

## GLOBALIZATION AND E-BUSINESS

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**Abstract** - The attempts of globalization in developing countries could be observed in a wide range of areas. Objectively speaking, globalization can be of advantage to developed and developing countries provided that the companies and commodities of those countries can get access to and compete with those of others in international market place as equal partners with fairness in international trade. Globalization is not just liberalization of trade, opening up borders by lowering or removing tariffs and non-tariffs barriers, but it goes beyond and tries ideally to generate a business in production, investment, financing, marketing and distribution as well as in organization, management and supervision by a universal code of conduct. On the other hand, with the expansion of satellite communication, computer networks, and reducing the transportation costs, the process of globalization is becoming easier, and with the aid of e-banking, Electronic Commerce has replaced the traditional trade system. Moreover, globalization refers to the widespread distribution of networking mechanisms and the accessibility of them to all parties, no matter where they live. It is a difficult stage that requires conscious decision making and can only be developed step-by-step[1]. This paper attempts to review the impact of Globalization and E-Business in the new Millennium, especially in the steel industry. To put it another way, it reviews cost savings that can be achieved through E-Commerce in a global market. Certain recommendations are also made for designing strategies to increase the profit rate as well as the share of E-Business in the market in the long run.

**Keywords** - Globalization, E-Business, Cost Savings, Developing Countries, Steel Industry.

### INTRODUCTION

Today, the new Millennium has witnessed great changes in the world of international business in general and European business in particular. The full effects of the Uruguay Round of GATT are still working their way through the international economy and such has been the importance given to free trade that a new trade body, the WTO (i.e., with over 142 members), has come to replace GATT.

At the beginning of the new Millennium, greater competition has been achieved through the process of deregulation. Privatization has played an important role in questions of ownership, efficiency and the performance of a number of industrial sectors not only in western Europe, but also in South East Asia, Oceania, and Central and Eastern European countries.

Furthermore, technology can have an impact on the growth of business, particularly in E-Business, in a number of ways. It allows countries to obtain comparative advantages in the production of commodity, and based on these cost advantages, e.g. virtual market, previously unprofitable markets now become worth considering.

Meanwhile, one of the new powerhouses of the world's economic activity is being devoted: China's economy is growing at an average rate of 7-10 percent per year and is expected to become a major economic force in the new millennium [2]. Business today demands adaptive and active companies and value chains. The ability to connect with a variety of changing suppliers and distributors and to support rich, multimedia information transfer requires an evolutionary step forward to incorporate connectivity.

On the other hand, the emergence of global networks has already begun to influence the way individuals interact with each other, businesses conduct their affairs and governments provide services to their citizens. As with traditional commerce, electronic commerce requires trust across the whole spectrum of users and providers of services and goods. The radical change brought about by the emergence of open networks will, in some instances, require modifications to the existing framework of rules to assure this trust. Today's commercial transactions are governed by a mix of laws enacted by government and business self-regulatory mechanisms, and most of supplier's on-line B2B strategies entail courting the few buyers already using the Internet.

In short, the global active plan states that business would like to see governments concentrate on providing a minimalist and predictable legal framework in specific areas of government competence such as intellectual property protection, taxation and the removal of barriers to competition in providing the underlying infrastructure.

## DISCUSSION

Globalization refers to a world where societies, cultures, politics and economies have, in some sense, come closer together. The concept can be defined as the intensification of world-wide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa [3].

Furthermore, there is a new milestone being reached in business and commerce. The beginning of the twenty-first century has started to see a radical transformation in the retailing of goods and services. There is a revolution taking shape in how people shop. This is while the growth rate of E-Commerce is predicted to increase from US \$ 354 billion in 2001 to US \$ 5 trillion by 2005, with an annual increase of 70 percent per year [4].

