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E-commerce in Developing Countries and How to Develop Them During the Introduction of Modern Systems

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Abstract

The rapid proliferation of the Internet gave rise to the concept and practice of electronic commerce (e-commerce, from here onwards), which has become a common phenomenon in the world today. Internet-based economic structures and information groups are the new business reality, as organisations and individuals revel in the ease of purchasing commodities and services from foreign shores. Most developing countries, however, are far from experiencing this reality due to many factors which act as obstacles for e-commerce to flourish.

Key Words: E-Commerce, developing countries, impact, barriers

Introduction

The definition of e-commerce is the electronic process by which individuals or organisations make a transaction, such as buy, sell, transfer, or exchange products, services and/or information (Turban, McLean and Weatherbe 2004). In a nutshell, e-commerce effectively erases the necessity of huge investments or outlays on physical infrastructure to develop a global presence, which has led to a revolution in the way business is conducted around the world. For developing countries in particular, it has the potential to present solutions to many prevalent problems such as provision of remote healthcare and education. However, these countries are unable to reap these benefits, as there is a vast difference between the adoption rates, implementation and use of e-commerce in developed and developing nations, with the latter lagging behind to a significant extent. This essay aims to understand the various reasons for this, as well as the potential impact of e-commerce technologies for developing countries. It begins by introducing the rampant disparities between both sets of countries in its adoption, before progressing to a discussion on the various barriers these countries face, which hinder the growth of e-commerce. It also sheds some light on research on the critical success factors for e-commerce, at least a multiple of which are noticeably missing in these countries. It ends with a few measures taken to boost e-commerce in these countries and the thought that a strategic focus is necessary if developing countries want economic growth, via e-commerce.

High growth, still a rocky road – The case of developing countries
Developing countries represent a market with immense potential for e-commerce. Academic research usually mentions e-commerce as a sound strategy and an ideal opportunity for these countries to cash in on new economic avenues. According

to the UNDP (2005), developing countries should embrace e-commerce wholeheartedly as it will enhance their economic and social development, lead to gains in commercial productivity, lower the operating costs of businesses, and enhance the level of domestic integration with international markets.

These countries have generally exhibited low rates of basic Internet usage, but the growth rate has been high. UNCTAD (2005) reported that between the years 2000 and 2005, these countries experienced a spike on Internet user population to around 400 million, which equated to a growth rate of 300%, and an increase in their international proportion of all Web users from 25% to 40%. Internet bandwidth displays a similar trend as the increase in bandwidth in these countries was twice as that of developed countries. While these statistics can be extrapolated to a corresponding increase in e-commerce adoption in developing countries, there are many local realities which act as obstacles for these countries in their quest for economic prosperity via e-commerce (Molla and Heeks 2007).

Success Stories – Still a long way to go
This is not to say that e-commerce is not thriving in these countries. Hussain (2013) quoted the example of China, where online trade skyrocketed by 120% in the previous ten years. This is hardly surprising as research on e-commerce in developing countries pins the country as most likely to emerge as the world leader in the global e-commerce market, with its third largest Internet user population in the world. Its business leaders are generally cognizant of the benefits of e-commerce in terms of enhancing Chinese presence in the international business arena, strengthening business processes and channels, and forming better customer relationships. These factors notwithstanding, the country is still struggling with realising the full potential of e-commerce due to state restrictions, payment systems, and inadequate telecommunication facilities (Stylianou, Robbins and Jackson 2003).

Latin America, of which Brazil comprises 59%, also exhibited monumental growth in e-commerce, as revenues increased from 1.6 billion USD to 43 billion USD in the last ten years (Hussain 2013). Another developing country which is displaying rapid progress is e-commerce is India. While the sector may still be in its infancy stage, research showed that it grew from 3.8 billion USD in 2009 to 12.6 billion USD in 2013, which equated to a CAGR of approximately 35%. The lion's share of this market, roughly 70%, is held by online travel, but e-retail is the fastest-growing segment (PWC 2014).

