

## **E- TAILING (INTERNET) SERVICES FOR THE FASHION INDUSTRY**

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### **ABSTRACT**

*Fashion is really just starting to interact with the information technology (IT) world. Today there are already 'cool' gadgets and wearables, but tomorrow, we will see whole new domains where fashion can play a key role--BT futurologist Ian Pearson explores how fashion could get a whole lot funkier...( Ian Pearson)*

The 21st century heralds the creation of new information service-based businesses, which are a growing part of the digital economy. The E-tailing of services will assume a position of central importance in the future. Many attributes of the E-tailing of physical goods are directly transferable to selling services on the Internet. The widespread adoption of the Internet by both vendors and consumers alike has created a thriving electronic marketplace on the Web for many consumer goods. The experience of buying fashion products by touching them physically cannot be substituted by the Internet shopping and also preferences is given to multi-brand outlets. The demographic results of the 'E-Retailing survey' conducted in India by IITM, Gwalior show that a majority of the consumers prefer conventional way of shopping.

The paper also uses the literature review for models and classification schemes for services. For instance Lovelock (1996) has classified services into six broad categories using two dimensions

- People Contact, Tangibility, and Credence
- Nature of demand for the service.

The fashion industry and fashion devotees have created sites that provide access to runway shows, designers, models, trade information, and current events. Costume historians have designed sites that can be used to research costumes, locate visuals, and document the creation of accurate historical garments (Monica Fusich)

The fashion industry and professional organizations then saw the value of the Internet as an advertising and informational medium and began to develop commercial sites. Currently, serious researchers and those interested in cutting-edge fashion trends will be able to locate information on the Internet

Internet Exchanges and E-market places have been consolidating their businesses and have provided tremendous growth to organizations already doing business in the physical form. For instance Office Depot has set up similar kiosks in its stores and, like Staples, invites corporate customers to connect their internal procurement systems to its E-commerce setup for the complete automation of ordering, approval, and billing work flows.(Cayce Roy, 2005)

The paper contains organizational case studies like Li&Fung, JC penny, indiatimes.com and E-chaupal ITC etc for substantiating that the scope and opportunities in E-tailing services is very high compared to the e-tailing of fashion products.

## **1.0 INTRODUCTION:**

The E-tailing of services will assume a position of central importance in the future. The 21st century heralds the creation of new information service-based businesses, which are a growing part of the digital economy.

The impact of information technology on range of marketing channels for consumer markets has been the subject of much discussion within contemporary marketing literature {Peterson et al., 1997; Alba et al., 1997; Hoffman and Novak, 1996; Klein, 1998). A wide range of media and the Internet causing 'death of time and distance' have made customer demand and access to products and services to be in a 24x7 mode. The new electronic channels are increasingly seen as complementary to rather than competitive with traditional channels {Anton, 2000). Many attributes of the E-tailing of physical goods are directly transferable to selling services on the Internet. The widespread adoption of the Internet by both vendors and consumers alike has created a thriving electronic marketplace on the Web for many consumer goods.. The benefits of setting up an Internet presence are cost justification, new capability, competitive advantage, communications improvement, improved control, and customer service improvement (Bocijetal., 1999).

In an attempt to take advantage of the Internet, most companies have made an attempt to put up on the websites a retail offering or an application to handle the customers. This could mean E-tailing of products, putting marketing materials and pricing information on the Internet, or providing customer support. 'While this can grow revenue incrementally by selling direct to end users and eliminating channel middlemen, or by opening up a global channel with little effort, this is a very limited view of what an e-business strategy can offer'. (Robert Skinstad)

The potential usage of the internet as a medium and as a business process model lies in being able to use the interface between various supply chain partners and leverage the efficient means of communicating and conducting business between these partners. For instance a fashion house like LVMH could possibly use an XML application for data interchange and conduct automation in their business processes in an integrated fashion so that all suppliers, vendors, fashion stylists, venture capital companies and their retail end could be integrated as an important business strategy. This would be more comprehensive than using internet just as medium for B2C or doing E-tailing of fashion products.

## **2.0 CHALLENGES TO E- TAILING OF FASHION PRODUCTS**

The experience of buying fashion products by touching them physically cannot be substituted by the Internet shopping and also preference is given to multi-brand outlets. The demographic results of the 'E-Retailing survey' conducted in India by IITM, Gwalior, India show that a majority of the consumers prefer conventional way of shopping. A number of peculiar characteristics of the textile and apparel industries pose challenges to the implementation of electronic commerce.

