

# ***E-COMMERCE IN TEXTILE INDUSTRY- A PATHWAY TO INTERNATIONAL MARKET***

*Dr. Aarthy. C*

PES University, Department of Management Studies  
Bangalore, India

*Dr. J. Venkatesh*

School of Management Studies  
Anna University Regional Centre, Coimbatore  
Coimbatore, India

**Abstract:** The textile and apparel industry is one of the leading segment of the global business and thus to Indian economy and the largest source of foreign exchange earnings for India. Global business is a term that describes all commercial transactions that take place between two or more regions beyond their geographical and political boundaries. The production of garment apparel in India was, until recently, reserved for the small scale industry with IT (Information Technology) exploration and system reinforcement in every part and step of its processes and functions. Although the apparel industry is one of the major contributor in today's economy it has its own deficiencies in accessing unexplored global market due to lack of deployment of system application and thus without a systematic procedure to retain customers thereby affecting factor of time and profit maximization. The leading scope of this study is to emphasis the importance and role of information technology in garment industry.

**Keywords-** *information technology, e-commerce, garment industry, intranet, internet, extranet*

## **I. INTRODUCTION**

With the integration of information and communication technology a substantial revolution arises there by establishing a fair relation within and between the organization and the individual. As a result of this amalgamation, the cost is reduced, productivity shoots up and participation of the customer is high. When the Information Communication Technology (ICT) is coupled with prompt strategy and policy it will help the small and medium

enterprises to compete equally with the large capital firms. Today, the focus is on how to gain more profit by not only increasing revenues but also increasing gross margins with the help of emerging technology. This phase is called e-business and it comprises all the applications and processes which aids a company to service a business transaction. In addition to e-commerce, e-business includes both front-office and back-office relevance that act as a heart for modern business.

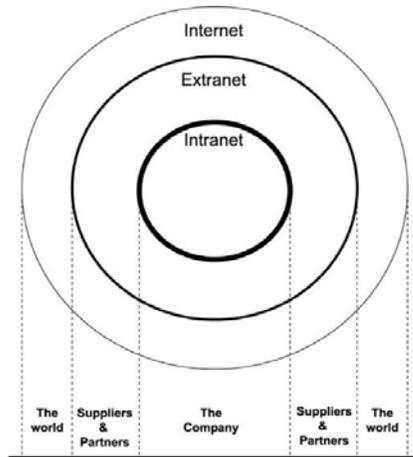
Thus, e-business is reframing the overall strategy, procedures and model thereby enhancing the relation with customers for maximizing the profit. International business has to be carried over with extreme care these days. When business is extended beyond the borders, few port authorities impose charge on every consigner who uses the traditional old paper. So in order to avoid this, electronic data interchange procedures are used and thereby it aids in carrying over electronic form of business with a combination of technology and services that foster the automatic transaction of business and related information with the help of the following three levels which are depicted in Figure 1.

- Within a business (INTRANET)
- Between two business, one of whom could be a supplier (EXTRANET)
- Between a business and its customers (INTERNET)

## **II. INTERNET and INTRANET**

A. *Internet:*

The internet is a global system of interconnected computer networks that use the standard internet protocol suite (TCP/IP) to serve several billion users worldwide. It is a network of networks that consists of millions of private, public, academic, business and government networks from local to global scope that are linked by a broad array of electronic, wireless and optical networking technologies.



Source: Adapted from Chaffey *et al.* (2003, p. 26)

**Figure1. Levels of ICT application in business**

The internet carries an extensive range of information resources and services, such as the interlinked hypertext documents of the World Wide Web (WWW), the infrastructure to support email and peer-to-peer networks. Electronic business involves business processes spanning the entire value chain electronic purchasing and supply chain management, processing orders electronically, handling customer service and cooperating with business partners. E-commerce seeks to add revenue streams using the internet to build and enhance relationships among clients and partners. According to research firm IDC, the size of total worldwide e-commerce, when global business-to-business and consumer transactions are added together, will equate to \$16 trillion in 2013. IDate, another research firm, estimates the global market for digital products and services at \$4.4 trillion in 2013. A report by Oxford Economics adds those two together to estimate the total size of the digital economy at \$20.4

trillion which is equivalent to roughly 13.8 percent of global sales. While much has been written on the economic advantages of internet enabled commerce, there is also evidence that some aspects of the internet such as maps and location-aware services may serve to reinforce economic inequality and the digital divide. Online shopping has boomed both for major retail outlets and small artisans and traders.

Business-to-business and financial services on the internet affect supply chains across entire industries. For the purpose of communication, collaboration, information sharing and business support, like an internet environment, intranet is established within the organization. Intranets are the websites that are accessible and available for the employees within the company. With the help of an intranet, the different units of the organization can communicate easily and effectively among themselves. For example, if the production department is in requirement of some raw materials, report of the stores department can be accessed and can also check whether the required material is in the stock. If it is, the production manager can send the requirement list to the stores department. The store's manager, who in turn makes arrangement for the materials to be delivered and update the same in the report and send delivery note for the same, thus each and every department is connected for all operations or activities thereby saving time.

