E-READINESS ASSESSMENT AND ITS MODELS

Ahmad Hosseinpour¹, Fereydoon Hajizadeh², Seyed Morteza Maddah Shariati³, Reza Rokhideh⁴, Maryam Karimi⁵

^{1,2,3,4,5}M.A. Student of Business Management, Rasht Branch, Islamic Azad University, Rasht, Iran

Abstract

E-commerce in many sectors including the traditional has created new commercial conditions. Now, it is expected that over the next few years the internet create profound changes in the structure, management and the concept of the commercial services. Although still electronic commerce is in its infancy, but its consequences have used in some firms to perform their main tasks such as identifying customers, introduce products and services and even receive and payment, it is now well detected. Entering condition to extent of ecommerce is ready to accept this new approach. So start up new ways need to study and assess the readiness of the community to access to technology is considered, so to achieve this result, use standard methods, continuously so as examine the conditions.

Keywords: Ecommerce, Internet, E-Readiness

1. Introduction

Information and communication technology and computer and internet revolution in recent decades, large and rapid changes in various aspects of community life, including cultures, socio-economic, etc emerge. Existence of comprehensive measures of commercial use of new technologies by government organizations, enterprises and household are the main necessities of planners and policy makers. Electronic statistics for information available give to policy makers and enterprises and enable them to adopt appropriate policy. Agreement about definitions of e-commerce and terms related to it is practical first step to provide metrics suitable for measuring electronic commerce.

Considering fundamental role of key information and communications technology to facilitate the transition process, and organizational change and concerns the development of digital divide in the world, most countries have a growing effort by these technologies in order to improve their social position (TungX.Bui & et al,2005). In order to achieve these goals should be planned with an impressive speed to develop capabilities (in term of technical and organizational). This capacity is measured with a country or an organization's readiness for entering the field of electronic commerce and electronic government, or e-readiness. Countries can measure different aspects of current situation with a coherent and comprehensive approach by using e-readiness assessment models and then according to the results of this assessment decisions for future planning (Yaghoubi, 2007).

2. Literature of Review

2.1. The definition of e-commerce

E-commerce is said direct sales of products and services through the Internet by the buyer and seller. In other words, e-commerce is all aspects of traditional commerce and market process that can be done by Internet.

2.2. E-Readiness

Based on Rizk research (2004), the purpose of e-readiness is ability to accept the use and deployment of applications related to its in community. Several factors influence how the use of IT and e-readiness level of communities that it is necessary be carefully studied and identified (Movahedi & Yaghooti, 2009).

2.3. The Importance of E-Readiness Assessment

With regard to the issue that digital divide between developing countries is increasing, governments and businesses to use ICT know as a priority. In order to further the effectiveness of information and communication technology a country and consequently businesses in terms of telecommunications infrastructure, access to information and communication technologies must have legal framework for the use of ICT e-readiness. If it is considered to reduce the digital divide, it is necessary above all needs with a coherent and achievable strategy that takes into consideration country local needs, have appropriate. National governments can set measurement of e-readiness in order to assess their current state in the agenda and to identify areas that need government support.

Infrastructure needed for e-commerce include: (Tamizi, Akbari, 2004).

- * Connection and IT infrastructure
- * Social and cultural environment
- * Business environment
- * Organizations of public and private

2.3.1. Connection and IT infrastructure

Implementation and development of e-commerce and the public in a manner that is inclusive and sustainable is necessary to establish the appropriate communication substrates. Implementation and development of e-commerce in a way that will be public and inclusive, it necessary is to create a stable and suitable communication basis. This basis is that communication network in a virtual environment must have require quality to create reasonable and reliable communication so it can easily be used for electronic transactions.

2.3.2. Social and Cultural Environment

Master key locks of electronic commerce is making culture in this regard (Alvani; Yaghoubi, (2003) The second problem is matching tools and techniques of with the culture and knowledge and spirit of the people because for years people have grown accustomed to traditional methods and may easily not be willing to abandon them. They still like direct procurement, the product watching from the shop windows or even to touching the product from close distance, do not trust to smart card and web site know as a tool of luxury and unnecessary and distrusting them and services of these systems know non-functional and superficial and when this culture and trust in the technology and

benefits of this new method is not tangible to the general public, expect a broad approach of the general public to this issue would be impossible. In fact, infrastructure and culture should be changed so that traditional way to many things is considered outdated and is unusable. So before we think about access to new technologies have provided the capacity and waiting to enter it. One of the fundamental bases for any change, and the use of new technology in a society is the cultural infrastructure of society. Because fundamental changes without attention to culture and cultural and social infrastructure if not impossible, it will be very difficult and will be faced with many problems. Therefore, to perform any change that is fundamental, according to culture is essential. By knowing cultural and evaluating appropriate program can create field for these changes.

2.3.3. Business Environment

The business environment is an important aspect of business, so to implement any way from business must be provided suitable environmental conditions with practices of the trade especially in modern business practices that occur in virtual environments. The environmental conditions that are different from with traditional approach are very important. Thus necessary of implement electronic commerce is creation of field and the right business environment with this way from business.

