



*International Journal of
Information Technology
and Management*

*Vol. VII, Issue No. X,
November-2014, ISSN
2249-4510*

**THE ISSUES AND INFLUENCES OF
ELECTRONIC COMMERCE IN DEVELOPED
COUNTRIES**

AN
INTERNATIONALLY
INDEXED PEER
REVIEWED &
REFEREED JOURNAL

The Issues and Influences of Electronic Commerce in Developed Countries

Syed Ahad Murtazaalyi

Lecturer, King Saud University, Al Muzahmiya Branch, Riyadh, Kingdom of Saudi Arabia

Abstract – *Electronic commerce and its related activities over the internet can be the engines that improve domestic economic well-being through liberalization of domestic services, more rapid integration into globalization of production, and leap-frogging of available technology. Since electronic commerce integrates the domestic and global markets from its very inception, negotiating on trade issues related to electronic commerce will, even more than trade negotiations have in the past, demand self-inspection of key domestic policies, particularly in telecommunications, financial services, and distribution and delivery.*

Technical aspects of electronic commerce, its complexity and the characteristic of network externalities should change the way that developing countries approach the external negotiating process. Differing characteristics of local environments, both infrastructural and socio-economic, have created a significant level of variation in the acceptance and growth of e-commerce in different regions of the world.

The e-commerce has affected the global economy in many different ways. First of all, it has affected the information technology, and all the economic sectors, all and above e-commerce has enhanced the productivity growth worldwide and here we are going to discuss this impact, they are able to identify the number of qualified people needed to advance their country's information economy or to calculate the amount of investments needed to provide business with access to the internet.

Some countries are already benefiting from the results, they are now in apposition to benchmark their economies with competitors internationally and there are many ways to accelerate the growth of productivity but the reason for this is rather controversial. Banks and financial services companies in the developing countries will need to adopt online payment system, to obtain e-trade finance and equity investment, tourism and its internet incarnation is regularly cited as one of the fastest growing ecommerce sectors.

This paper is to show the obstacle issues, which must be addressed and resolved so as to enable developing countries to take in the evolving digital world economy. The presentation of various obstacles should enable to obtain practical advice for replication or adaptation in developing countries.

By the same token, industry in developing countries should be encouraged to innovate hardware and software better towards the needs and circumstances of developing countries. Governments in developing countries should be made aware of the need for creating a suitable and enabling environment for e-commerce.

INTRODUCTION

The number of Internet users around the world has been steadily growing and this growth has provided the impetus and the opportunities for global and regional e-commerce. However with Internet, different characteristics of the local environment, both infrastructural and socioeconomic, have created a significant level of variation in the acceptance and growth of ecommerce in different regions of the world. Over time, various studies have been conducted and models have been developed to identify diffusion of e-

commerce in different environments. (Wolcott, et. al. 2001; Travica, 2002) These models have looked at "infrastructure" (e.g. connectivity hardware and software, telecommunications, product delivery and transportations systems) and "services" (e.g. e-payment systems, secure messaging, electronic markets, etc.) as the primary diffusion factors.[1,2]

In addition to infrastructural issues, trust (in our paper, we call this "transactional trust") has been identified as one of the critical issues that confront businesses that are new businesses or utilize new

business models like e-commerce. Numerous studies have tried to find correlations between trust and experience with a new system, concept, or relationships, including a correlation to frequency of e-commerce activity and other researchers have noted that trust may be significantly influenced by culture of a given society. (Lee and Turban, 2001) Grabner-Kraeuter observes and states that trust is “the most significant long-term barrier for realizing the potential of e-commerce to consumers”, (Grabner-Kraeuter, 2002) and others state that trust will be a “key differentiator that will determine the success or failure of many Web companies.” [3,4]