B. *Intranet:*

A company's intranet can also be accessed through the internet by customers, suppliers, and other business partners through extranet links. Intranet applications were first applied at universities followed by industries and commerce fields. Then company's growth, development, managerial or commercial purposes to non commercial uses such as chat rooms are due to the major applications of intranet. Developing home pages, newsletters, technical documents, product catalogues and employee directories became simple task with the use of internet. Communication between individuals and groups, transaction with other organizations, computer-based information system, organization wide

information search and recording best practices and business processes on the intranet are possible in support of knowledge management. The intranet has wide range of application by enhancing the flow of data in the organization, timely access of vast data base and predominantly it replaces traditional paper based work with web applications and thus increasing the accuracy of information.

### **III.EXTRANET**

Business continues to use open internet technologies (extranets) to improve communication with customers and partners, agents and buyers. It helps in gaining many competitive advantages along the way in product development, cost swings, marketing, distribution and leveraging their partnerships. Extranets are network links that use internet technologies to interconnect the intranet of a business with the intranets of its customers, suppliers and other participants of export. Companies can establish direct private network links between themselves or create private secure internet links between them called virtual private networks. Thus extranet enables buyers, suppliers, consultants, subcontractors, business prospects and others to access selected intranet websites and other company's databases.

#### *Extranet applications*

The series of possible extranet applications is almost countless. Examples of extranet applications are clustered into several categories according to their corporate functions and disciplines are as follows:

#### *C. Sales and promotion*

The sales sector faces a continuous challenge delivering up to date reference data to customers, often detached over a large area. Sales representatives know that having the exact information accessible at a critical moment can be the variance between making and losing a sale. Marketing people, in the meantime, need access to database-type information on existing and impending customers. An extranet can be used for all these circumstances to provide

information regarding product provisions and prices, sales leads, competitive information gleaned from a competitor's web site, sales activities, just-in-time training and real-time sales presentations.

#### *D. Product Expansion*

In today's developing environment, apt information becomes decisive to product development groups as product development activities often depend on efficient project management. Therefore, team members need virtuous communication channels to update project schedules, to report and organize their progress, and to receive and evaluate customer's feedback. An extranet claim can prove useful by providing information such as product provisions and designs, schedule changes, team schedules and individual areas of charge, customer comments and requirements as well as features of key competing products.

#### *E. Customer service and sustenance*

Extranet applications in this category can have a much comprehensive impact on the quality of internal and external communication. For example, communal applications let the service and support staff dig systematically to investigate a particular issue. Newsgroups with negotiated discussions provide opportunities for detailed analysis of frequent customer problems and their causes.

#### *F. Human resources solicitations*

An extranet can be an imperative tool for human resources to recruit employees. The company can post job preambles on the extranet and use e-mail to receive applications and resumes. Furthermore, HTML forms are fetching popular for storing data. Extranet applications can also allow access to discretionary benefit packages in addition to provide value information, policy statements and instructions, mission and goal statements, searchable core telephone manuals, employee surveys and personal needs of employees.

#### *G. Financial applications*

Procuring departments can maintain online catalogs of agreed supplies and equipment. Client departments then just

need to visit the firm's extranet to place their orders. At the same time, the link can simplify the billing and purchasing from peripheral vendors. In this particular occasion, the web application is often denoted as a form of Electronic Data Interchange (EDI). Investment firms have also started to use extranets to provide information to their customers and if security anxieties can be overcome, to handle customer transactions over the web.

#### **IV. THEORETICAL BACKGROUND**

Some years back the textile and garment industry used to be single most export earner for India, now information technology and Information Technology Enabled Services (ITES) companies have taken that place pushing garments to number two. India is known for both of these industries around the world. The combination of these two can create synergy, if properly used. The application of IT in garment and garment industry can help them in improving the overall performance. In country like India it is very important that garment industry remain strong and growing continuously. Many big garment units have already adopted IT in their companies in various forms. They use machineries with latest technology available in the world and these machines utilize IT in many areas such as production monitoring, quality monitoring and control, etc.

The emergence of information and communication technology is not only reshaping the business models but also intensely interlining enterprises across its internal as well as external value chain. In other words business enterprises are in the process of major transformation in order to meet the challenges of network economy. The role of ICT is redefined as a fundamental enabler in creating and maintaining a flexible business network of inter organizational arrangements such as joint ventures, alliances and partnerships, long term contracts, technology licensing, and marketing agreement. Traditionally in house developed customized Management Information Systems (MIS) have been used to enhance business networking and now enterprise resource planning systems,

supply chain management systems, customer relationship management systems and e-business portals are being used to establish business networking systems.

Most of the small and medium enterprises in India are in early stage of business networking as they have recently started adopting integrated information systems such as ERP and supply chain systems. An integrated transaction oriented information systems is concerned with the seamless flow of data and work flow among the business functions of the enterprise resulting into improved administrative and operational efficiency in the organization. The absence of such systems in the enterprise may result into the following business problems: high lead time in business processes, high cycle time in business transactions, high inventory, and poor utilization of financial as other enterprise resources, poor productivity and high stock outs.

