

GLOBAL ELECTROINIC COMMERCE AND ITS IMPACT ON THE ECONOMY OF THE NEW EMERGING MARKETS

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ABSTRACT

This study discusses the potential of electronic commerce (EC) and its impact among the newly emerging economies and the changing landscape of businesses. In assessing the global impact of EC, the study examines the different areas of EC in which Information Technology (IT) can play a vital role with a focus on access and use of infrastructure, global competitiveness and trade, the changing landscape of business with reference to India and Philippine, and trends in financial transactions.

INTRODUCTION

The development of new technologies and eventual re-engineering in the corporate world is changing how businesses operate and conduct business today. Innovative forms of business transactions have emerged as a result of the technological advances in information and communications technology. The last three decades have witnessed significant transformation in the structure of global business, moving from centralized to decentralized, and to a new found era of global virtual enterprise based on an entirely new set of operational principles.

The increase in the popularity of the Internet has stimulated the growth of electronic commerce (EC) applications, not only in the more advanced regions of Europe and North America, but also among the newly emerging markets (NEMs) of Latin America and Asia. The new direction in business transactions in the corporate world resulting from a vast development of information system, paved way for the outgrowth of the Internet, open systems, interorganizational systems, and the potentialities for EC with electronic trading of goods and services through networks. As defined by Dadd (1998), EC is the paperless exchange of business information using Electronic Data Interchange (EDI) and related technologies. A key technology to the development of EC is the EDI, which is defined as the passing of commercial information through networks between firms. Based

on the above broad definition, EC includes not just purchasing of goods by telephone and Internet networks, it involves payments processing, end-to-end processing, including ordering, fulfillment, customer service, and reporting. In short, the vision of EC is for potentially large improvements in customer service and lower costs.

In an increasing global economy, according to Oshikoya and Hussain (1998), information technology (IT) is one of the key determinants of competitiveness and growth of firms and nations. From this perspective, the new direction in trade transaction that emerges as a result of global on-line “marketplace” means that more sections of the economy would become subjected to rigorous market competition (Roche, 1995). By this, changes are expected in the structure of markets and marketing activities, such as disappearance of geographical boundaries, the rapid flow of pricing comparisons, and the organization of industry in which some firms would witness summary death and some would grow to undreamed size.

The newly emerging knowledge-base economic structures resulting from the global information technology would have far reaching implications not only with regard to how modern businesses conduct their transactions but also on research and development in the process of economic growth. It is within the above context that this study examines the development in the NEMs, with particular reference to India and Philippines. In assessing the impact of EC on the NEMs, the study discusses the different areas of BC in which IT can play a vital role with a focus on access and use of infrastructure, global competitiveness and trade, the changing landscape of business among the NEMs, and trends in financial transactions.

METHODOLOGY

The paper uses theoretical and case analysis from the newly emerging markets (NEMs) in presenting the issues. In section III of the paper, access and use of information is presented with a focus on subscription and access to network infrastructure, the development and acquisition of information technology (IT), regional growth of IT, and case analysis of Internet service providers in the NEMs with specific reference to Philippines and India. Section IV discusses global competition and commercial opportunities among the NEMs. A model on major key players in International EC is

presented to demonstrate the interconnection between institutions, processes, and networks, which are considered central to EC globalization and commercialization.

Section V focuses on the changing landscape of businesses with emphasis on the changes in the economics of marketing channels, patterns of distribution, improvement of customer service, and reduction of cost arising from global EC. Two models are discussed in this section; one dealing with organizational efficiency of EC, and the other model is concerned with the interconnection between business, consumers, and the government for on-line business transactions. Section VI discusses approaches to banking and financial transactions with regard to electronic banking and electronic payments. The last section presents the concluding remarks.

ACCESS AND USE OF INFORMATION

The growth and potential of electronic commerce (EC) have recently captured the attention of businesses, consumers, as well as government officials. The advent of EC has brought a major change to commercial transaction. The Internet, with its open, non-proprietary standards, is behind the change and plays an important role in propelling the growth of EC. As the global economy embraces commercialization of EC and the public consumption of computer technologies increases, the consequent development in global network technologies and graphic based Internet applications make transmission of all kinds of digitized data fast, cheap and simple. According to Chon (1996), the rate of increase in the use of the Internet is second to none compared to any other technological advances in the modern era. Twenty to thirty million people are estimated to use the Internet by 1996 and the number is expected to grow to two million by the year 2000 (Hoffman et. al., 1996).

