E-COMMENCE AND GLOBALIZATION OF ENTREPRENEURSHIP

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T NFORMATION Technology is an enabling technology. It is well known that companies that have become competitive globally had some driving force behind their corporate growth. Globalisation is not a new concept. For example in the early 70's, every American company, if it was any good would strive for being multinational while in the 80's, globalsation was a buzzword that launched a thousand strategies. In 1990's we find that a new term transnational organisations became popular to set up their production facilities around the world. Recently, however, due to the advancements in the information and communication technology a new form of globalisation is emerging and that concept is of 'Virtual global organisation'. One technology that in particular has played an important role in the new virtual global organisational concept is the Internet Technology.

The world has realized that virtual business is a revolution in the making. It is creating new business opportunities and challenges. Electronic Commerce is spreading and may be in the next five years, people shall be using the net for shopping their daily needs.

Spread of E-commerce shall be directly related to growth of INTERNET in the country. Internet continues to be the fastest growing medium in the country. According to Indian Readership Survey, 1999, as on June 30th, 1999, there were 1.5 million Internet users in the country. In the same survey, it has been ascertained that in the 10 lakh plus populated towns there were 1,144,000 internet users, 1,58,000 internet users in 5-10 lakh population towns and 2,25,000 Internet users is below 5 lakh population towns. Just 2 years back this figure was abysmally low. As the internet grows in proliferation, E-commerce shall be on the rise in India too. There were 4.5 million global internet users in year 1991 and estimates suggest that shall be as many as 300 million or more by the turn of this century. The growth of Internet is linked to the number of telephone subscribers the world over. The number of telephone lines and cellular phone subscribers combined reached 900 million in the year 1996. It is estimated by International Telecommunication Union that main telephone lines are expected to be around 1 billion, Personal Computers 450 million and Internet host 110 million world wide by year 2001. These figures are however a conservative estimate. The telephone density has almost doubled in our country during the last 4 years (Saxena, 1999).

Electronic business is not just for pure internet start-up. Business to Business (B2B) E-commerce has already picked up in our country. Conventional businesses are leveraging the internet and web based technologies and transferring themselves into E-business.

The organisations of today may differ in their planning, management and control philosophies but one fundamental theme common to all of them is the desire of the organisation to operate, create and establish a broad base market place spanning countries around the world for their products Versha Mehta

and services. In other words, the main objective for the companies to globalize is to establish themselves as global household names besides attaining global equity.

During late 90's, it became possible for small organisations or a nation to achieve global impact and become big. This was not in terms of physical size but in terms of the impact on top line, bottom line and image. Traditionally and indeed not so long ago, only big organisations had the resources to grow rapidly and create world image because it was difficult to do so with number of constraints and resources. But today size has ceased to be trump card as it once was. Due to commerce and internet technologies, entrepreneurs with small outfits could now create big image and provide the world wide impact despite the fierce competitive forces. Their businesses no longer need to be confined to their physical domestic markets, neither need they be restricted to the local expertise nor be limited to resources (Hock 1996).

E-commerce- Issues

Electronic commerce is not just for pure internet start-ups, Business to Business commerce has already picked up in the country. As already said, conventional businesses are leveraging the INTERNET and transforming themselves into E-businesses. The emerging advances in IT and its new applications such as enterprises resources planning (ERP), supply chain management (SCM), Electronic data interchange (EDI) and Electronic funds Transfer (EFT) are making a profound impact on the organisation (Figure 1)

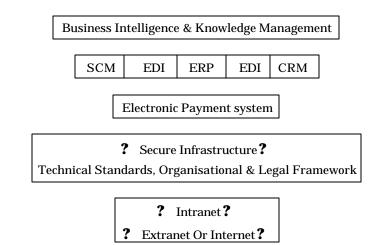


Figure 1: E-commerce Framework

The development of newer concepts such as intranets and extranets provide opportunity to exploit Internet Technology beyond the concept of common global network into enterprise wide networks and inter organisational system. With the emergence of electronic commerce the commercial organisations are encountering new ways of doing business. The organisations are being transformed from the hierarchical decision structures with well defined boundaries to more collaborative decision making structure and flexibly organised in disposed configuration. They are becoming more agile and collaborative on inter organisational basis while focusing better partnership management with suppliers and relationship management with customers. E-commerce transformation is now being considered as most challenging job for an organisation in pursuit of E-commerce (Jaiswal 1999) To simply put it E-commerce can be defined as production, advertising, marketing, sale and distribution of products via telecommunication networks. Electronic commerce has predominantly four distinct stages viz.