For developing countries like India, e-commerce offers considerable opportunity. E-commerce in India is still in nascent stage, but even the most-pessimistic projections indicate a boom. It is believed that low cost of personal computers, a growing installed base for Internet use, and an increasingly competitive Internet Service Provider (ISP) market will help fuel e-commerce growth in Asia's second most populous nation. Indian middle class of 288 million people is equal to the entire U.S. consumer base. This makes India a real attractive market for e-commerce. To make a successful e-commerce transaction both the payment and delivery services must be made efficient. There has been a rise in the number of companies' taking up e-commerce in the recent past. Major Indian portal sites have also shifted towards e-commerce instead of depending on advertising revenue. Many sites are now selling a diverse range of products and services from flowers, greeting cards, and movie tickets to groceries, electronic gadgets, and computers. With stock exchanges coming online the time for true e-commerce in India has finally arrived. On the negative side there are many challenges faced by e-commerce sites in India. The relatively small credit card population and lack of uniform credit agencies create a variety of payment challenges unknown in India. Delivery of goods to consumer by couriers and postal services is not very reliable in smaller cities, towns and rural areas. However, many Indian Banks have put the Internet banking facilities. The speed post and courier system has also improved tremendously in recent years. Modern computer technology like secured socket layer (SSL) helps to protect against payment fraud, and to share information with suppliers and business partners. With further improvement in payment and delivery system it is expected that India will soon become a major player in the e-commerce market.

India's ecommerce industry is on the growth curve and experiencing a spurt in growth. The Online Travel Industry is the biggest segment in ecommerce and is booming due largely to the Internet-savvy urban population. The other segments, categorized under online non-travel industry, include e-Tailing (online retail), online classifieds and Digital Downloads (still in a nascent stage). The online travel industry has some private players such as Makemytrip, Cleartrip and Yatra as well as a strong government presence in terms of IRCTC, which is a successful Indian Railways

initiative. The online classifieds segment is broadly divided into three sectors; Jobs, Matrimonial and Real Estate. Mobile Commerce is also growing rapidly and proving to be a stable and secure supplement to eCommerce due to the record growth in mobile user base in India, in recent years. Growth drivers and barriers are present in equal measures for new eCommerce ventures.

A report by the Internet and Mobile Association of India has revealed that India's E-commerce market is growing at an average rate of 70 percent annually and has grown over 500 percent since 2007.

The current estimate of US\$ 6.79 billion for year 2010 is way ahead of the market size in the year 2007 at \$1.75 billion. The following chart depicts the growth of E-commerce in India in the last couple of years:

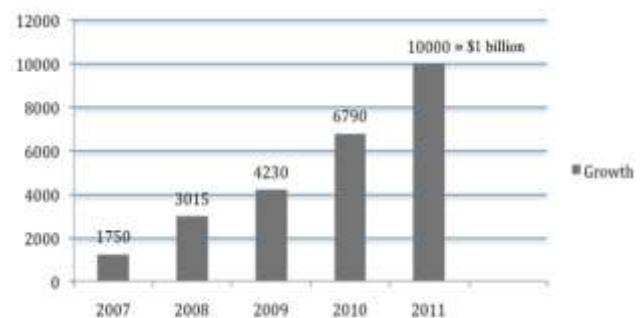


Figure-1 : Growth of E-commerce over the years (Figures in USD millions)

Electronic commerce may have large economic effects in the future. Internet commerce will change the face of business forever. The e-commerce has affected the global economy in many different ways. It is clear that e-commerce is a very broad concept and does not have a clear cut definition. One way of defining it, is that, it is a way of doing business transactions via the internet.

E-commerce or e-business is based on the electronic processing and transmission of data, including text, sound, and video. E-commerce as it is commonly known is the use of technology to conduct financial transactions online. E-commerce can occur within and between three basic participant groups – business, government, and individuals.[5]

The technologies designed to improve commercial transactions using the Internet have evolved as quickly. However, we have not yet achieved an ideal world of painless and secure transactions utilising the Internet, as unresolved privacy issues of the purchaser have impeded the further development of the technologies. During the last dozen years, ecommerce practices have changed in developed and developing countries. For instance, developing countries have fallen behind in the early stages of technology acquisition because of inefficient use of related knowledge, lack of investment within firms to acquire technology, lack of promotion policies that

develop these technological areas and high costs of importing technology. Moreover, recent technological developments such as the introduction of digital signatures may widen the gap in the use of e-commerce technologies. Therefore, it is important to examine the perspectives of developing and transition economies with regard to the likely enforcement of digital signatures in carrying out e-commerce transactions.