To capture the opportunities afforded by this Internet based business transaction, subscription into necessary infrastructure for businesses as well as households have shown some remarkable developments. For example, Table I below shows On-line household participation in 1996 and the projected increase in different economic regions of the world. The most significant development is witnessed in North America, followed

by Europe and Asia/Pacific. The rest of the world is still lacking behind in this electronic age race of commercial transaction.

Table I: The Number of On-line Households (Millions of Households)

	1996	2000
North America	15.4	38.2
Europe	3.7	16.5
Asia/Pacific	3.4	10.0
Other Markets	0.9	1.9
Total	23.4	66.6

Source: Dadd, C. Mark, (1998).

The development and acquisition of IT is crucial to how fast EC can broadly be embraced and used globally. Thus, the spread of IT globally will help demonstrate the potential participation in EC. However, before users can engage in on-line commercial transactions, they must be able to access and use the network infrastructure. This includes access to information technologies such as computers, servers and software, as well as the network itself~ which is composed of a number of different infrastructures: fixed-line communications, cable TV, cellular mobile networks, satellites, and among others, electricity distribution networks. The constant and rapid decline in prices and improved information technologies has promoted their widespread diffusion. Notwithstanding this phenomenon, further hardware and software innovations are needed to create a wide variety of devices that access is not a function of income, location, price, market, and specialized skills.

Table 2 shows the regional growth of IT by dollar sales. Within the ten-year period of 1985 - 1995, Asia/Pacific, Western Europe, Lat America and Western Europe showed major improvement in terms annual growth of IT. In terms of dollar market size, North America remains the dominant market for IT. The table demonstrates the important fact that access to IT is still more prevalent in the advanced economies of North America and Western Europe, with some improvement in the NEMs of Asia/Pacific. Some of the countries classified as high growth countries are showing some improvement their development in IT market. Among these, are China, India, Philippines, Indonesia, and Turkey (See: Table 3 below). Looking at the IT compound annual growth rates for the

newly emerging countries, we can observe that India and Indonesia showed decline in their estimated projected growth rates for the years 1995-2000 as compared to 1985-1995. Part of the problem in India could be attributed to the lack or inadequate service provider for Internet development. Their regulatory measures and the prohibitive costs of setting up websites affect Indonesia. The other low growth less developed countries are still at a disadvantaged position in their ability to access IT because of their inadequate infrastructure capacity and poor network system. Sophisticated EC applications rely on relatively high-speed, high-bandwidth data transfers of sufficient quality for services. Unless the less developed countries (LDCs) and more particularly, the NEMs take deliberate actions to join the new super-highway technology and develop their infrastructural capacity, their access to electronic commercialization will be limited in scope. Also, deliberate restriction and regulatory measures could inhibit their access.

Table 2: Regional Growth of IT (By Dollars Sales)

Region	IT Market 1985 (\$B)	IT Market 1995 (\$B)	10-year CAGR* (%)
North America	53.4	227.5	16
Latin America	2.8	12.4	16
Western Europe	30.9	157	18
Eastern Europe/ Mideast/Africa	4.9	13.6	11
Asia/Pacific	21.6	125	19

Source: International Data Corporation, 1996. *CAGR implies annual growth rate.

Table 3: High-Growth Countries

Country	IT Market 1995 (\$B)	1985-95 CAGR (%)	1995 Growth (%)	Estimated 1995-2000 CAGR* (%)
China	3.46	32.8	37.7	32.9
India	2.09	30.9	50.5	28.8
Philippines	500	26.6	57.7	27.4
Indonesia	1	26	30.5	24
Turkey	380	20	17.4	20

Source: International Data Corporation, 1996. *CAGR implies annual growth rate.