Accounting software such as Tally is extensively used by most of SME's in India. Though Tally has many advantages it is limited by many drawbacks. It is an off the shelf package solely catering to the needs of the function of accounting and it is very low on user customization. It does not have planning capabilities. No feature of costing exists in the package. It is standalone package and hence non-integrated with the other business functions such as production, sales and distribution of the company. In-house developed customized information systems are generally time consuming and very often poor in maintenance. Retention of IT personal becomes difficult. It is functional automation system and lacks process innovation and systems integration capabilities. The integrated transactional information systems such as Radix, MakeESS, Octopus-E and Tech Solutions etc. claim to offer integrated transactional oriented information systems solutions at affordable cost.

However since these systems lack in terms of planning capabilities, the implementation has to be accordingly designed. Apart from, there are no many examples exist to demonstrate the visible impact on the enterprise performance. The micro ERP such as NAVISION is new to

Indian SME's. Although it has been adopted by large number of SME's in Europe and USA, it has yet to demonstrate its presence and usefulness for Indian SME's. The major ERP vendors particularly BaaN and IFS are found to be best fit for SME sector. BaaN has maximum presence among manufacturing SME's worldwide including India. ERP is defined as an integrated, multi-dimensional system for all functions, based on a business model for planning, control and global optimization of the entire supply chain, by using state of the art IS/IT technology that supplies value added services to all internal and external parties.

ERP is an integrated system that allows information to enter at a single point in the process (e.g., at the materials receiving stage of a manufacturing process) and update a single, shared database for all functions that directly or indirectly depend on this information. This integration should take place in real time, not through interfaces or programs that transfer information to one or more modules only after the information has already been processed and updated in the module through which it entered the system. ERP would be enabling an enterprise to balance its resources such as manpower, machines, materials, money, methods and marketing to stay competitive in a globalized economy. An ERP solution covers all the functions like human resources, corporate finance, production planning and control, materials management, quality management, plant maintenance, services management, sales and distribution. In short, it controls the whole 'nervous system' of an enterprise.

The multiple benefits through successful utilization of Information Systems (IS) also deliver advantage in 'Strategic', apart from 'Tangible' and 'Intangible' ways. SME's can adopt information systems for many of the same reasons that large one do, but the most common reason is to establish a platform for growth. It is therefore essential for Indian SME's to absorb appropriate information and communication technology tools to leverage business advantage. Effective utilization of ICT tools will provide SMEs a disciplined business environment to operate in, where

decisions concerning supply and demand are fully supported by facts and help maximizing business value in order to enhance growth and competitiveness.

## V. CONCLUSION

Indian manufacturing industry has all the qualities that can enhance economic development, increase the productivity and face competition from the global markets. The importance of the manufacturing sector is not just its contribution to economy, but also in generation of employment. E-commerce promises benefits for businesses in developed and developing countries, such as the ability to reach new international markets. Thus the textile manufactures can focus on business parameters like technology up gradation in order to improve manufacturing competitiveness.

## REFERENCES

1. Abhijit Banerjee & Kaivan Munshi 2004, 'How efficiently is capital allocated? Evidence from the knitted garment industry in Tirupur', *Review of Economic Studies*, vol. 7, no. 1, pp. 19-42.
2. Arindam Basu 2007, Importance of IT in Textile Industries, <http://www.indiantextilejournal.com/articles/FAdetails.asp?id=694>. Accessed on 12-02-2012.
3. Arun Sharma & Jagdish N Sheth 2010, 'A framework of technology mediation in consumer selling: Implications for firms and sales management', *Journal of Personal Selling and Sales Management*, vol. 30, no. 2, pp. 121-129.
4. Ali Hasanbeigi & Lynn Price 2012, 'A review of energy use and energy efficiency technologies for the textile industry', *Renewable and Sustainable Energy Reviews*, vol. 16, no. 6, pp. 3648-3665.
5. Alifjifri, HA, Pons, A & Collins, D 2003, 'Global e-commerce: A framework for understanding and overcoming the trust barrier', *Information Management & Computer Security*, vol. 11, no. 3, pp. 130-139.
6. Andrew B Bernard & Bradford Jensen, J 2001, 'Why some firms export', National Bureau of Economic Research, Working Paper No. 8349, pp. 561-569
7. Benbasat, I, Goldstein, DK & Mead, M 1987, 'The case research strategy in studies of information systems', *MIS Quarterly*, vol. 11, no. 3, pp. 369-386.
8. Bibhuti Bhusan Mishra, Uma Sankar Mishra & Mishra, PK 2012, 'Perception and adoption of e-commerce in Indian SMES: A study in the state of Orissa', *International Journal of Advanced Computer and Mathematical Sciences*, vol. 3, no. 2, pp. 227-236.

9. Chaffey, D, Mayer, R, Johnston, K & Ellis Chadwock, F 2003, Internet Marketing Strategy, Implementation and Practice, Prentice Hall Financial Times, 4th Edition, London.
10. Conklin, David W Kalechstein & Simon 2011, 'Why not to invest in India: An analysis of the IT sector'.  
<http://www.antiessays.com/free-essays/275898.html>.