This is an important issue related to the expansion and promotion of e-commerce in developing countries. The purpose of this paper is to review the situation of several developing and transition countries in relation to the implementation and enforceability of digital signatures in e-commerce transactions. Another important goal of this paper is to create awareness in different stakeholders related to the use, development, and enforcement of digital signatures to carry out e-commerce activities.[6]

POTENTIAL COMPETITION ISSUES

Generally, e-commerce has the potential to increase competition by enabling the development of new services, new distribution channels, and greater efficiency in business activities. Competition policy issues may arise in relation to joint ventures to develop B2B electronic marketplaces (e hubs), particularly when they are developed by existing market participants with a significant combined market share (as buyers and sellers) in underlying wholesale markets. Competition policy issues may arise in relation to eHubs on an ongoing basis if they appear to have developed sustainable market power resulting from network effects and other factors, and/or engage in strategic acts to preserve or maintain their market power. Potential issues would include evidence of price fixing or tacit collusion, or anti-competitive discrimination against, or refusal of access to third parties. Issues will not arise in all cases, and this will depend on the details in each case. In many situations there will be pro-competitive and other public benefit issues that should be taken into account. A recent Federal Trade Commission report identified a range of potential efficiency gains that may accrue from the use of eHubs. They include reductions in administrative costs, reductions in search costs when accessing appropriate trading partners, creating new markets (e.g. markets for surplus stock), economies of scale in joint purchasing, and more effective supply chain management.[7]

EFFECT OF ECONOMY ON E-COMMERCE

The electronic economy will force change within nation states. The modern nation state remains the most prevalent unit of governance in the developed and the developing world. The concept has, in the last 50 years, been extended rather than retracted. There are

now more than 200 hugely different nation states, with different legal and regulatory systems, existing in the world. In this context, we define a nation state as a coherent territory circumscribed by defined borders over which the single national government has legitimate jurisdiction. During its 200 year history, the nation state has endured many changes. However, the advent of the electronic economy is confronting the nation state, with intimations of a future in which its relevance to its citizens and enterprises will be challenged.

The apparatus of economic regulations and taxation through which nation states operate was developed to support and facilitate industrial economy. That economy produces tangible and location bound services that are sold and distributed within and between fixed borders. In that familiar world of national and international trade, nation states have a variety of tools at their disposal to achieve their economic ends. They can levy tariffs on imports, raise taxes, protect consumers rights, punish economic criminals, set commercial standards, and provide guarantees of monetary payment. Until recently, these tools were supported by governments majority control over communications networks and information dissemination. Because of the emergence of global communications networks, the nation state is gradually losing monopoly control of information and financial flows. Private individuals and enterprises and groups now have the ability to source , package, and transmit information in compressed time and space. Through "digitization" currency, services, and even some goods can be conveyed immediately, transacted invisibly across the globe. Interactive networks are creating a new, network-linked world without borders, in which many commercial transactions are beyond the reach of national jurisdictions, laws, and taxation systems. As a result, many of the economic instruments and processes of the nation state need to be reexamined in the light of these new challenges.

E-COMMERCE AND SMES

In both developed and developing countries, SMEs make up a majority of business and employ the majority of workers in both manufacturing and services sectors. SMEs cater mostly to their domestic market and their contribution to GDP, although normally very small, can vary greatly depending on the value of the goods or services they produce. While less than 6 per cent of the formal work force is employed in manufacturing in SMEs in Azerbaijan, Belarus and Ukraine, this share is more than 50 per cent in other developing countries such as Ghana, Turkey and Ecuador. Research has indicated that countries with large SME sectors also tend to benefit

from the significant contribution which SMEs make to GDP.