Using India and Philippines as a case example for NEMs, we examine the potential for EC in these countries. As put by Bhatnagar (1997), the potential for EC in the NEMs depends on the number of users who have access to the Internet, the number of Internet users internationally who could have a prima lane interest in the emerging markets and the products and services offered by the companies in these countries, the skills and creativity employed in designing web sites and the band width available for users and service providers. Also the ability to afford the connectivity cost of Internet in the NEMs is one of the major concerns regarding access to EC. Preparing of websites can be fairly expensive. As observed in India (Bhatnagar, 1997), companies providing this service charge fees from \$3000 to \$100,000 for concept, project analysis, and content development. Web authoring may cost between US\$50 to \$80 per hour. According to the study, of the many small shops offering these services across the country, only few can be termed as professionals.

Creating a website is only one part of connotative problem. In order for people to visit such web pages, these pages must show up in a key word search of web data bases maintained at several sites such as Yahoo, Infoseek, etc. Thus, for India to take advantage and exploit the opportunity offered by the Internet, it will have to adopt promotive pricing of Internet services, and convert its information footpaths into wide band highways. Although the growth rate of telecommunications network in developing countries has been slow, the rise of large outsourcing operations, such as those in the Philippines and India, have done much to accelerate their growth.

Internet and World Wide Web (www) access has spread faster than any other technology (Roche, 1995). Because of a technological lag compared to its more advanced Western trading partners and a culture which places a lot of value on personal relationships (including business transactions), electronic markets have not gotten the needed attention by businesses in order for them to grow and be prevalent in the Philippines. According to Asuncion (1997), in order for electronic marketplace to be viable in the NEMs like Philippines and India, a number of key success factors should be met: improved telecommunications infrastructure, a critical mass of regular Internet users, secure payment over the Internet, and legal framework. Some of the major Internet development in Philippines is presented in Table 4 above. The first Internet Service

Provider (ISP) in the Philippines is Phnet, which started operations in March 1994. Now, there are more than 30 Internet service providers in Philippines offering links from a 64kbps-leased line to T1 and E1 connections (Asuncion, 1997). Current estimates put the number of Internet users within a range of 35,000-45,000 users.

Table 4: Some Internet Service Providers in the Philippines

ISP	SUBSCRIBERS	CONNECTION
Cybernet Live/NetSpace	2,000	128kbps via MCI Direct
Distributed Processing Systems, Inc.	NA	72 lines to Mozcom 45 lines to e-mail Co. 200 lines to sequetNet E1 connection to the US
G-NET/Globe Telecom	500	96 line 128 kbps to MCI 128 kbps to Sing Tel
IGM	1,000	40 lines T1 connection to the US
Infocom Technologies, SequelNet	2,900	180 lines E1 connection to the US
iPhil Communications	40 companies	64 kbps connection to Sprint 128 kbps connection to MCI
Mosaic Communications, Mozcom	NA	90 lines 256 kbps to MCI
Philippine Network Foundation (PFI), Inc., PHNet	80 corporations	Direct Connections to the US via MCI and Sprint
World Tel Philippines, Inc.	80 companies	Direct link to Canada

Source: Computer World, September 30, 1996, p. 48, Asuncion, Roberto M. (1997).

GLOBAL COMPETITIVENESS AND TRADE TRANSACTIONS

The last decade has witnessed unprecedented pace of globalization in the world economy with trade increasing nearly twice as fast as the gross domestic product (GDP), financial markets in many countries becoming rapidly liberalized, and many developing countries are opportune with accelerated capital flows (IMF, 1997). The economic progress witnessed during this period moved the world economy toward increased global competition between regions and among nations with increased trade transaction buttressed by new methods of conducting international business. The greatest commercial opportunities for the increased global trade and commercialization can be found, particularly among countries classified under the NEMs consisting, among other China, India, South Korea, Malaysia, South Africa, Singapore, Thailand, and Philippines. As these countries and economic areas emerge and increase their purchases of capital equipment, including industrial and farm machinery, electrical power transmission, ar transportation equipment, and a wide range of high-technology manufactures, promising opportunities for trade expansion are likely to open with increased global competition.

Table 5: Global Shift in IT: Share of Total Market

Region	1985 - % of IT Market	1995 - % of IT Market
North America	47.0	43
Latin America	2.5	2
W. Europe	27.2	29
E. Europe/ Mideast/ Africa	4.3	3
Asia Pacific	19.0	23

Source: International Data Corporation, 1996.