- 1. Searching Stage
- 2. Ordering Stage
- 3. Payment stage
- 4. Delivery Stage

Creation of web is the first stage of setting up of the E-commerce facility, second stage involves comprehensive web promotion strategy and listing the web site in important search engines. Search engines help the buyer to locate the E-commerce web site and the required product is ordered through the web. The ordered product has to be paid for. Here comes the major issue of the security for which various encryption and decryption keys are used for ensuring safety over web. The different concepts of digital signatures, SET, SSL, Electronic wallet come into prominence. Every Credit Card transaction has a front end and back end security issue. On the front end, customers submit their credit card information for purchases via an order form to the server hosting the E-commerce site. On the back end, the customers credit information is sent from E-commerce server to the acquiring bank with Internet Merchant Account via a transaction processing for verification and approval. There thus arises a need for ensuring the integrity of transaction by using one of a variety of hardware/software security solutions and protocols. The last stage is the delivery of the product. The products like computer software, music, books, etc. can be downloaded and offered on the internet while products e.g. garments, flowers, food products have to be transhipped to the destination cities or countries. The harmonisation of trade procedures being followed in different countries and trade duties enforced comes into picture at this stage. The product finally reaches the user.

So far, E-commerce in our country had only meant Electronic data Interchange (EDI) over value added Networks used by corporate organisations. This process usually related to computer to computer exchange of routine business documents in a standard format. Now, E-commerce has made internet another medium to do business. The internet enabled E-commerce helps the customers, partners and users to access a company's EDI network, which was hitherto closed to the customer. Another advantage to the entrepreneur is the reduction in transaction cost using the essences of Internet Service Providers (ISP's). Traditionally VAN operator charged for the EDI services on a per transaction basis. In order to reduce transaction cost the organisations used to send the transaction file in batch mode once in a day. Over internet, organisations can afford to send transactions at any time. This helps to make E-commerce real time by:

- Connecting the enterprise
- Extending the value chain
- Expanding the business market

Intranets, Extranets and the Internet

Intranets provide means of connecting all geographies and components of enterprises. Intranets improve communication, reduce cost and increase efficiency. Whereas, Extranets are tools that companies are using to reach out beyond their companies to suppliers, partners and customers.

Extranets help companies to effectively reduce cycle time, improve accuracy and strengthen partnerships.

Versha Mehta

The last type of transformation is using internet to buy and sell goods, information and services, thereby extending the business/market. This can result in increased revenue, enhanced image and even the ability to, reach new markets without significant increase, in expense. Most companies are using the last type of transformation, called E-commerce. E-business is combination of all the three types of transformation. It is only when a business gets connected within and without, not only with its customers, but also with its employees, and business partners, it becomes E-business. Enterprises world wide are finding it easier to integrate their operations across geographies, and they have no other option. The internet has led to dramatic reconfiguration of entire industries. For example, the book publishing companies have suffered a body blow, whereas the earlier model was to produce and distribute, the current model is distribute and produce. This is because individual customer has become much more powerful. Figure 2 depicts the transformational path for organisations moving from traditional to E-businesses (Dubey S, 1999).

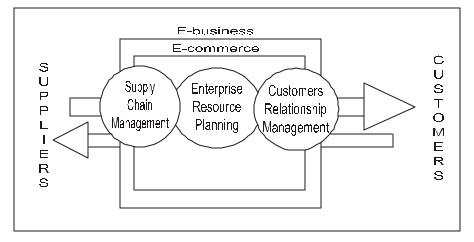


Figure 2: Transformational Path to E-Business

E-commerce and Globalization of Entrepreneurship

There are three strategies about the myths of entrepreneurs that no longer hold true today with the emergence of E-commerce. The three myths are viz i) small entrepreneurs have difficulties in globalizing because of size (ii) they don't own necessary resources (financial and economic) and (iii) they are not customer oriented and responsive (flexibility and speed). These myths no longer hold true.

From local to Global

If the growth and enthusiasm in internet is any indication to symbolise the inevitability of cyber space computing, it can be safely predicted that electronic commerce will only increase in importance. The boundaries in terms of differences in cultures; differences in time zones and physical locations between the companies and its suppliers, customers and competitors will no longer be there. In other words boundaries in cyber space are imperceptible. Its potentials, opportunities and benefits have started becoming obvious.

With the internet, the world is just one market place. And by the beginning of next century this electronic bazaar will change the landscape of domestic and international trade. The net web pages can help companies, especially small firms to reach new customers, thus providing opportunity to reach larger market. It is indeed a very cost effective means to establish world presence. It is also possible to open business shop 24 hours a day, 365 days a year reaching every cover of the world. Otherwise, the financial expenses of printing millions of brochures, distributing them through

agents and setting up the marketing distributions would be beyond reach of the entrepreneur. On the internet, even a small firm can also reach millions of customers by creating web pages to advertise products and provide a purchasing system.