One of the main challenges on the internet is the difficulty to depict the physical aspects of the fashion products on-line. Most of the characteristics of fashion apparel like touch, feel, handle, 3D appearance and fit etc. are difficult to be shown or appreciated even if a virtual reality model is used. The demonstrative capability of a garment cannot be appreciated fully on the digital screen and therefore these aspects then cannot be compared with the competitive offerings. This makes the brand susceptible to rejection by the potential customer if the product does not match with the one shown in the picture on the Internet. These difficulties make the e-tailing of goods even more difficult than the e-tailing of services as the vendor based applications like procurement or e-marketplaces etc. that require less of these depictions than the ever demanding consumer-- wanting to touch, see color and envisage the fit of a garment—all of it at the same time!

Another challenge related to the non physical form of the garment is with the accuracy of the color selection as one of the biggest deterrents in apparel purchases. According to a survey conducted in India, more than 75% of Internet shoppers find difficulties in handling color matching when they buy the product online. In spite of color correction software like Metacolor etc., color matching is still seen as a big hurdle in realizing the potential of the Internet as a selling medium.

Lastly, the degree of difficulty in depicting the product online differs by product type. Basic products are selling well on-line, according to Forrester research. Products like t-shirts blouses; scarves, stoles and shoes etc are considered more commodity types for online purchases. It is the high fashion product categories like cocktail dresses business suits that are considered risky, as they are high involvement categories for fashion purchases.

### **3.0 POSSIBILITIES WITH E –COMMERCE AND SERVICES**

How is electronic commerce different from traditional modes of business? The primary difference lies in the networking capabilities and the virtuality of the business. There is vast use of information and telecommunications technologies that allow for portability, instant communication from anywhere, at any time, and the ability to offer access to unlimited databases of information about products and services. The distinctions of Business-to-Business (B2B) and Business-to- Customer (B2C) also allow for instant transfer of information, independently of place and time, and the ability to manipulate unlimited amounts of data in virtual storage. Clearly, there are far-reaching implications for organizing and managing the marketing function, and such issues as the “business model,” the role of branding, and cost-per-transaction. Networks allow for instantaneous orders and information exchange in what is termed: The “24×7 world” (Waters, 2000).

Networking also facilitates cooperation among vendors and with customers. Such trends require changes in processes of communication, control, and product flow within the e-commerce organization— thus influencing the composition of its value chain (Lynn Markus and Benjamin, 1997; Mort and Knapp, 1999).

Another attribute of e-commerce organizations is the networking beyond the boundaries of the enterprise, thus forming inter-organizational workflows, combined with problems associated with technological standards, connectivity, and cultural differences. This phenomenon of the “extended enterprise” creates a myriad of structural challenges. (Aalst, 2000; Boddy and Boonstra, 2000; Rockart, 1998).

### 3.1 Service Classifications (Lovelock)

In defining a semantic framework for service description, the interest in a classification of services is twofold: it delineates what we mean by a service, and it structures services into classes that can be more easily characterized. Several classifications of services have been proposed in the area of services marketing and management [Kasper et al., 1999].

Lovelock’s classification [Lovelock, 1983] is particularly relevant from a service description viewpoint. This classification is based on a set of questions that we enumerate below. We have slightly modified the original formulations so as to take into account services involving software:

- Who or what is the direct recipient of the service? Is it a person, a physical object or software? Reciprocally, one can ask the question about who or what is delivering the service. In this way, we obtain the following classes of services: human-to-human (hairdressing), human-to-object (equipment repair), object-to-human (vending machines), object-to-object (automatic car washer), software-to-software (event services), software-to-human (search engines) and human-to-software (software maintenance).
- What is the relationship between the service provider and its users? Is it a formal relationship (i.e. it requires a subscription) or not? Is the delivery of the service continuous (e.g. many services provided by operating systems) or discrete (e.g. a database query service)?
- What is the nature of demand and supply for the service? Does the demand regularly exceed the capacity (e.g. popular search engines)? Do users have to make a reservation (e.g. some emerging bandwidth services) or are they served on a FIFO basis (e.g. memory allocation services)?
- How is the service delivered? Electronically or physically? Through a broadcast, subscription based or via a point-to-point mechanism?

This classification does not explicitly take into account at least two important issues:

Service automation. In general, when the actions of the service are intangible, they can be partially or fully automated. This is the case for travel agencies and insurance brokers. In the last decade, this issue has become crucial as business processes are being modeled through work- flows that can be connected through emerging enterprise-wide and inter-organizational workflow management systems [Casati et al., 2000; Schuster et al., 2000; Jennings et al., 2000]. As a result, services that are primarily intended for composition with others (i.e. intermediary services), need to be distinguished from those that are directly consumable (i.e. final services).

