including information exchange) between businesses (B2B), between customers (C2C), between businesses and customers (B2C) and between government and businesses (G2B) (Fearson & Philip, 1998).

As the nature of market operations and resource strengths differ, it is likely that firms would take different paths in adopting and integrating e-commerce in their business operations. Molla and Licker (2005a), in their Perceived Readiness Model (PERM Model), present a hierarchical model of the functional application of the Internet by firms to create business value. The hierarchical phases of e-commerce adoption are: *no e-commerce*, *connected e-commerce*, *static e-commerce*, *interactive e-commerce*, *transactive e-commerce*, and *integrated e-commerce* (Molla & Licker, 2005a, p. 881). The model has been subsequently used in other studies (Dada, 2006; De'elak, 2006; Lai, Dahui, Wang & Hutchinson, 2006; Tan, Tyler & Manica, 2007). The adoption phases enable the firms with the following e-commerce capabilities:

- With connected e-commerce, the intended e-commerce capability is communication – using email alongside traditional ICT technologies, like fax and telephone, to support information and transactional processes. However, the reach of connected e-commerce is limited to the existing and potential trading partners, suppliers and customers who know the firm's email address and others the firm decides to contact.
- Static e-commerce builds on connected e-commerce and extends the communication capability to an informational capability; where firms can inform trading partners, customers and suppliers of their products

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the product's webpage:

www.igi-global.com/article/advancing-commerce-beyond-readiness-developing/49645?camid=4v1

This title is available in InfoSci-Journals, InfoSci-Journal Disciplines Business, Administration, and Management.

Recommend this product to your librarian:

www.igi-global.com/e-resources/library-recommendation/?id=2

Related Content

Motivators for IOS Adoption in Denmark

Helle Zinner Henriksen (2006). *Journal of Electronic Commerce in Organizations* (pp. 25-39).

www.igi-global.com/article/motivators-ios-adoption-denmark/3474?camid=4v1a

Personalization of E-Commerce Applications in SMEs: Conclusions from an Empirical Study in Switzerland

Petra Schubert and Uwe Leimstoll (2005). *Advanced Topics in Electronic Commerce, Volume 1* (pp. 121-141).

www.igi-global.com/chapter/personalization-commerce-applications-smes/4409?camid=4v1a

Validation of the B2E Portal User Satisfaction (B2EPUS) Scale: Empirical Evidence from South Africa

Dewi Rooslanij Tojib, Ly Fie Sugianto, Liesl Martin and Eric Cloete (2010). *Journal of Electronic Commerce in Organizations* (pp. 83-97).

www.igi-global.com/article/validation-b2e-portal-user-satisfaction/40250?camid=4v1a

Build it – Will They Come?: A Study of the Adoption of Mobile Financial Services by Low Income Clients in South Africa

Prateek Shrivastava (2010). *Journal of Electronic Commerce in Organizations* (pp. 1-14).

www.igi-global.com/article/build-will-they-come/44910?camid=4v1a