E-commerce has been hailed by many as an opportunity for developing countries to gain a stronger foothold in the multilateral trading system. E-commerce has the ability to play an instrumental role in helping developing economies benefit more from trade. Unlike the requirements necessary to run a business from a physical building, e-commerce does not require storage space, insurance, or infrastructure investment on the part of the retailer. The only pre-requisite is a well-designed web storefront to reach customers. Additionally, e-commerce allows for higher profit margins as the cost of running a business is markedly less.

Another advantage provided by e-commerce is that it allows for better and quicker customer service. In some cases, customers could have direct access to their own personal accounts online and can avoid calling companies on the phone. This can save both time and money. Adding customer online services such as overnight package delivery services can also have commercial benefits. These can be complemented by package tracking services which allow customers to check the whereabouts of their packages online. This helps provide good levels of customer satisfaction with very little effort from the side of the business.

THE OBSTACLES FOR E-COMMERCE OPTIMISM

This study is mainly concerned with the diversity of ecommerce applications and their implications for access by developing country firms to global markets. Given the range of e-marketplaces that were being hosted, it was also important to consider three aspects of their features. The research strategy distinguishes between:

- (i) information content and services for transaction preparation;
- (ii) information content and services for transaction completion; and
- (iii) the means of access to the e-marketplace.

For example, in the case of transaction preparation, information may be available about products and trading partners but it may not be sufficient for firms to decide whether or not to trade. The quality and the timeliness of the information will affect whether it can be used to make decisions about whether to buy or sell. Some e-marketplaces provide only trade leads or classified ads that must be followed up using e-mail, hyper-links, the telephone, fax or the post.

Other e-marketplaces provide firms with access to on-line auctions or catalogues that may enable them to make quick decisions about whether to buy or sell.

The evidence base for the prevailing assessment of ecommerce and the consequent policy priorities was limited. Three types of evidence were marshaled to support the idea that on-line trading was developing rapidly across a diverse range of business sectors:

1. Anecdotes about the development of e-marketplaces. These stories were subject to bias because the providers of emarketplaces had an interest in talking up their successes as part of the process of attracting new business. Furthermore, the success of one type of e-marketplace would not necessarily indicate that other types of business could be successfully transacted on-line. At the most basic level, data on the development of e-commerce (such as the sale of books, music and airline tickets) were cited as an indication of the potential for e-commerce.
2. Many discussions of the potential of e-commerce for developing countries quoted predictions of its likely growth that were circulating in various reports. Companies such as eMarketer, Forrester Research, frequently projected growth rates of e-commerce of 100 per cent per annum. Different bodies projected different numbers, but they all projected rapid growth and the increasing importance of e-commerce relative to e-commerce.
3. In the absence of evidence about e-commerce, data on the spread of telecommunication services and Internet hosts and users were used as proxies for the growth of Internet based e-commerce. Many reports also relied on indicators of ecommerce growth or on the availability of Internet Web sites offering products as an indicator of B2B growth prospects.

The development of various types of e-commerce is likely to differ depending on the existing structure of an industrial sector and its value chain. Earlier studies of the development of electronic trading networks suggest that there is scope for the elimination of some types of intermediaries, but that there are often new roles for existing and new intermediaries in the value chain. The costs of transacting may increase or decrease depending on how e-commerce is introduced and whether it is developed in open or restricted electronic environment [7].

FACTORS RESTRICTING DEVELOPMENT OF E-COMMERCE IN DEVELOPING COUNTRIES

A number of factors have hampered the growth of e-commerce in developing countries. Yet, the main perceived obstacle to increased Internet usage is very similar in companies from both developed and developing countries. Firms already using the Internet consider the lack of network security to be the primary problem, followed by slow and unstable connections. Lack of technical skills is not the only

reason preventing firms from going online. However sometimes company owners lack knowledge management on Internet and ICTs in general. (Gwyer, 2004). Furthermore, various impediments are responsible for the current limited use of e-transactions by small- to medium-sized enterprises.