## **4.0 INITIATIVES IN E-TAILING OF SERVICES IN THE FASHION INDUSTRY**

### **1. Fashion Information Services--libraries, Virtual knowledge driven Associations and Q&A services**

There are sites created by the fashion industry that provide access to runway shows, designers, models, trade information, and current events.

Similarly many fashion information services have created a unique exclusive list of the organizations dealing in apparel product development and manufacturing. For instance fashioninformation.com has fashion reporting published exclusively on the Internet. It has women's wear forecasting and trend reporting service offering a close and detailed insight into fashion trends from a unique perspective.

Costume historians have designed sites that can be used to research costumes, locate visuals, and document the creation of accurate historical garments (Monica Fusich). Costumes and their documentation is one of the services (Virtual Museum) that helps not only preserve the heritage but also helps young designers draw inspiration for their collections from innovative and informative web sites.

\ Associations driven by knowledge and using virtual platform for commerce are the initiatives that support E-tailing of products in an eventual manner. One such example is the Fashion Beauty Internet Association-an Internet association and virtual forum for fashion and beauty businesses such as retailers, manufacturers, and style-related journalists. (<http://www.fbia.com>).

The fashion industry and professional organisations now have seen the value of the Internet as an advertising and informational medium and began to develop commercial sites. Currently, serious researchers and those interested in cutting-edge fashion trends will be able to locate information on the Internet Search engines which not only provide B2B services but also take care of the publicity and media programmes of various brands are fast developing into very profitable Internet venture (<http://www.fashionwindows.com>).

Another service in the same direction is Q&A service like Allexperts.com, which is the largest service of its kind on the Internet.

### **2. E-Market Places and Exchanges providing B2B Services**

Globally, the number of e-marketplaces for businesses is extensive and is growing profusely. Companies interested in international trade are increasingly becoming aware that e-marketplaces are potential sources of new customers, and access routes to global supply chains.

An e-marketplace is an electronic exchange where firms register as sellers or buyers to communicate and conduct business over the Internet. For example, firms representing

each section in a supply-chain could join an e-marketplace to transfer information and purchase products.

There are many types of e-marketplaces based on a range of business models. They may operate on a cost-recovery basis by an independent third party (such as an industry association) or be set up as a business offering, with a middle-person providing a value-added function such as transaction services.

Services offered by e-marketplaces include business directory listings, electronic catalogues for online purchasing of goods and services and trading or transaction services. E-marketplaces that are worth considering are those that interconnect with other marketplaces and allow low-cost connection to a firm's financial accounting systems. Various kinds of e-market places exist which are targeting on special niche segments.

For example Hong Kong-based apparel sourcing giant **Li & Fung** has set up an e-commerce subsidiary, Lifung.com, to open up a new market segment of overseas small and medium-size enterprises. Li & Fung's earlier foray into B2B without integrating it with the buying agency business failed which served as a classic example in the Harvard Business Publications Classic Cases, thereby making a lot of apparel supply chain players realize that the subsidiaries like these initiatives work very well when they are integrated throughout the fashion value chain

Another example of the thriving e marketplace is that of **CPG.com**. CPG market is a provider of collaborative supply chain solutions open to manufacturers of consumer-packaged goods interested in efficient transactions with suppliers. Companies include: Barilla, Fromageries Bel, Coca-Cola, Danisco, Danone, Delta Dairies, Ferrero, Henkel, Nestlé, and L'Oreal. Similarly, **GNX.com** is an e-business solution and service within the global retail industry. GNX solutions connect retailers, manufacturers and their trading partners to reduce costs and improve efficiency by streamlining and automating critical sourcing and supply chain processes. Again, **Tradeplace** provides a trading service to European retailers of household appliances and consumer electronics. The e-market aims to eliminate inefficiencies in the supply chain whilst improving e-enabled communications between manufacturers and distributors.

### **3. Third party Logistics and Distribution Services**

Till date, most B2C players have not made significant changes in their distribution strategies to meet the needs of consumer orders placed online. The New Internet companies are setting their base quickly and in some cases outsourcing all of their distribution and logistics functions. In the past many of these third party logistics operators were classified as asset or non-asset owning (Sheffi1990). Some of these are freight marketplaces or bulletin boards for posting available loads or equipment required for logistics. Others are mainly ASP's (application service providers) who are providing web based enabling of logistics services through software applications. In fact many fashion brands like Levi Strauss have realized that distributing products through online retailing method require third party logistics support that aims at speedy order fulfillment and reduces excessive distribution costs. **Some of the examples of 3PL's (third party logistics operators) on the Net are given below:**

