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Potential Benefits of E-business on Economy and Infrastructural Development

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Abstract

Throughout history, innovation and the adoption of new technologies have led to productivity improvements that generate stronger economic growth and higher living standards. In business, technological innovation over the past century has focused on the design and manufacturing processes that are used largely within individual firms. At the same time, the process of physically moving raw materials, components and products through a firm's value chain comprises a significant portion of the total cost of goods in many industries. Mechanized transportation, telecommunications networks and integrated information systems have significantly helped supply chain managers improve their ability to plan, order, monitor, and evaluate their processes. In particular, new information technologies and e-business solutions have transformed operations from mass production to mass customization. In particular, we explore how the implementation of e-business technologies on supply chain operations has affected prices, employment, economic output, living standards, and productivity the impact of e-business technologies on supply chain operations has benefited consumers and the macro-economy in many significant ways. A national strategy for the advancement of information and communication technology (ICT) has been worked out, mainly to introduce e-government, e-commerce, and a digital society. So, all these efforts play a vital role in the development of economy. E-Business is important because it allows: Transformation of old economy relationships (vertical/linear relationships) to new economy relationships characterized by end-to-end relationship management solutions (integrated or extended relationships), Facilitation and organization of networks, small firms depend on 'partner' firms for supplies and product distribution to meet customer demands.

KEYWORDS: E-Business, E-Commerce, CRM, ERP, SCM, SMEs, INFOR Technology, Macroeconomics, Productivity

Definition of E-Business

Doing[1] business electronically to transform key business process. Enabling core business processes to be put online to improve services to both customers and collaborating partners, cut costs and sell products.
The transformation of an organization's processes to deliver additional customer value through the application of technologies, philosophies and computing paradigm of the new economy.

The Difference between E-Commerce and E-Business

E-Commerce[2] the sale of products and services to customers over the Internet - is now relatively easy to implement. There are many software products and solutions that enable catalogues to be incorporated into web sites for purchase of products over the Internet by consumers. Yet e-Commerce is not e-Business. An e-Business not only sells products online (e-Commerce), but also links those sales tightly to its back-end systems for order processing and delivery fulfillment. If online sales are not seamlessly integrated with the back-end systems of an enterprise, those orders must be separately entered into the normal processing and fulfillment systems. Such enterprises are only doing e-commerce; not e-business. Perhaps the best-known example of e-business is that of Amazon.com, the world's largest online bookstore with over a million titles. Amazon has succeeded by building a closely linked e-business value chain for acceptance of orders online and delivery to its customers wherever they are located, worldwide. As an e-business, it has also added CDs, videos, toys, electronics and auctions.

Old Economy Relationship[3]

Producer ⟷ *Retailer* ⟷ *Consumer*

New Economy Relationship

Producer ⟷ *Consumer*

Overall the result is that traditional marketing methods of communicating in a 'monologue' is not only a thing of the past but is doomed to failure in a 'multilingual' world. The preceding texture [Figure.1] devoted to explain its justification. Further ,its claimancy can be gauged through its worthy activities which are being elaborated here in Table I.