India – Logistics hindering growth of e-commerce
Expanding on the example of India, for this country, logistical problems act as one of the barriers to growth of e-commerce. All logistical models conceived in the country consider the larger metropolitan cities and Tier-1 cities as their target, where the customer usually belongs to either the upper affluent or middle class, and has easy access to the Internet. Also, delivery costs are high for e-retailers, as the majority of goods being ordered online are transported by air. This also causes shortage of cargo space on airlines in times of high demand, such as the weeks leading up to the Indian festival of Diwali, and warranted dependence on external delivery firms. But while India can boast of the second-largest number of mobile users in the world, e-retail sales are less than 0.5 % of the country's entire retail sales. When this figure is compared with 6% in the US and 5% in China, it does appear as if the country's e-commerce sector needs to firm up its delivery network (Narayan 2014).

The outlook however, is not completely bleak, as e-retailers are looking to counter the various problems associated with contrived addresses, cash-on-delivery, and returned merchandise by investing the requisite amount of capital and establishing their own logistics business. FlipKart and Amazon India have already undertaken various initiatives in this regard. However, setting up a captive logistics infrastructure is not without its own perils – these companies are finding their delivery costs to be 10 to 20% higher than those of the logistics experts. Higher delivery costs may lead to elimination of the benefit of free delivery by e-retailers, who are already trying to attain success in a complex business model which offers thin profit margins (PWC 2014).

Barriers to growth of e-commerce in developing countries
Regardless, there are many obstacles in developing countries which seriously hinder the growth of their e-commerce industry. E-commerce has the potential to provide many opportunities in a manner unprecedented by other technological

advancements, with its positive impact on trade, investment, business transactions, and market penetration (Wresch and Fraser 2011). But the conclusion reached by many researchers who have tried to search for the realisation of these benefits in developing countries has been, by and large, disappointing. According to Molla and Heeks (2007, 105), "the majority of businesses do not appear to have obtained E-commerce benefits in terms of expanding their access to markets, improving their reach or linkages to customers or suppliers, or in relation to cost savings or other efficiency gains".

The obstacles may vary between countries and regions but the commonly reported barriers that these countries face include a severe dearth of managerial skills requisite to formulate and implement an e-commerce strategy for business. Internet connectivity with regard to the cost, quality, and speed of the service provided is another stumbling block while lack of effective branding and trust issues is another important barrier to e-commerce growth. The latter has succeeded in pricking the e-commerce bubble in these countries as buyers feel more secure conducting transactions from renowned companies and brands (usually belonging to developed countries) rather than from unknown companies online (Travica et al. 2007). Lack of robust logistical networks is a barrier already discussed with reference to the Indian e-commerce market, and this factor is a common barrier for e-commerce in developing countries. Another common obstacle these countries face is the absence of a sound legal and regulatory environment for e-commerce, which acts as a deterrent for both buyers and sellers to conduct business over the Internet (UNCTAD 2004).

Pre-conditions for success of e-commerce initiatives
A very relevant aspect for the purpose of this discussion is that of the conditions necessary which favour the growth of e-commerce in a country. Travica et al. (2007) and Sridhar and Sridhar (2006) conducted research and found a few common critical success factors for e-commerce. These authors stated that for e-commerce initiatives to succeed, the first and foremost condition must be customer readiness, or propensity for e-commerce. Travica et al. (2007) refer to this as the "cultural layer", and explains it to be the readiness that shoppers may or may not display towards adopting e-commerce, which in turn stems from their historical association, or lack of, with it. He contrasts the US and Latin America, where the former has always been comfortable with catalogue-based shopping, and the latter regards shopping as a social act necessitating interaction. Trust, as discussed earlier, is an important aspect of this layer: even in the US where Amazon and eBay earned more than 4 billion USD and 15.7 billion USD respectively in just the first quarter of 2008, and customers are traditionally attuned to the practice of online shopping, there are persistent issues regarding trust (Elbeltagi 2007; Feigenbaum, Parkes and Pennock 2009). Developing countries, owing to the newness of e-commerce as a concept, then, find propensity for e-commerce to be significantly lacking, leading to low adoption rates.

Other preconditions include technical and managerial expertise, and legislation. Travica et al. (2007) reported that while technical expertise may be on the rise, there is a dearth of managers willing to champion e-commerce objects. The regulatory improvement is gradually becoming more conducive to e-commerce efforts, as noted by Kariyawasam (2008) when he appraised the efforts of Asian countries such as Sri Lanka, which was on the verge of passing an electronic signature law, to provide better legal support.