- **Smarterwork:** Smarterwork offers services in 11 business categories covering a wide range of services: Marketing & Creative, Research Services, Web Design Service, Business Consulting Services, Legal Services etc. Companies include Hugin, New Media Ltd, Six Degrees Recruiting Inc., Rubicon International Services Ltd., MyAddress.co.uk, Higher Living, and Newsweek Japan Magazine.
- **Cargo Portal Services:** Based in Blue Bell, USA since 2003, Cargo Portal Services works as a full service portal for the global air cargo industry. Companies include: Air Canada Cargo, Austrian Cargo, KLM Cargo, United Airlines Cargo and NWA Cargo.
- **Global Freight Exchange, GF-X:** GF-X provides cargo capacity to carriers and forwarders in the air cargo industry. The e-market assists large companies to increase the level of efficiency in handling of transactions. With a global focus they have attracted several major companies including Air France Cargo, British Airways World Cargo, Lufthansa Cargo, Emirates Sky Cargo, DHL, Middle East Airlines, TAP Cargo and AA Cargo.

#### 4. Offering Mass Customisation through Internet Services

Mass customization requires the customer and business to develop the product or service together so as to provide customers with exactly the product they want at the time they want it, using advanced information and production technologies, it (Davis, 1987; Pine, 1993) Mass customization, a combination of “mass production” and “custom-made” production, is rapidly becoming a guiding business principle for the 21st century ( Narges Kamali)

Mass customization should involve the customer in the design, production, or delivery process before the actual sales transactions, using technology to limit the cost. On-line applications offer customers clothes that are made with their inputs and the customers are made to feel the special treatment.

Clothing sites offering mass customization varied from selecting pants length and fit (Ilbean.com) and color and style (Nike.com) to selecting components such as fabric and style features (IC3D.com). There were several T-shirt sites that offered a small choice of T-shirt styles to which custom text and images selected from those provided or uploaded from consumer's files could be added (e.g., t-shirts.com and 99dogs.com).

Firms such as IC3D (Interactive Custom Clothes Company Design), Express Custom Tailors, and mytailor.com provide customers with instructions on how to take their own measurements, and give a menu of options for each garment. The customer interface allows consumers to “design” and designate their specific style needs. Although the use of the internet as a front-end tool for B2C apparel sales has great potential, most agree that the real power of e-commerce in the apparel industry lies in the opportunities for significant improvements in supply channel management through B2B initiatives.

## **5. Vendor managed Inventory and Supply Chain Services**

Vendor managed inventory (VMI) is an operating model in which the supplier takes responsibility for the inventory of its customer. In a VMI-partnership the supplier makes the main inventory replenishment decisions for the customer. The supplier, which may be a manufacturer, reseller or a distributor, monitors the buyer's inventory levels and makes supply decisions regarding order quantities, shipping and timing (Waller et al., 1999). For suppliers, the major attraction of VMI is in mitigating demand. Large, infrequent orders from customers force suppliers to maintain inventories that enable them to respond to the uneven demand.

In VMI, therefore the supplier has not only a better chance of fulfillment of the orders but also is able to lower down the buffer inventory and therefore can also service various buyers at the same time. Usually in VMI the frequency of shipments is increased (Waller et al., 1999, Cotrill, 1997). Buyers need not monitor the supplier performance by the service level provided by the supplier to the buyer. The speed at which the data is interchanged is possible only through Internet and computer technology. EDI or XML applications are used predominantly to exchange information and the supplier's performance is measured by this service level and by the inventory level at the retailer. The service level improves because of the supplier's abilities to plan operations better and due to more frequent deliveries. This generates more sales, because product availability increases (Waller et al., 1999).

Successful Internet driven VMI implementations in retailing can be found in the apparel industry. For example, VF Corporation( for Wrangler Brand) increased sales of men's jeans by 20 % by adopting a replenishment system based on point-of-sales data and VMI principles with its retail customers. In the apparel industry, store availability is essential, since a customer who can't find his size in the store is a lost forever (Anon., 1998). In a VMI relationship, the co-operating parties must use the same protocols and common product numbering.

## **6.0 CASE STUDIES: NEW EMERGING BUSINESS MODELS (B2B) SERVICES IN THE FASHION / RETAILING INDUSTRY**

### **6.1 The JCPenney Initiative (CAN DO Afterschool Initiative)**

JC Penney one of the world's largest retailers started an initiative with govt. and public partnership, which was launched to set an example of corporate responsibility leadership. The initiative was open through the internet and open to school students wanting engage into meaningful activity the initiative was called JCPenney CAN DO Afterschool initiative which looked at a wide range of resources to help providers of afterschool programs enhance curriculums, upgrade facilities, train staff and volunteers and reach out to kids across the United States. This was funded by proven Girls Clubs of America program that boosts kids' academic performance and inspires them to make positive choices that increase their chances for lifelong success JCPenney CAN DO Afterschool Project Learn was made available in 2,200 communities and will reach three million children throughout the school year and during the summer months.