The cost that one would need to incure is the computer, telephone line and subscription to an Internet Service Provider and cost of getting someone to design and maintain company's web page. A number of young entrepreneurs have already started up virtual companies, selling computers, software, music, books and even shares on the stock etc. Most of these companies are seeing revenue grow over a short period of time (Strait Times).

From limited to world wide resources

Big companies are trying to downsize to become small and move away from vertical integration. Dynamism of small business is being rediscovered across the globe as customers are demanding customization requiring products to suit their specific requirements and needs.

In this electronic arena, small companies can make alliances with other organisations to combine appropriate resources from anywhere and with everyone.

So the well founded concepts of economies of scales may no longer be applicable to entrepreneurs. As the cost of Information Technology is decreasing with instant world wide communication becoming increasingly available, even small enterprises can have information and resources to participate in world markets and resources. The important point is that they can join with large company partners in strategic alliances or other forms of co-operation as suppliers, or in product development, co-production, distribution and after sales service. The entrepreneurs can seize the opportunities of the current glibalization trends, the information technology is making possible and tap world resources to further build their core competence and capitalise their market niches.

Speed to flexibility

In the early 90's speed to response to opportunities in the market became more important than the size of the organisation. In the coming century, flexibility in customising its products will attain larger significance. Customers will demand customization and require products to suit their specific requirements and needs. The future is dependent upon smart people, smart technology and smart products (Alvin Tofflar).

A major result of deployment of Information Technology is the transformation of traditional factories depending upon speed to agile manufacturing. This gives them flexibility to meet customers rapid and ever changing demands. Information Technology has given ability to mass customisation which means ability to customise products literally in quantities as small as one. While producing them at mass production speed and at a good price.

The ultimate concept fast approaching is simultaneous manufacturing where the customer is giving order, and the product starts to be made. The following case studies highlight the E-com adoption by businesses in India.

Kanandairy.Com web site

Amul products can be purchased in UK, New Zealand and US. The site offers free samples, gifts and home delivery and other benefits of E-commerce. An electronic cart helps the customer buy his needs on the net. Some of the features of web site, are given below.

- Next day air delivery US \$ 9.99 per order to minimum 4 items and maximum 10 items.

Versha Mehta

- 2 day air delivery US \$ 6.99 per order for minimum 4 items and maximum 10 items.
- For less than 4 items, next day per order is US \$ 11.99.
- All orders are processed same day if received before 2.00 pm central time on any working day (Monday-Friday). Orders received after 2.00 pm or on weekends will be processed in the next working day.
- Orders for more than 10 item require special quote. The customer gets a special price from virtual store. Price and availability are subject to change without notice.

Another feature of this web site is special security feature. Netscape Navigator (1.2 and later) and Microsoft Internet Explorer are secure browers. These browsers automatically enter the secure mode when the customers make purchases with AT&T secure buy service which takes care of the front end and back end security considerations of this web site. In netscape browers, a key appears in the lower left hand corner to indicate the current security mode. When the key appears unbroken, data sent between brower and web site is secure, if key is broken then the data is being sent unencrypted.

In Microsoft browsers a lock appears in the lower right hand status bar during a secure session. No lock is visible during normal unencrypted sessions. AT&T secure buy service basically acts as a depository. Credit card numbers are sent through the internet in a secured atmosphere and customers are doubly sure that the credit information shall not be misused in future. AT&T Secure Buy service makes credit card transactions safe. It ensures that the customers credit card or other sensitive information is never sent unprotected over the internet.

AT&T's secure buy payment processors use SSL encryption technology. This scrambles the information and prevents others from looking at it. As the consumer uses AT&T secure buy the browser will automatically search between the normal and SSL encrypted mode.

On line purchase of Hammocks

Inca Hammock Manufacturing and Export Pvt. Ltd. located at Chennai, has been the leading manufacturer of hand woven hammocks to markets of USA, France, Japan, Australia, Singapore and Spain. The site can be visited at www.incaham.com set up as 100% Export Oriented Unit, Inca, nearly for a decade, has been growing rapidly, to hold a position of reputation of being a manufacturer who truly understands the needs of clients worldwide. Rope hammocks are 100% hand made and need skill and diligence. The site takes on line orders and requests prospective buyers to give their card details for transfer of funds. The web site takes into account the SET standards in security encryption and decryption. The Web site insures the product and charges for shipping cost and other services from the customer.

Conclusion

The age of computer and telecommunication provides the small businesses ample opportunity to internationalize their businesses. Using the net based technologies, internet and extranets the companies can reposition themselves to face the global challenges of competition. If these businesses make strategic use of IT, these is no reason why small businesses operating in India cannot become MNC's. It will enable them to tap world resources, to customise with agility and deliver their goods and services at a fast speed. The IT is creating ripples by encouraging small organisations to create big impact rather than the converse.

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