Information technology (IT) is becoming a major factor in global trade and transactions. The increased developments in global network technologies and graphic-based Internet applications are influencing trade transactions through the adoption of BC.

The significance of this is reflected in countries and regional investments and consequent global shift in IT as shown in Table 5 below. According to the table, Western Europe and the NEMs of AsiaPacific show significant market share gain in their acquisition of IT. Countries and regions with improved measure of information-based-technology have greater potential in participating more actively in Internet-based EC and become more competitive in trade transactions. As pointed out by Roche (1995), the age of EC means that more sections of the economy will be subjected to rigorous market competition. Changes such as the disappearance of geographical boundaries, the rapid flow of pricing information, and the ability of electronic markets to force instant price comparisons, as well as their associated structural elements will alter profoundly the organization of industry, killing off some firms, and growing some to undreamed size.

Among the major factors driving the current electronic phenomenon that shapes the structure of business and trade transactions are some key technologies. First, IT makes it possible to increase the matching of offers with prices, much like is done in traditional stock markets. The rise of electronic storefronts, electronic shopping malls, and cyber-malls are examples of how networking technology can be used to provide critical information to consumers of goods and services. A second key technology that helps to propel electronic commerce is Electronic Data Interchange (EDI), the passing of commercial information through networks between firms (Roche, 1995). EC has brought changes to the way businesses are conducted among businesses and between businesses and consumers. As shown by Ellsworth and Ellsworth (1994), as a result of the new stride in IT, employees in companies will be able to get far more information more quickly than in the past. The rapid development of inter-linked trading and communications between firms will help solidify the competitive advantage of different "technopoles" of the world (Castells and Hall, 1994; Scott, 1993), and will be a key factor in international high technology competition, particularly intra-industry trade (Scherer, 1992).

The use of EC, the precursor of EC, has contributed both to reducing data entry errors, time cost, and to enhancing efficiency in several aspects (Kim and Hong, 1997). As the use of advanced IT accelerates, EC is expected to make a tremendous impact on the competitiveness of firms and the structure of markets and industries (Malone et al.,

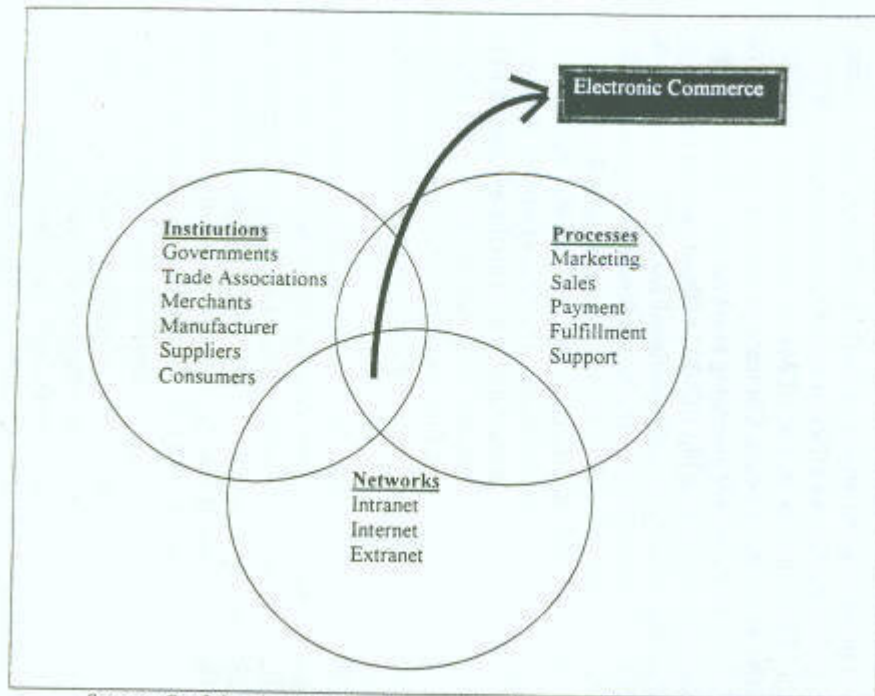
1987; Benjamin and Wigand, 1995). The impact of EC can be summarized in three words: paperless, timeless, and borderless (Park, 1997). A decreased restriction in time and space brought about by EC means a broader scope of competition. Institutional arrangements such as the World Trade Organization (WTO) and the spread of international EC will make import barriers virtually ineffective. To stay competitive in the global market, an efficient and effective adoption of EC will be critical. The situation in the NEMs is different from the advanced countries in many respects. Contrary to those in advanced countries, many firms in the newly emerging markets like Philippines and India, for example, are introducing EDI/EC without enough prior experience and preparation in their organizational use of IT. A relatively small number of total computer users means thin market viability. The scope of trade can be considerably limited in countries lacking behind in the new race for Internet trading. As the NEMs improve in their technological engagement, they will be able to benefit from borderless trade, free of undesirable trade barriers. With the expansion of Internet in these less advanced countries, they will be able to take advantage of the revolution in retail and direct marketing. Consumers will be able to shop in their homes for a wide variety of products from manufacturers and retailers all over the world.