E-payment and banking systems, and software services must exist in a country which hopes to attain economic progress via e-commerce. This is another frontier which is can be regarded a work in progress, with banks in developing countries equipping themselves with systems for electronic payments and local software support. Telecommunications infrastructure remains a major condition missing in developing countries as even with increased rates of Internet access, these countries still report a very low ratio of user accounts per 100 people. Logistical networks, including both delivery services and traffic infrastructure, are both essential preconditions for growth of e-commerce, and areas where developing countries are struggling (Wresch and Fraser 2011). Delivery services are not dependable, and this combined with outdated technology (compared to the US) and strict customs laws render international shippers reluctant to do business with these countries, whereas their revenues in European countries are increasing by billions every year (Cooke 2007). Traffic infrastructure problems include custom delays, exorbitant custom duties, lengthy delays in shipping to customers, and sudden increases in shipping costs of inputs and finished products. These problems are rampant in developed countries, and to a much greater extent in developing countries as the latter often find themselves unable to make the required national expenditures in the aforementioned areas.

Recommended measures to boost growth of e-commerce in developing countries

The term 'digital divide' is often used in reference to the "disparities between groups and societies in the adoption and diffusion of electronic information and communications technologies (ICTs) and E-business practice" (Genus and Noor 2005, 82). With reference to the adoption and growth of e-commerce, the gap between developed and developing countries is gradually narrowing down.

However, one of the major critical success factors of e-commerce is training and education. Developing countries face the digital divide primarily because they lack the requisite intellectual human capital. Mass illiteracy and little to no command over the English language render e-commerce an exercise in futility. Hence, the most important measure which needs to be taken is to engage in capacity building in e-commerce skills. Training and education can be imparted via various means using the internet itself, such as distance learning and specialised links with universities. India has effectively used the Open University concept to reduce illiteracy and cash in on the opportunities provided by e-commerce (Rouibah et al. 2008).

The government has a very strong role to play as state policy, specifically legislation, significantly affects adoption and growth of e-commerce. One of the most important measures that can be taken and that will counter multiple barriers to e-commerce growth is the development of a supportive regulatory and legal environment. E-commerce strategies will be successfully owned only when consumers and businesses trust the concept and its premise, and are sure of its security and reliability (Zaied 2008). For them to feel confident, a solid regulatory umbrella must include enabling laws pertaining to e-business, regulations on consumer protection, e-transactions, and cybercrime as well as carefully laid out processes for redress in the event of abuse. UNCTAD (2015) statistics reveal that developing countries are slow to adopt these laws; particularly those in Eastern and Middle Africa have not adopted these laws or produced draft legislation. These laws are vital for doing business online as the Internet by its very nature exposes customers to possible instances of deception and fraud.

Financial systems in developing countries need to be restructured to enable online payment mechanisms and credit facilities. Developing countries are generally lagging behind in this regard, other than those with governments that are aggressively supporting e-commerce and reaping the benefits of doing that, such as Korea. In fact, regulatory support has a stronger impact on e-commerce in developing countries relative to developed countries (Zhu et al. 2004). Inadequate infrastructure acts as a major obstacle for e-commerce in developing countries, and the government should invest in legal, financial, logistical, and telecommunication infrastructure which is the backbone of any e-commerce initiative. It is vital that regional integration communities and developed countries partner with developing countries to facilitate in building long-term capacities for e-commerce, and ensure that a compatible infrastructure is developed to enable e-commerce across national boundaries.

Conclusion

The argument most commonly stated against free trade and liberal markets is that these worsen the gap between developed and developing nations. The recent rise of the Internet economy has added further fuel to this critique, as the digital divide has revealed sharp disparities between the countries which are equipped with information, and those which are not. Given the immense potential that e-commerce has to act as a powerful tool in reducing the gap and give developing countries the chance to achieve economic equality, it is necessary that these countries develop dedicated national strategies and policies for e-commerce development, customised to their resources and situation. This, if followed by investments in telecommunications infrastructure, an enabling legal and regulatory climate, sound institutional reforms and training and education of human resources, will ensure that developing countries become strong contenders in the global e-commerce sector.

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