Abstract

Earlier studies on e-business adoption factors have been conducted from a firm level perspective or from a single country level perspective. In this study, we propose a framework entitled “CBTG (Country characteristics-Business-Technology-Government Model)” that addresses a theoretical perspective on e-business adoption factors required for a nation level e-business development. The major goal of this study is to propose a research model based on identified factors and provide discussion on the model proposed. The limitations and future directions are also discussed.

Global electronic business (e-business hereafter) trade volume is growing at a very rapid pace. According to Yang and Miao (2005) per capita trade volume on the Internet was over 4.8 trillion US dollars and global e-business trade volume was over 5.5 trillion US dollars in 2005. Also, according to Forrester Research (Forrester 2003), the e-business traffic of the US is $3.2 trillion, while the Asia-Pacific is $1.6 trillion and Western Europe region amounts to $1.5 trillion. The remaining regions such as Eastern Europe, Africa, and the Middle East make up their sales volume on e-business to $68.6 billion. As suggested by these reports, e-business growth is high in some countries but some others are still behind the curve. Under these circumstances it would be an interesting and challengeable question – how do some countries do better than others?

How do they achieve competitive advantages in this global economy?

There has been much research (D.Phan 2002; Wu, Mahajan et al. 2003; Zhu, Kraemer et al. 2004; Gregorio, Kassicieh et al. 2005; Zhu and Kraemer 2005) on e-business development and factors contributing to its development. Most research on e-business concentrates on either organizational or individual level of analysis for various B2B or B2C activities. There’s no unique framework that a nation or country administrator can abide by for developing e-business in his/her country. Thus in this study, we attempt to fill this gap by answering the questions above.

Drawing from previous research constructs and theoretical models such as TOE framework, we identified four dimensions for a successful global e-business development: Country Characteristics, Business, Technology, and Government dimension. E-business development is chosen as the dependent variable in our model with two indicators: E-business use and E-activity. E-business development is the degree of maturity with which a nation conducts its transactions using Internet (Gregorio, Kassicieh et al. 2005). E-activity is defined as the measure of online activities taking place within a country.

Country characteristics dimension is identified by two indicators: Corruption and Human capital. These characteristics can influence e-business development according to previous studies (Bogaert, Martens et al. 1994; Berthon, Pitt et al. 2007). Hence, we posit that e-business development in a nation depends on its country characteristics. Business dimension indicates the external factors needed for a country to adopt e-business. Business Competitiveness, Business Environment, and Business Readiness are the indicators for this dimension. Businesses need to adopt e-business to increase their benefits with their buyers and suppliers in turn increasing the economic growth of a nation. We state that the e-business development in
a country is increased with increase in business process in a nation. Technology is proposed as one of the important dimension with two indicators: ICT Infrastructure and Technology Innovation. A better ICT Infrastructure enhances e-business development in a country (ECD-UNCTAD 2004). Technological Innovation refers to nations’ need to innovate new technologies to increase their productivity. E-business development in a country is positively affected by technological factors of a country. Government dimension is identified as a key factor in many early studies. Every government should actively encourage its citizens and firms to use internet in their daily works. Government should encourage its industries by providing subsidies, by procurement, or government itself acting as a trusted third party. E-government development-participation, and Government policy & vision are chosen as indicators for this dimension. We believe that e-business development in a country depends on the government support and encouragement for e-business.

Understanding facilitators for e-business development is vital for effective implementation and usage of e-business by a nation. E-business development represents the maturity of nations to conduct their transactions online. Facilitators for this aspect of e-business have not been studied yet. This study is expected to contribute in this field of research. Through this paper, we plan to give some implications to country administrators, academics, and policy makers. For researchers, we plan to provide a direction to develop more studies at the global level. In this study, we propose our idea for e-business development in a nation with four dimensions and their indicators. We expect to test the proposed model with data from secondary sources and perform an empirical analysis using partial least square analysis.

References:
Forrester (2003). Projections for Global E-commerce