The new development in EC is intended to enhance the efficiency of business and contribute to reducing transaction costs. Because of the limited experience of businesses in the LDCs, the government can play a positive role in minimizing the risk of providing a solid policy toward EC. The government has an economic and strategic rationale for promoting the spread of EC because it has a potential to dramatically lower transaction costs. As pointed out by Kim and Hong (1997), establishment of standards for electronic documents, preparation of the legal and institutional arrangements, construction of the physical infrastructure is essential grounds that require active role of government for facilitating the use of EDI/EC. The major key players in international electronic commerce are illustrated in the Figure I below. The model shows that the interconnection between institutions processes and networks are critical to EC globalization and commercialization.

According to Porter (1989), National competitiveness is a function of technological innovation. Given the financial constraints faced by majority of businesses in LDCs and

the risk involved in venturing into new innovations, government may jointly provide venture capital to support several risky EDI/EC projects in these countries. From the point of view that government must guarantee access to the EC market to reduce transaction costs, government should promote competition and market transparency by eliminating entry barriers and unfair trade practices (Benjamin and Wigand, 1995).

Figure 1: Key Players and Processes in International Electronic Commerce



Source: Confederation of Indian Industry, (<http://www.tradeaccess.com/cii/Ecommerce/sld005.htm>).

A few conglomerates generally dominate IT in the NEMs. Since cooperation among the conglomerates and the small and medium size enterprises (SMEs) is very important to gain competitiveness in the global market, it is desired that the conglomerates of the NEMs make up cooperative partnership with SMEs and promote more open relationships. Both parties, according to Kim and Hong (1997), will benefit from strategically cooperative relationships while specializing and repositioning themselves in the network of organizations via a smart adoption and use of IT. Though the role of government in financing the initial development of the Internet is crucial, its expansion must be left into the hands of the private sector. This is important because innovation,

expanded services, broader participation, and lower prices will only arise in a market-driven arena, not in an environment that operates as a regulatory industry.

THE CHANGING LANDSCAPE OF BUSINESS

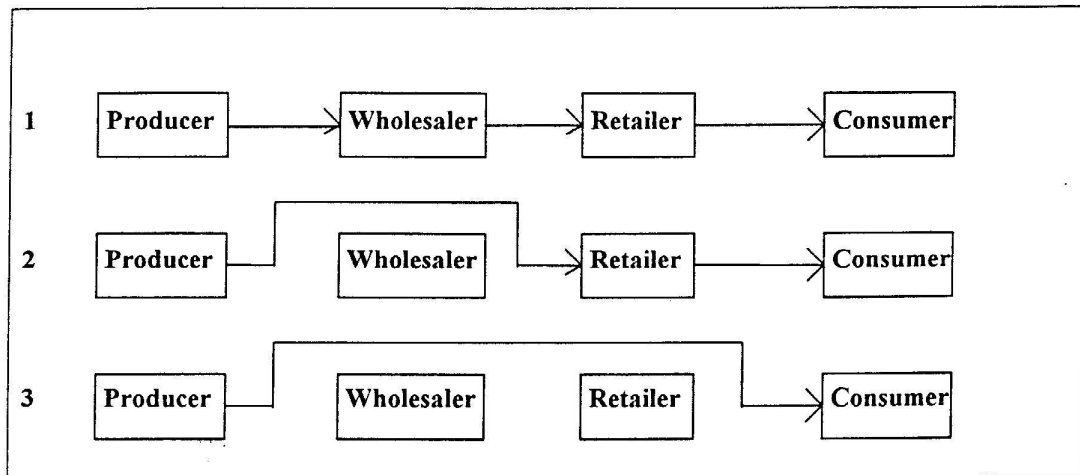
The major revolutionary development accompanying the evolution of the global on-line market space is the rapid change and expansion of market activity. As more and more consumer' homes are connected to the Internet super-highway, significant changes continue to follow, particularly in the economics of marketing channels, patterns of physical distribution, and the structure of distributors. According to Dadd (1998), IT, of which telecommunication is a part, is going to be the biggest technological drive of economic and business change over the next decade. Understanding the nature and breadth of that change is critical for those who use business economics in their jobs. The impacts of IT will be spread across all sectors of the economy. It will enable business to improve customer service as well as reduce costs. The growth of EC will lead toward a virtual market in retail and distribution. Furthermore, IT presents a great potential to raising the bar of global competition and requires new policies that encourage flexibility in the economy.