2.3.4. Organizations of Public and Private

Public and private organizations play a major role in social activities of the general public. So for the expansion of trade that the people are the main actors is the need for cooperation of government and other institutions properly. So essential to the formation of a successful e-commerce and its implementation is the need to institutionalize of e-government that public organizations and the private play key role in the implementation and institutionalization of it.

2.4. Models of E-Readiness in Various Countries

Another effective approach in determining a proper assessment of e-readiness tool is modeled after the work of various countries. With examining experience of countries such as India, Uzbekistan, Korea, Russia, Bulgaria and ... It was found that most of these countries have used a standard model or with localization of model indexes (dimensions and elements of the original model remains unchanged) have attempted to assess. Some of common actions of these countries were: create the perfect organizing and statistics organization and appropriate census to helps policymakers, ICT development among all stakeholders, attention to training and human resource development, infrastructure development, development of a national language content on the internet, the user's security of services, one purpose assessment in provide services, use of international consultants, considering privatization in telecommunications sector, development and implementation of relevant legislation, supporting government from the development of ICT (Ziaeipour,2011).

2.5. E-Readiness Assessment Models

Several models offered and used for e-readiness assessment by consulting firms and universities. In superficial look at each of these models show level of readiness of a community to the exploitation of information technology and e-business. On closer look, these models have very wide and varied definitions and different measurement methods (Sergey S. Russia, 2007).

Table (1) e-readiness assessment models at different levels (Shirvani & Baneshi, 2009)

E-readiness evaluation models	Level
CID, APEC, CSPP, McConnell, EIU, ITU,	Information infrastructure
USAID , CIDCM, NRI	
CID ,APEC,CSPP, McConnell, EIU , CIDCM,	Deliverability and availability of the Internet
NRI	
CID, APEC, CSPP, McConnell, EIU, ITU,	Network speed and quality
USAID, NRI	
CID, APEC, CSPP, McConnell, EIU, NRI	Hardware and software of network
CID, EIU	ICT Service and Support
CID, APEC, CSPP, McConnell, EIU, ITU, ESAID,	Human Resources and Skills (Information Literacy)
NRI	
CID, APEC, CSPP, McConnell, EIU, ITU, NRI	People and organizations online (employee and
	departments)
CID,APEC,EIU	Appropriate local content
McConnell, EIU, ITU, USAID	Financial support and investment for the
	development of ICT
CID,APEC,CSPP,EIU	Information and Communication Technology in the
	Workplace
CID,EIU	ICT job opportunities
CID,APEC,CSPP,EIU	E-commerce B2C (relationship with consumer)
CID, APEC, EIU	E-commerce B2B (relationship with other business)
CID, APEC, McConnell, USAID, NRI	Electronic Government
CID,APEC,McConnell,EIU,USAID,NRI	Legal and regulatory environment (such as copyright
	law,)
CID,CSPP,EIU,CIDCM	Information Technology Policy and Management
APEC,ITU	Benefits of electronic services (expenses and
	charges,)
APEC, CSPP, McConnell, EIUUSAID	Security encryption (such as public infrastructure,
	digital signature, Privacy Statement)
EIU, CSPP	Degree of Innovation
EIU,APEC	Industry standards (for developing ICT)

3. Conclusion

E-readiness goals according to situation of economic, social, technical and legal goals can mentioned to economic goals such as to remain competitive digital ability, ICT infrastructure, applications of ICT in the development of economy and the expansion of foreign investment and social goals such as to reduce digital divide, benefit of individuals and organizations from qualitative data and build confidence in consumer. There are different models to E-readiness assessment such as CSPP, CID, APEC, MOSAIC, EIU and ITU that indexes and different methods have been proposed to assess E-readiness. Existence of e-readiness assessment models is caused to more accurate planning, intelligently to enter into the digital age and providing a better substrate for monitoring the performance of executive agencies.

References

- Alvani, S.M; Yaghoubi, N.M. (2003). Public Management and eGovernment, Qom, Qom Center for Higher Education, Journal cultures and Management, No. 3.pp 8-15.
- Movahedi,M;Yaghoti,M.(2009). Provide a model for measuring e-readiness in small and medium-sized businesses in the nation's defense, Journal of New Economics and Business, No. 12, pp. 27-50.
- Sergey S. Russia **e-readiness assessment**. Institute of Information Society, Moscow, 2004.http://prior.russia-gateway.ru/en/documents/readiness/ [May 2007].
- Shirvani,H.R;Baneshi,Z.(2009). assessment e-readiness Municipality of Baharestan New Town in order to fulfill e-Municipality, Second International Conference of e-Municipality.
- Tamizi, A; Akbari, M. (2004). Evaluation Criteria for ICT development, case study OIC countries, Tehran: Tehran University, Journal of Knowledge Management, No. 64.
- TungX.Bui,Ina M.Sebastian,Wayne jones,saisamorn Naklada . (2005). E-Commerce Readiness in East Asian APEC _a Readiness in Determine HRD Requirements and Capacity Building
- Yaghoubi, N.M. (2007). Electronic government (management approach). Tehran: publication of Afkar.
- Ziaeipour,E;Mohammadian,A;Khosh Alhan,F;Taghizadeh,A.(2011). Framework of national ereadiness based on a systems approach, Journal of Information Technology Management, Vol 3, No. 8.