On the other hand, Internet economy has been shaken to its core by two distinct phenomena: the dot-com shakeout and the sudden slowdown in the US economic growth (i.e., after 11 September 2001). The Internet companies must now start to show profitability, or clear path to it, or risk near-term financial oblivion. This challenge alone would probably be enough to sweep away many firms in both developed and developing countries.

Moreover, Electronic marketing goes beyond the Web. First, there are many

E-Marketing technologies such as those used in customer relationship management, supply chain management and electronic data interchange that predate the Web. Second, there are non-web Internet services such as e-mail and newsgroups that provide fruitful avenues for marketing. Third, there is more than one Web. For instance, there are subsets of the Web House content that are specially formatted for appliances such as Web TV, cell phones, etc. Fourth, there are off-line electronic data-collection devices such as bar code scanners. Finally, there is the portion of the Web containing high-bandwidth content for users connected with either cable modems or digital subscriber loop (DSL) connections.

In short, as Internet has rapidly become a critical component of our lives, it is important to take a step back and understand the meaning of E-Business and various overused labels such as E-Commerce. E-business and E-Commerce are often used interchangeably, though E-Commerce is a subset of E-Business as is shown in the following formula:

$$EB=EC+BI+CRM+SCM+ERP$$

where as:

EB is E-Business=E-Commerce plus business intelligence, customer relationship management, supply chain management and enterprise resource planning. E-Business is actually the integration of systems, processes, organizations, value chains and entire markets using Internet-based and related technologies and concepts. Although, Electronic Commerce is merely a part of E-Business and is limited essentially to marketing and sales processes, it uses digital technologies such as Internet and bar-code scanners to enable the buying and selling process [5]. Business Intelligence, BI, refers to the gathering of secondary and primary information about competitors, markets, customers and more. Customer Relationship Management (CRM) involves retaining both business and individual customers through strategies that ensure their satisfaction with the firm and its products. CRM seeks to keep customers for a long time to increase the number and change the timing of transactions they conduct with the firm. Supply Chain Management (SCM), occurs behind the scenes. It involves co-ordination of distribution channel to deliver products effectively to customers. Finally, Enterprise Resource Planning (ERP), refers to back office operations such as order entry, purchasing, invoicing and inventory control. ERP systems allow organizations to optimize business processes while lowering costs [6].

As is shown in Table 1, there has been an average of 11 percent saving by using B2B in different industries in 2001. Whereas most savings have been in Electronic Parts Industry, Wood Industry, Transportation Industry, Machine Industry (steel), Computer Industry, Biological Sciences Industry, Media and Advertising Industry, Oil & Gas Industry, Communication Industry, Steel Industry, Aircraft Industry, Chemical Industry, Paper Industry, Food Industry, Health Industry and Coal Industry respectively.

Table 1: Savings by using B2B: e-business in different industries, 2001 (source: www.jup.com)

Industry	The Amount of Savings (in Percent)
Aircraft Industry	11
Chemical Industry	10
Coal Industry	2
Communication Industry	5-15
Computer Industry	11-20
Electronic Parts Industry	29-39
Food Industry	3-5
Wood Industry	15-25
Transportation Industry	15-25
Health Industry	5
Biological Science Industry	12-19
Machine Industry (Steel)	22
Media & Advertising Industry	10-15
Oil & Gas Industry	5-15
Wood Industry	10
Steel Industry	11

Last but not least, E-Business encompasses the entire business model of a company (business to employees, customers, suppliers, partners and value chain), and in a sense is a cultural revolution.