Because EC provides a fundamentally new way of conducting commercial transactions, it has potentially far-reaching economic and social implications for many facets of life, including, the nature of work, the role of governments, and even the environment. From commercial transactions perspective, it is clear that accepted ways of doing business will be profoundly modified: traditional intermediaries will be replaced, new products and markets will be created, new and more direct relationships will be forged between businesses and consumers (Turku Report, 1997).

Figure 2 below shows a feasible scenario of what will happen to organization and industry value-added chains, i.e., the collection of companies involved in producing, distributing, and selling a related set of products from raw material to the consumer, when national information infrastructure (NII) or EC trading becomes a reality. The model demonstrates the potential changes in organizational and industry value chains. As noted by Chandler and Daems (1979), every coordinative activity that improves

organizational efficiency speeds up flow through the system or permits a more intensive use of the factors of production that could improve the performance of the economic system. Similarly, Williamson (1981) pointed out that the modern corporation could be taken as the product of a series of organizational innovations that have had the purpose and effect of economizing on transaction costs.

Figure 2: Coordinative Activity and Organizational Efficiency of EC
Three Variants



Source: Adapted from: Benjamin, R. And Wigand, R. (1995), p. 67.

The economic impact of this model (Figure 2) is that it shrinks the economic distance between producers and consumers. Consumers can go directly to consumers without the need for traditional retailers, wholesalers and, in the case of intangibles, distributors. The new intermediaries that would be needed, like network access providers, would be far much less labor-intensive than the traditional intermediaries and do not require a specific geographical location. In general, the new inventive method of conducting business through EC would promote economic activity much closer to the ideals of perfect competition, i.e., low transaction costs, low barriers to entry, and improved access to information for the consumers.

The four-way transaction illustrated in Figure 3 below shows a scenario of interconnection between business, consumers, and the government for on-line business transactions. The business-to-business shows how businesses use network for ordering from their suppliers. The business-to consumer segment relates to electronic retailing.

This has been greatly enhanced through the electronic shopping malls over the Internet. The business-administration category covers all transactions between companies and government organizations. And finally, the consumer-administration segment is evolving as government extends electronic interactions to consumers in such area as self-assessed tax returns.