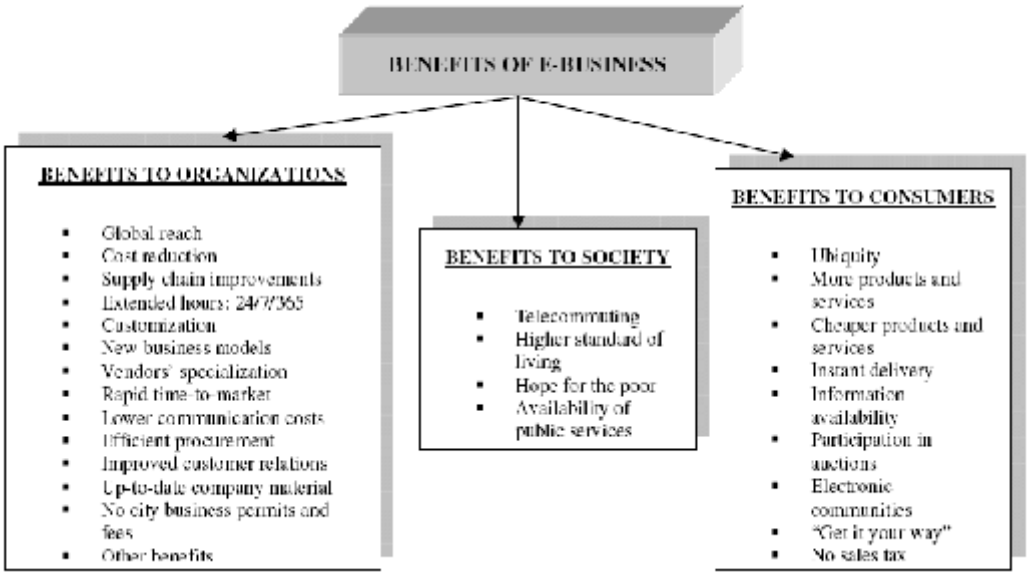

Table –I Examples of E-Business Services[4]

E-Business	Activities	Examples
Customer Relationship Management (CRM)	integrated processes to manage customer lifecycle and build relationships	-Electronic address book for customer contact details -Responding to customer emails within 24 hours -Database of customer orders and preferences
Selling-Chain Management	transform sales into interactive orders including pricing, quoting and service	-Website with catalogue of products including updated price lists for sales staff and customers -Online email quote or service request
Enterprise Resource Planning (ERP)	integrated accounting & finance, production planning, human resources, sales & distribution systems	-Accounting system such as Quick Books -Database that tracks resources for projects -Simple monitoring system for sales tracking
Supply Chain Management (SCM)	inter-enterprise coordination of material, information and financial flows across all participating enterprises	-Email orders to suppliers -Automatic transfer of payment via bank accounts -Website with reports and information
E-procurement	improved purchasing for efficiency, reducing corruption and cost control	-Emailing an order direct to a supplier -Track invoices through accounting packages
Knowledge-tone	decision support, data management, information retrieval and reporting in response to market and customer needs	-Gather customer satisfaction information and use it to develop a new marketing strategy -Review orders and develop a new inventory list

E-business is Business without Borders

The[5] world has fewer barriers than its people have ever seen before. There is no place that seem scary and out of the way to the cameras of international news agencies. People routinely converse online from locations the world over. A business trip to an overseas destination is not unheard of. The truth is this has become common in many quarters. With the explosion of online business there has been a further fracturing of the idea that there are pronounced borders. A craftsman in Idaho can sell merchandise to an importer in Hong Kong. A clock maker in Holland can sell a handmade timepiece to a client in Mexico. Most online checkouts provide the ability to manage financial exchange rates so there is little delay in completing an order and submitting the funds. Suddenly there are very few locations in the world where ecommerce cannot take place. Imagine a gentleman in Jamaica who has made handcrafted items for tourists for years. He can now take those one of a kind items and sell them online. He can provide jobs for some of his family and friends to help fulfill orders and assemble the materials he needs to complete his art. Business was once thought of in terms of taking the physical business to individuals. This has largely meant developing a physical structure that houses actual merchandise that can be purchased using real sales associates. Online sales have made this idea one that deserves a second look. Today you can take your retail business idea anywhere in the world.