Whereas, critical business trends impacted by a paradigm shift, which includes a shift from a cost reduction strategy to a business growth strategy (i.e. by using the Internet to capture market share, expand geographical coverage and increase sales growth) and an increased speed of doing business (i.e. companies are moving from fast to faster, as changes occur in technology and in the expectations of the customers. In fact, the customers want everything faster). The paradigm shift also includes a shift from self-containment to globalization (i.e. with the Internet, companies are becoming global over night). Finally, there is an increased collaboration (i.e., the Internet is causing companies to be more collaborative among themselves, and even with competitors, to deliver a complete solution to the customer. On the contrary, with linear supply chains, the markets are changing to networked webs of value) [7]. (see Figure 1)

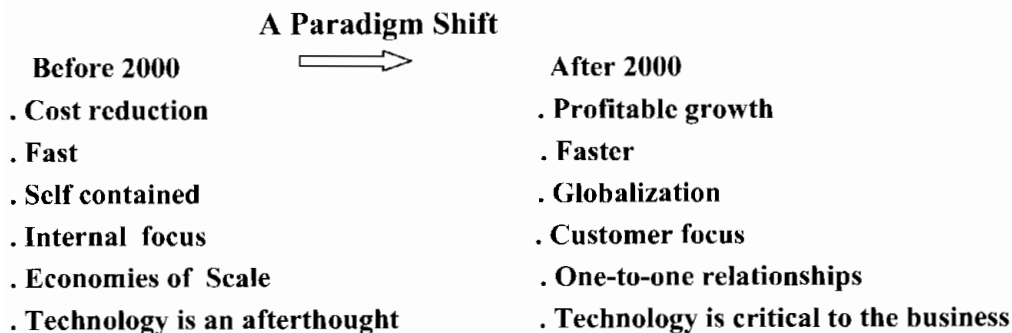


Figure 1: Paradigm shift in business trends

## **E-BUSINESS IN THE STEEL INDUSTRY**

E-Business is not one single activity in itself, but must be described as an enabling technology, which embraces a number of models, systems, procedures and relation-creating activities. All of these are relevant to the steel industry and E-Business is currently used in several ways, from the selling of scrap or steel products on the spot market to the building of close customer relationships with integrated systems. EDI has been used in support of business relationships for some time, but it is an expensive and not very flexible tool and after a widespread initial scepticism, EDI solutions are apparently being gradually abandoned in favour of migration to the Internet. The Internet and open standards such as XML enable different systems to communicate in a relatively uncomplicated way and are essential to the spread of e-business.

Moreover, E-Business has a great potential for the steel industry and will offer new opportunities to individual employees and companies as well as to the sector as a whole. The steel industry has gone through extensive rationalisations and process development, primarily within the production processes, and now the beginning of what might be a corresponding development in the administrative functions may be seen.

On the other hand, E-Business opens up new ways of working, which also involves staff up to now relatively unaffected by new technology. Although computers were introduced throughout the companies several years ago, they have not radically changed structures or the working methods of, for example, sales and procurement personnel. A side effect of the development of administrative process is that the process development that has already taken place in production may be utilized better. The integration between companies, which company's E-Business creates new types of relations, old structures are challenged and the transition might not be without pain. [8]

Last but not least, new phenomena that have emerged in the steel market include the electronic marketplaces run by independent companies used for buying and selling steel and other related products (see Figure 2).

## **PROCUREMENT**

Procurement processes deal with the purchase of all kinds of products needed in the processes of the company, from electric power and expendable supplies to raw material. Different companies use different strategies for procurement, but generally the routines are about to undergo radical changes.

Today, both the customer and the supplier, depending on the situation and preconditions, are contributing to the transition towards e-transactions in procurement. The implementation of E-Business in different versions demands investment and technological competence to different degrees. There will be costs for education and training of the personnel, as the development will imply changes for the procurement staff, with a shift from personal contacts to IT-supported activities, leading to fewer employees.

## Production and Logistics

There is a strong wish in many steel companies to integrate the production systems more closely with other activities of the company. Systems supporting E-Business are being used to facilitate this development.