Among many potential users, a serious lack of confidence in e-commerce impedes usage. For this reason, firms make complementary usage of video conferencing and other communication methods such as telephone, e-mail, and face-to-face communications. A scarcity of information technology administrative systems and a lack of experience make firms hesitate to utilise e-commerce fully to digitize all of the administrative works related to business transactions. High costs and fees to start e-commerce by utilising e-marketplaces are a severe hindrance, especially for enterprises incapable of developing their own systems. Insufficient human resources and digital infrastructure are always concerns when one discusses development of small to medium-sized enterprises (Kuwayama, 2005). As discussed by Mansell (2003), large corporations carry out the bulk of e-commerce activities. However, during the last eight years a constant and important growth of ecommerce transactions by small- to medium-sized businesses, individuals, and governments at different levels must be considered. Same study claims that business-to-business e-commerce does not offer greater returns to firms in developing countries than other channels for conducting trade. Accordingly, it is mandatory that firms in developing and transition economies accomplish some initial requisites successfully to carry out ecommerce processes.[8-10]

CONCLUSION

Even though there have been earlier studies that have tried to understand and address issues related to e-commerce, there have been very few that have focused on the impact of culture and non-infrastructure related issues. We were partially able to address this deficiency by conducting primary research on development and acceptance of e-commerce in a developing country that has very unique cultural characteristics. Our findings show that, even though a developing country government may make the necessary investments in infrastructure, unless the e-commerce industry participants understand and address the cultural issues that are unique to that country and relate to off-site transactional process, the large scale diffusion and success of such endeavors will be greatly impeded. Therefore, we would like to encourage other researchers to focus on different cultural environments (countries or regions, if there is homogeneity of culture) and, by understanding and dealing with these characteristics, enable a broader globalization and acceptance of e-commerce.

The evidence base for the prevailing assessment of ecommerce was limited. Three types of evidence, information contents and services for transaction preparation; information content and services for transaction completion; and the means of access to the e-marketplace were marshaled to support the idea that on-line trading was developing rapidly across a diverse range of business sectors.

The key issue for e-commerce is trust. If firms are to trade with 'strangers', they must be confident about both the reliability of the trading partner and the product information. The vast majority of e-marketplaces that we examined provided no assurances in these respects. Buyers were almost entirely dependent upon sellers for information about the products. The e-marketplace providers were not employing two possible means of resolving this problem.

REFERENCES

- [1] Wolcott, P., Press, L., McHenry, W., Goodman, S. E., Foster, W., (2001). "A framework for assessing the global diffusion of the Internet." *Journal of the Association for Information Systems*, 2(6).
- [2] Travica, B., (2002). "Diffusion of electronic commerce in developing countries: The case of Costa Rica." *Journal of Global Information Technology Management*, 5(1), 4-24.
- [3] Lee, M. and E. Turban, (2001). "A trust model for consumers Internet shopping." *International Journal of Electronic Commerce* 6: 75-91.
- [4] Grabner-Kraeuter, S. (2002). The role of consumers' trust in online shopping. *Journal of Business Ethics* 39: 43-50.
- [5] Ayb, Nagla. "What you need to know about E-commerce." *Community .. Times Monthly Periodical*, March 2000:3.
- [6] Hawk, S. (2002). B2C e-commerce in developing countries: a comparison of India, Latin America and Russia.
- [7] Stefan W. Schmitz and Michael Latzer, *Competition in B2C eCommerce: Analytical Issues and Empirical Evidence*
- [8] Kraut, R, Steinfield, C, Chan, A P, Butler, B and Hoag, A 2005, 'Coordination and Virtualization: The Role of Electronic Networks and Personal Relationships',

Journal of Computer Mediated
Communication, Vol 3 No 4.

- [9] Gwyer, J. (2004). Has the Internet increased trade? Evidence from industrial and developing countries.
- [10] Kuwayama, I. (ed.). (2005). Information technology for development of small and mediumsized exporters in Latin America and East Asia.
- [11] Mansell, R. (2003). The reality of e-commerce with developing countries.