Borderless Economy in a World of Borders

The essential in the new economy is a structural shift from the industrial economy toward an economy characterized by information, intangibles and services and a parallel change toward new work organizations and institutional forms. Many new terms have been coined for this new economy such as "knowledge-based economy," "borderless economy," "weightless economy," "networked economy," "digital economy," "the information-based economy," and "the networked economy" to name a few (Woodall, 2000; Sharma et al., 2004). A digital economy is a convergence of communications, computing, and information. The new economy is basically about coordination, innovation, selection and learning (Gärdin, 2002)[6]. The combination of networked computing technologies and new business models is creating entirely new markets, industries, businesses, and work practices today to form a digital economy. The new economy or digital economy is based more in the form of intangibles, information, innovation, and creativity, in expanding economic potential (Persaud, 2001)[7] and is based on the exploitation of ideas rather than material things. The focus of the new economy moves from processing material input into material output toward creation, trading and distribution of knowledge, intellectual property and intangibles. The symbiosis between changing production and business processes and information and communication technologies (ICT) is the driving force toward the new, digital economy. The key to understanding the new economy is services and the measurement of services. The modern industrial enterprise is largely a producer of services integrated or embedded in the product. A large part of this service production concerns the use of information in some form (Gärdin, 2002)[8]. The essential elements of the digital economy are:

- digitalization and intensive use of information and communication technologies (ICT);
- codification of knowledge;
- transformation of information into commodities; and
- new ways of organizing work and production.

This implies that much of information and many services are available online. A widely distributed access to the networks, the intra- and Internet, and of skills to live and work in the Information Society is the basis for the digital economy. The new economy is a combination of services and ICT. Malone, Yates and Benjamin elaborate on the growing concern that the benefits of the digital economy are not evenly distributed within society (Bouwman, 1999)[9]. The two major concerns are the role of technologically-sophisticated workers in the digital economy and the equity of the benefits-sharing as digitization of information changes the structure of businesses and industries. For example, the dramatic expansion of inequality and educational differentials, and disparities in access among different groups seem to follow the perfect labor market scenario. In this scenario, the most qualified workers receive much of the benefits, but both firms and poorly qualified workers tend to lose out (Kauffman and Walden, 2001)[10].

E-business can influence the process of governance in various ways and in varying degrees, from improving the current mechanisms of delivery of services to transforming the entire mechanism and the nature of services themselves. The role played could be:

1. Purely technical in terms of automation of tedious tasks earlier done by humans,

2. To a facilitating/supportive role leading to more participatory and all-encompassing decision-making and implementation processes,
3. To a completely innovative role that involves new services and new mechanisms to deliver these services.

E-commerce can lead to increased participation, inclusion and integration on one hand and increased marginalization, loneliness and exclusion from information and communication on the other.

E-business Economy Impact

One[11] place where we can identify macroeconomic benefits from the impact of new e-business technologies is on prices by reducing production volatility, inventory levels, and logistics costs, and by introducing more efficient procurement methods. Another macroeconomic variable where we would expect to see improvement is the growth of productivity, measured as output per hour. New technology solutions frequently eliminate the need for labor, whether it is counting inventory, processing orders, streamlining production operations, or moving stuff from one location to another. Moreover, as information is collected and processed in real-time, businesses have a better understanding of the demand for their products and can take necessary actions quicker to reduce production output (and labor resources). And there are signs that these benefits are spreading to the service sector, whose productivity growth has recently picked up, particularly in retail and wholesale trade. The good news is that, in the end, stronger productivity growth directly translates into higher standards of living for an economy's citizens. The effective implementation of e-business technologies in a competitive environment that demands economic efficiency in order to maximize shareholder wealth should lead to stronger productivity growth.

The Fundamental Principles of E-Business Legal Framework

The increasing numbers of transactions in both international and local trade are carried out by means of electronic data interchange and other means of communication, commonly referred to as electronic commerce (e-commerce). This e-commerce seeks at the use of alternatives to paper-based methods of communication and storage of information (Chissick & Kelman, 2000)[12]. This substitution is increasingly phenomenal today where more and more applications are used to eventually turn the Internet as a virtual business sphere. Nevertheless this initiative is more technologically advanced rather that its other aspects. If the traditional trading activities are already well equipped with traditional sets of laws and regulatory frameworks, its new electronic environment is not the same. Certainly this was the motives that pushed the United Nations Commission on International Trade Law (UNCITRAL), an international body under the United Nations, to look at possible model laws that seek to equip this new environment. In an electronic business environment, a good law is supposed to provide a conducive framework in which the compliance would eventually serve as facilitator instead of barrier to the business (Lallana, 2004)[13]. Thus, the first and utmost function of the law here is to legitimize the use of electronic tools and methods for the purpose of contract and commercial transactions.