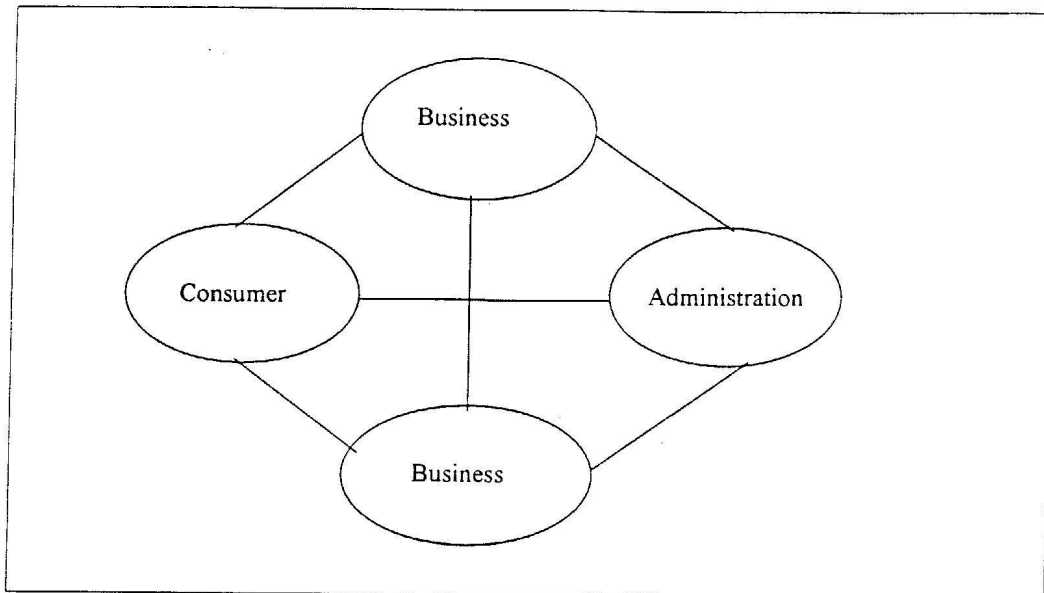
As demonstrated in Figure 3, the Internet-based business relationships can take many forms. Business-to-business, business-to-consumer, business-to-administration, and consumer-to-administration are the typical types of such relationships (ESPRIT, 1996; Kim and Hong, 1997). The business-to-consumer type is often classified as 'electronic retailing', where the customer is an ordinary customer rather than another company. In this type, Electronic/Cyber Shopping Mall based on the WWW technology on the Internet composes the major part. Through Cyber shopping malls, customers can learn about products through electronic publishing, buy products with electronic cash, and even have information about goods delivered over the network. Customers are spared the drudgery of traffic and long lines of conventional shopping. Similarly, suppliers can reduce overhead costs through less expensive distribution channels.

Another major part of EC is transaction based EDI technology to accommodate a larger share of transaction volume, business-to-business and business-to administration. Traditionally EDI is implemented based on the MHS (Message Handling System) and the batch processing. The Internet-based, a more recent technological advancement, has the potential to reduce communication costs and to enhance users' convenience. With the fast development of EC, security problem must be adequately addressed to make it more useful for transaction. Also, to accommodate small volume transactions, more efficient use of electronic forms and interactive-EDI should be developed.

With the advancement in EC, instead of firms becoming more global, they tend to break down into giant alliance structures supported by new forms of multimedia technology, virtual space technology, and the global information super-highway (Bara, 1995). In large organizations, the impact of these new telecommunications systems will be to create network-type rather than traditional hierarchical-type organizations (Lipnack and Stamps, 1994).

Initially, EC involving individuals is not likely to be as significant economically as business-to-business commerce (Dadd, 1998). According to this hypothesis much of the benefits from EC in business will result from supply chain integration - the process by which organizations share information, make operational decisions and even develop strategy with others at different stages in supply chain. Supply chain integration is not simply the exchange of information, i.e., it is not just EDI. Supply chain integration also enables better customer service with fewer out-of-stocks, quicker reorder cycle time, all at lower cost. Thus, EC is allowing us to move towards a virtual market in retail and distribution, with management based on real-time information, and an economy that requires more and better quality information.

Figure 3: Category of Electronic Commerce



Source: Adapted from: ESPRIT, (1996), <http://www.ispo.cec.be/ecommerce/introduc.htm>

In this section, the study focuses on the new approaches in Banking and Financial transactions with specific reference to Philippines and India. It provides some insight into some developments in electronic banking and electronic payment system. Though banks have been involved for years now on electronic fund transfer, recent new technology has made it possible to pay for goods and services over the Internet. Some of the methods used to engage in global EC, in most cases, link existing electronic banking and payment

system, including credit and debit card networks, with new retail interfaces via the Internet. The electronic banking in Philippines presents a good example of the development of EC in the NEMs of developing countries. According to Asuncion (1997), if there is any sector, which has the best potentials to initiate an electronic market place in the Philippines, it is the banking and the financial sector, more specifically, in the area of retail consumer banking. For more than 10 years, domestic banks in Philippines have provided magnetic-stripe cards to their clients for transactions using automated teller machines (AIMs). This has provided the consumer a whole new range of banking services which include 24-hour deposit/withdrawal options for savings and current accounts, on-line inquiries, automatic payment facilities (e.g., for over-the-counter supermarket payments or utility bills payments), etc.

