E-commerce and Developing Countries; Obstacles and Motivations

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Abstract.

It is hard to imagine the greatness of information technology development in all aspects of human life in last two decade. The development of the Internet has created so many new applications worldwide independent of geographical distance. However, it has been confirmed by all that we are now entering into a new era with an explosion of information which some of its aspects and consequences have been predictable and understanding. On the other hands, this development shows the basic and fundamental evolution that happens every hundred years based on scientific predictions. The most obvious symbol of this change in the last decade can be found all aspects of e*. It should be noted that an important factor in e* project implementation is the country’s readiness (e-readiness). From one side the country readiness refers to the necessary infrastructure including technical, business and social structure of each country. The other side of these issues can be seen in the business infrastructure. In order to investigate the necessary info structure for e-economy readiness of country some issues such as macro-economic, political situation, the role of market, competitive strategy, foreign capital investment policy, taxation, and skilled human resources should be considered. Providing all theses three aspects in each society make an improving change in the way of thinking, civilization dialogue, improvement of style of living, job creation, continuous improvement of democracy in each country. In this paper, some obstacles regarding to the growth of e-commerce in developing countries is discussed. These obstacles coincide to the country readiness, national strategy and governmental ruling systems, which should be taken into account.

1. Introduction

After a decade of discussion on globalization, now the IT developments have been attracted the attention of all policymaker worldwide. Currently some plans has been developed such as of the NII program in United States, MSC plan in Malaysia, IT master plan in European countries, Digital 21 in Hong Kong, KII in South Korea, and Information Economy in Australia. The policy makers of these countries believe that a new economy based on millennium info-infrastructure is going to birth resulted to a knowledge-based society. This development can be seen as shown the fundamental evolution that happens in every hundred year based on scientific predictions.

In order to accompany with this global trend in IT development, the e* projects implementation should be prioritized based on adopted IT development strategies and country readiness. From one side the readiness refers to the necessary infrastructure including technical, business and social structure of each country. Communication infrastructure, computer/population, computer/number of employee indexes, and so on are some of the indicators for technical readiness. Today, the growing ease and speed of communication in different aspects is creating a new world where a distance has little to do. However, enhanced networking creates a new set of rules, opportunities, threats and challenges. Networking is like as relationship and what is important is genuine interaction [1]. On the other side, social readiness refers to the number of educated people/population, life long learning programs, Internet penetration, and the national educational network growth in both the schools and the universities in the country.
Finally, to investigate the necessary infrastructure for business, some issues such as macro-economic, political situation, the role of the market, competitive strategy, foreign capital investment policy, taxation, and skilled human resources should be considered carefully. Providing all these aspects in any society makes an improving changes in the way of thinking, civilization dialogue, improvement of living style, job creation, continuous improvement of democracy which leads to the social, cultural and economic development of each society.

Presenting an information technology policy with an eye on regional development and global issues is vital. The most important part is the “cyber law”. We consider this issue as a base for e-economy development, which has its own complexity. The structure of these laws should be compatible and responsive to our own local conditions, regional considerations, and global cooperation. The diversity and complexity in structure of “cyber law” with regard to three models including market driven, regional and centralized governmental ruling systems could be observed easily. However, the less flexibility can be seen in third model. Many countries in the world are the obvious example of third model. Creating the compatibility between the ruling system law and the “cyber law” is very attentive and complex. In this paper, a model for e-commerce development in third world countries is proposed. Then main components and their relationships will be discussed. It will be shown that one of the critical components is the “cyber law” which tailors the state rules in order to persuade all sectors especially the private sectors to play their role in this development. Moreover, the cyber law should be tailored by global and regional constrains.

2. E-commerce Structure

Today, Internet is considered as a new and effective platform for socio-economic activities. The main impacts of the Internet can be found in the way of living, interacting and thinking. It is perceived that e-commerce be one of the main applications on this platform with the maximum impacts on country development. It has been predicted that the emergence of some new types of intermediately, a reduction in the capital required to set up a business, and efficiency gains for both the buyers and sellers by dramatically reducing marketing and selling costs [7].