One of the important pillars of an e-business legal framework is the preservation of national interest. It follows that all legal and regulatory frameworks to be put for facilitating the e-business would have to observe the objectives of national comprehensive development program, be it economic, educational, social, cultural and political goals. Thus any measures of adopting principles of any international or foreign laws and practices shall not contradict this first requirement.

Another crucial work to do in providing e-business laws is that they need to ensure a harmonious framework within the existing national legal system and in accordance with current international initiatives and expectation, given the borderless nature of the e-business (The United Nations, 2004)[14]. Thus, the e-business legal framework should not undermine the existing legal and regulatory framework on commercial activities such as existing laws on contracts, sales of goods, banking, and property as well as consumer protection. Unless this principle is given sufficient care, we would only end up having clashing laws and therefore obsolete and inapplicable.

While keeping the harmony of national legal system is very important task yet not an easy one, the policymakers should also bear in mind the current initiatives of the international community which reflect their expectation when it comes to trans-border electronic commercial trades. This approach is imminent because e-commerce and Internet are both global and trans-border. Constructive adoption and comparison needs to be looked at, either from international legal instruments or other foreign jurisdictions.

This international community may be represented in the UNCITRAL who had come up with a series of model laws such as e-commerce model law and e-signature model law. These model laws, amid their non-binding nature, provide very useful guidelines of certain benchmark acceptable by international community.. Technology is by nature insensitive about laws and rules. Thus law is needed to keep the technology in track, benefiting everybody not only the industry but also the consumers at large.

E-Business Regulators

At[15] the outset of E-business, it is observed that the opportunity is bewildering highly to step back from the day-to-day hurly burly of regulating Markets. The Internet broke alternative trading systems and electronic initial public offerings (IPOs) are the sorts which are trying to keep track of the range of alliances, joint ventures and linkages between exchanges and clearing houses that are being driven by e-commerce to try and focus on the longer term, more over fundamental issues of where e-commerce is taking the art of regulation and what it means for the role of securities and futures regulators in the future.

The regulators in this regard mainly are World Trade Organization (WTO), Organization for Economic Cooperation and Development (OECD), United Nations Commission on International Trade Law (UNCITRAL), International Chamber of Commerce (ICC), Asia Pacific Economic Cooperation (APEC), Trans-Atlantic Business Dialogue (TABD), Trans-Atlantic Economic Partnership (TEP), Free Trade Area of the Americas (FTAA), World Intellectual Property Organization (WIPO), national governments and the European Union (EU). When conducting business on the Internet, national boundaries and local markets are entirely permeable, open to anyone desiring to operate anywhere in the world. Legislation and regulation, previously based upon physical presence, must now be analysed in the context of the increasingly pervasive, always intangible, transnational marketplace.

Secondly, e-commerce transcends national boundaries, it forces regulators to evolve international regulatory networks to cope with greater cross-border co-operation and competition between exchanges, quasi exchanges and clearing houses.

Thirdly, partly because of increasing internationalization, partly because the increase in statutory regulators' jurisdiction is so great and partly because the rate of change in the securities and futures industry has been so greatly accelerated by e-commerce, regulators are forced to re-examine the traditional style of regulation.

Conclusion

Finally, the paper evaluates the potentials benefits of e-business on economy and infrastructural development based on benefits analogy. The aim of this paper is to emphasize the balanced growth of each vital component to achieve successful deployment of e-commerce in developing countries.

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