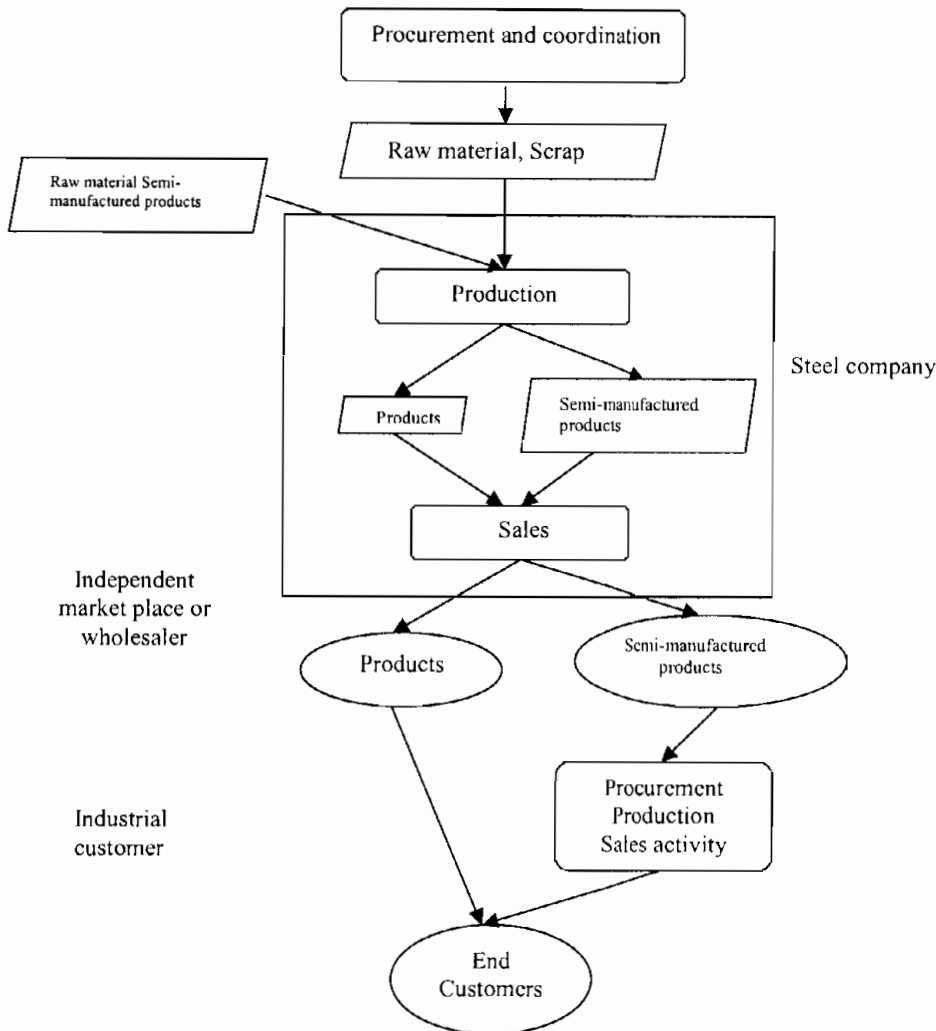


Figure 2: The dominance of the electronic market place

## Advantages of E-Business in the Steel Industry

E-Business occurs when organizations perform transactions electronically with their customers or suppliers. In E-Business, you have to modify your internal business activities to attain acceptable performance goals for the business transactions. E-business employs E-Commerce transactions and formats. Therefore, we can say that E-Commerce is part of E-Business. The major advantages of E-Business in a company's operations (e.g. Steel) are as follows:

- 1- Transaction flow seamlessly across departments. Traditional processes have barriers between departments requiring a hand-off of the transactions.
- 2- Exception transactions, workarounds and shadow systems in departments are greatly reduced or eliminated; whereas, traditional business processes tend to have many of these.
- 3- Policies and procedures are more formalized in E-Business. Many traditional processes rely on informal procedures that depend on critical employees with business knowledge.
- 4- In E-Business, there is a greater dependence on systems and technology than in much of traditional businesses.
- 5- There are lower procurement costs in E-Business (i.e. less time, fewer errors, greater standardization, streamlined processes and less contract buying), lower products costs (i.e. more vendors, greater liquidity, wider selection, less inventory, and with vendor management), and increased capacity utilization (i.e. increased productivity, sale to local businesses, expanded market and revenue management).
- 6- E-Business activities include every thing from distribution channel transactions to electronic mail (e-mail) order status, product and price information, product availability and transparent process for everything from ordering to electronic billing [9].