The Bank of Philippine Island (BPI), the pioneer in electronic banking in the Philippines, is looking at the potentials of virtual banking by instituting services such as ExpressPhone and ExpressLink which are essentially banking transactions over normal phone links. On the other hand, one of the largest banks in the Philippines, the Philippine Commercial International Bank (PCIB), is currently the only bank providing a service called BankOne which uses the "chip card" or "smart card" instead of the magnetic-strip cards for banking and selected payment transactions.

In more recent development, one of the more aggressive universal banks has introduced a concept called "home virtual banking" (HVB). Urban bank's HVB allows the bank client to access more than 40 banking services from his personal computer. The customer can execute highly complex and multiple transactions, involving transactions in foreign currency, stock and money market placements, on-line bank statements, scheduling fund transfers and other payments 7 days in advance and scheduling bill payments up to 31 days in advance (Asuncion, 1997).

In India, over 200 companies have already established websites. Citibank has put up a site to keep in touch with its 70,000 non-resident Indian customers, as have other financial institutions such as the Reserve Bank of India. Syndicated Bank and ICICI Roopam and Roopmilan have posted their fashion catalogues in cyberspace, while Chetana has put up its book-list and Air India its flight schedules. Small companies such as Paper Products Ltd., which is in packaging business, spends \$3000 per month for

Internet advertising (Bhatnagar, 1997). Though progress has been made in the Internet-based financial transactions, some of the developments are still at the early stage. Also, because the Internet lacks the clear and fixed geographic lines of transit that historically have characterized the physical trade of goods, problems remain on the policy front. Thus as electronic payment systems develop, government would need to work closely with the private sector to inform policy development, and ensure that governmental activities are designed to accommodate the needs of the emerging marketplace.

CONCLUSION

The intense interest in electronic commerce's economic impact is linked to the fundamental fact that it shrinks the economic distance between producers and consumers. Consumers can go directly to producers without the need for traditional retailers, wholesalers and, in the case of intangibles, distributors. While new intermediaries are needed (e.g. network access providers, electronic payment systems, and services for authentication and certification of transactions), such services are far less labor-intensive than traditional intermediaries and do not require a specific geographic location.

According to Montealegre (1996), the advent of EC has put us in a period in which the old managerial formula for corporate success is no longer viable; new solutions seem to have an ever-decreasing shelf life. In such an environment, the human intellect, combined with these new technologies, represent a new hope for achieving the flexibility, speed, and creativity that are required today for organizations not to only succeed, but to survive. Given this new environment, managers of NEMs are faced with great challenges and opportunities. Also, with the reality of the new technologies, it is evident that the emerging global information infrastructure has within it the capacity to go a long way toward solving many of the problems confronted by companies from the LDCs. However, if managers fail to understand how to use it in accordance with their situation and idiosyncrasies, it will only create new barriers, limitations, and foreign necessities in their societies. Thus, managers from the NEMs need to strengthen the capacity to understand the technological advances and learn how to improve the transfer and assimilation of these advances.

As the electronic market continue to penetrate countries' national information infrastructure (NH) or information superhighway, as well as the emerging global infrastructure and the NI! is connected to consumers' homes, market activity will rapidly expand. As this takes place, significant changes in the economics of marketing channels, patterns of physical distribution, and the structure of distributors are expected to follow. Also, in terms of transaction costs, (1) all intermediaries between the manufacturer and the consumer may be threatened as trade by EC reaches out to the consumers; (2) profit margins may be substantially lowered and redistributed; (3) the consumer will have access to a broad selection of lowered-priced goods; and (4) there will be many opportunities to restrict consumers' access to the potentially vast amount of commerce. In general, EC will succeed in moving economic activity closer to some of the ideals of perfect competition: low transaction costs, low barriers to entry, and improved access to information for consumers.

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