Internet has become one of the most important topics in business and marketing. It is the most significant area of development in marketing, faster and cheaper personalized interactions, reduce search cost for customers by providing intelligent agents, provide 24 * 7 locally and globally activities [2].

In order to see the different aspects of E-commerce development in presence of ruling systems and cyber-laws an e-commerce structure model has been proposed in Figure 1.

![Figure 1 The proposed E-commerce Structure](image-url)
e-Data refers to the information infrastructure, which is necessary for both the consumer and business sectors. E-shared services are those important services necessary for e-commerce applications such as logistic applications. In the third layer, e-law is considered as a base legal issues needed for electronic transactions. In the beginning of e-commerce growth in developed countries there were some ideas claimed that cyberspace permitted no regulatory intervention. Now, it is apparent that it is not a question whether regulation will occurs, but rather what type of controls will appear in a given policy area [8]. The government should help the legal system to develop the necessary infrastructure in order to improve e-commerce in developing countries. Finally, the components of the last layers are applications and user interface layers.

It can be determined from different experiences and comparative studies, the government is responsible to prepare the necessary infrastructures for developing e-commerce which is responsible to prepare a confidence environment for both the consumer and business by implementing reliable and simple legal issues. Moreover, the government is responsible to harmonize national policies with the rest of world, complying with the international standards and rules.

3. IT based Commerce

There are different definitions of e-commerce in the literatures. Generally, e-commerce is defined as the commerce, which is enabled by the new Internet based technologies, to include web browsers, web security, and web databases tools along with traditional EDI and email technology. In the other word, e-commerce is defined as the sharing of business information, maintaining business relations, and conducting business transactions by the mean of the telecommunication networks and protocols [4].

By the end of year, more than 600 million people worldwide will have Internet access and collectively will spend more than US$1 trillion online, according to research firm [3]. E-commerce adoption roughly maps to countries or regions with high purchasing power such as Industrial Countries. For example the United States now accounts for 40 percent of money spent online, but that proportion will slip to about 38 percent by 2006 as residents of Asia and Western Europe increase their online spending. In Asia some countries such as Singapore, Korea and Hong Kong governments are lobbying to bring their citizens online contributing to rapid Internet penetration. In addition, broadband is improving the online experience, and more consumers now access the Web via television and mobile devices, increasing their opportunities to spend money online. It has been expected that the online buying in East Asia will grow about 89 percent in 2002.

4. Obstacles

Today, the IT strategists believe on some issues that can increase the growth of e-commerce in developing countries. These are some political, technical and socio-economical issues. When the English returned Hong Kong to the Chinese in 1997, Hong Kong entered a "a country, two systems" policy, designed by late Deng Xiaoping. The goal of the policy was to give access of Hong Kongers to "the Western continuations" -- as capitalism, the freedom of the word and the rule of the democratic law -- while functioning under the communist Chinese roof. Hong Kong, for its part, adopted a progressive approach. In January 2000, the legislature of Hong Kong passed the ordinance of transactions, which identified the validity of the contracts formed online. It was a political example of determination in Hong Kong for the free exchange and the use of spite-Based of trade of many restrictions and hostile political environment towards the free exchange. In addition, one partly expects that the E-commerce in Western Europe assemble 68 percent this year, because of the common currency, which brings a better competition, a transparency of the prices and businesses improved for the purchasers on line. In the countries in the process of development with the closed political systems, there are many unclear visions about the position of government concerning of the foreign investments. Although the civil servant of these government have to
accept the significant investments in their country by the international trade.

In some countries, the governmental civil servant and legislative systems announced their intention to start a complete activity of E-commerce by passing various laws and legislations. While waiting, the government agencies also published edicts concerning the "security of state secrets," putting the responsibility on Internet Provider Service for users of Internet and to prevent significant information from being disseminated inside or apart from the country.