#### **COMPLEXITY OF E-BUSINESS IN STEEL INDUSTRY**

In short, E-Business is complex because of the following factors:

- 1- There are high management expectations. This means greater management of visibility of the project.
- 2- E-Business implementation can be quite disruptive to the business staff.
- 3- Business organizations such as marketing, customer services and other departments must change to adapt to E-business.
- 4- There is severe time pressure to implement.
- 5- The work does not end with the initial implementation . Instead, E-Business work will have to continue and expand.
- 6- E-Business and E-Commerce software is evolving and will continue to evolve during the project. New products may come out. These create opportunities and challenges [10].

#### **CONCLUSION**

In the new Millennium, European and Asian businesses face a number of uncertainties. For example, European Single Currency which may make European firms leaner and fitter, and with added expansion into Eastern Europe will provide many opportunities for business.

In short, we can see that recently, E-Commerce has centered on the Internet and the PC. E-Commerce and E-Business have made lots of progress: more than 500 million

people world-wide have access to Internet communication and B2B had an average of 11 percent saving in different industries during 2001. But the capabilities for interactive selling can only be anticipated and we are still at the beginning of an explosive growth. Electronic business-to-business transactions are estimated to grow to more than 1,000 billion Euro by 2005 globally [11], while consumer transactions are still viewed as a small fraction of that.

Furthermore, the need for a technical infrastructure for E-Business and E-Commerce has created new business areas. Technical platforms that support lock-in strategies towards the customers are today developed by, for example, ABB and Steel screen. To Steel screen this is a way of earning money until the market is mature enough to use e-marketplaces on a large scale. It is also a way of accelerating the process towards greater familiarity with, and a more favourable attitude to, E-Commerce in the steel industry.

Moreover, the development of E-Business within the steel sector may be regarded as a continuation of the rationalisation processes that have taken place, during recent decades, in such a way that the most proactive firms seem to suffer from the fact that a large number of companies in the steel industry have a wait-and-see policy concerning E-Commerce. When companies initiate a process of integration, new types of relations occur and old structures are challenged, which may be difficult, from practical and psychological points of view.

Last but not least, small companies may gain benefit through E-Business and E-Commerce, but generally large companies seem to be winners as they will, to a large extent, dictate the conditions and may put pressure on both suppliers and customers. Today's new economy (i.e. Digital Economy), is based on Information Technology industries that have been growing at a rate more than twice that of the overall economy, reaching close to 9 percent of GDP in 2000, up from 4.9 percent in 1985. Today, companies throughout the economy are betting on IT to boost productivity. But, in 1960s, business spending on IT equipment represented only 3 percent of the total business equipment investment, and during the late 1990s IT's share rose to 45 percent each year [12]. Thus, these figures indicate that we are actually experiencing a digital revolution and that the Internet technology, by itself, has increased competition among businesses and tends to save money in different industries including steel (Table 1).

## SUGGESTIONS

Considering the new era of Information Technology and E-Business, the following suggestions are recommended for designing strategies for industries (e.g. steel industry) in developing countries:

- 1- Knowledge capture or 'information flow co-ordination' needs to become a central, driving core competence.
- 2- Convergence demands a new relationship between Marketing and Information Technology.
- 3- To build a kind of electronic business system, which includes the understanding of



the impact of E-Commerce on banking structure with regard to the potentials for new business models and the opportunities for competitive advantage.

- 4- Small companies, being dependent on the larger ones, will have to adapt their solutions to suit the larger customers or suppliers, in order to be able to benefit from the advantages of E-Business.

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