4.1 Political Issues

The political and governmental situations are more serious drawback in the promotion of E-trade. The various political systems can be divided into some distinct groups reflecting the principal differences. Some of them are classified by category inside with the autocracy, conservatism, the democracy, monarchy, socialism, and Theocracy. In fact, the various political systems have their own positive and negative impression on the growth of E-trade. It is clear that, the majority of the governments reach with the importance of ICT to present a new manner of working, make deals, to increase the public services, to improve the quality of the public life, at the costs of reduction and to increase the economic situation finally. However, country in the process of development with some principal obstacles meets as follow:
1. Governmental structures.
2. Type of governing on people and the companies.
3. Lack of national policies harmonization with the rest of the world.
4. Lack of the necessary regulations on trade.
5. Lack of personal security and privacy in doing business in new era.

Although some of these obstacles are found even in developed countries more and less, but it is seriously unresolved in developing countries.

4.2. Technical Issues

Technical issues always be a major problem in adopting a new technology in each era and each country. The lack of many infrastructure and readiness will stop or slow down the acceptance of new technologies. Some of the technical obstacles for E-commerce development in developing countries towards of e-economy are as follow:
1. Readiness in changing business procedure.
   Reengineering the work procedures with in standardization for the electronically commerce is still in the initial stage.
2. The lack of pricing and communication strategies changes.
   Lack of government supports to prepare an encouraging connection prices, Internet costs and flexible regulation are some of the main technical obstacles in developing countries.
3. Deficiencies in communication and information infrastructures.
   Internet access is rising in developing countries but infrastructures, regulation and limited budget and financial resources challenge its growth. Moreover, more Internet access is government regulated and the ISPs role is still not clear well. On the other hand, virtual distribution infrastructure that is related to the physical logistic link is considered as another aspect of infrastructure.
4. The low penetration rate of computers in business sectors.
5. Lack of sufficient information infrastructure.
   The lack of e-policy in national level to make use of resources that allows developing countries to share the practice through networks interconnecting private and public sector.

4.3. Socio-Economical issues

While it appears to be a significant trend in the growth of e-commerce in developing countries, the lack of personal security, consumer uncertainty about quality of goods of services bought over Internet, lack of knowledge cited as reasons why people do not shop on the web are essential issues. Moreover,
determining consumers purchase behavior is an important cultural and social issue, which should be considered as on line purchasing behavior [5]. The government policy should support and guarantee the protection of privacy and building trust. The government is responsible for public education on issues related to the protection of privacy, keep secure the system, and improve public literacy on the use of technology in life long terms. Finally, education, experience, views on convenience, and perceived accessibility is robust predictors of the extent to which Internet users are a frequent online buyers [6].

On the other hand, the benefits of using IT based technologies in economical growing have not been so cleared yet in developing countries. Some constraints in preparing budget, indefinite policy on foreign investments, undefined rules regarding to taxes, import and export are some obstacles in improving e-commerce in developing countries.

It can be anticipated that market-driven growth of the e-commerce or any e* applications need to assure governments in developing countries that equity can be achieved without drastic regulatory interventions. It can be recognized that private run e* activities such as private ISP, privatized telecom and IT bas companies will normally act in the interest of their shareholders which is a completely different principle to acting in interest of their customers. The interest of people remains the responsibility of government, which should be protected by establishing the regulatory bodies and developing a IT based jurisdiction system while playing a effective role in promoting fair competition rather than intervening in private business.

4 Conclusion:

In the paper some issues related to e-commerce obstacles in developing countries has been discussed. It is believed that the Internet and the digital revolution will have wide ranging impacts on marketing as well as business. The growth of Internet penetration causes a new vision of international marketing. Government not only should work to eliminate the digital divide for the citizen in developing countries, but also the digital divide between the country and the rest of the world.

Government has a critical role in determining the policy framework that will encourage and promote private sectors effort in using e-commerce. The government should identify and balance the needs of private sector and of those consumers and formulating efficient strategies for educating privacy and building new rules and legal issues that helped build trust. Resolving conflicts of laws in cyberspace and political system in developing countries is not going to be a simple issue. We showed that three major categories of political, technical and socio-economic are necessary as basic infrastructures for growth of e-commerce in developing countries.

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