The JC Penney supply chain system learning on handling e-communities was used and this benefited the children by providing them with services and utilized \$1bn of federal spending and eventually JC Penney earned a good corporate image as an employer and retailer across America.

## **6.2 Home Depot Case Study on Initiatives in e-services**

Home Depot launched the "Kitchen and Bath Design Center" in early 2002. With Scene7's Infinite Imaging™ Platform, Home Depot customers could select from more than 75 kitchens and bathrooms in different styles, then point and click to instantly customize an almost-unlimited combination of cabinets, countertops, flooring, wallpaper, fixtures, paint, appliances, and other options. Customers could do this in real-time without a plug-in. The technology generates a photo-realistic presentation of every option from a single photograph, presenting colors, reflections, textures, lighting, and shadows. Customers can then print out a summary (with visuals) of each product and bring it into a local store to work with a Home Depot sales associate. The first-of-its-kind "Online Kitchen & Bath Design Center" lets customers experiment with 9,500 branded products in millions of combinations to design and visualize their dream kitchens or bathrooms online & purchase products in stores.

After the launch the results were as follows:

"Kitchen and Bath Design Center" generated more traffic on Home Depot's site than any other application, receiving about 5% of total home page traffic, with time spent averaging 22 to 24 minutes. Home Depot successfully achieved its original vision of inspiring customers to design their ideal Kitchen or Bath using branded products — then visiting the local stores with their materials of choice.

Home depot not only uses the Internet based technology for its stores' own private labels but also for other brands thereby providing customization to the customers and also making the customer have an experience before visiting the store. This facilitates the decision-making and removes a lot of problems in e-tailing of fashion related products.

## **6.3 E-Choupal the Indian Model in Action:**

ITC's International Business Division, one of India's largest exporters of agricultural commodities, has conceived E-Choupal as a more efficient supply chain aimed at delivering value to its customers around the world on a sustainable basis.

The E-Choupal, which is primarily an auction site, has its model designed to tackle the challenges posed by the unique features of Indian agriculture, characterized by fragmented farms, weak infrastructure and the involvement of numerous intermediaries, among others. Appreciating the imperative of intermediaries in the Indian context, 'E-Choupal' leverages Information Technology to virtually cluster all the value chain participants, delivering the same benefits as vertical integration does in mature agricultural economies..

With a judicious blend of click & mortar capabilities, village internet kiosks managed by farmers – called sanchalaks – themselves, enable the agricultural community access ready information in their local language on the weather & market prices, disseminate knowledge on scientific farm practices & risk management, facilitate the sale of farm inputs (now with embedded knowledge) and purchase farm produce from the farmers' doorsteps (decision making is now information-based).

Real-time information and customised knowledge provided by 'E-Choupal' enhance the ability of farmers to take decisions and align their farm output with market demand and secure quality & productivity. The aggregation of the demand for farm inputs from individual farmers gives them access to high quality inputs from established and reputed manufacturers at fair prices. As a direct marketing channel, virtually linked to the 'mandi' system for price discovery, 'E-Choupal' eliminates wasteful intermediation and multiple handling. Thereby it significantly reduces transaction costs and is a good example of using e-tailing of services to improve the living standards of poor Indian farmers

## **7.0 CAUSES FOR GROWTH OF B2B SERVICES IN THE FASHION INDUSTRY**

Both vertical exchanges and horizontal B2B are expected to extend and improve performance aspects of supply channels that have been critical to meet lean retailers' requirements. Enhancement of these exchanges will allow companies to more closely collaborate on product design, inventory planning, and other value add activities. Some of the positive effects of B2Bs in the textile-apparel-retail channel include:

- Reduce transaction costs
- End to End Process Integration
- Reduce inventory costs
- Improving Forecasting Capability
- Reduce lead times and distances

### **7.1. Reduce transaction costs**

Measuring the impact on transaction costs is a necessary step in any economic analysis of B2B markets. Garicano and Kaplan (2000) made an early attempt in this They classified transaction costs into two categories, coordination costs and motivation costs, and the efficiencies promoted by e-commerce in three types: (a) process improvements; (b) market place benefits; and (c) indirect benefits. Coordination costs are those related to the management of the transaction, i.e. finding potential buyers and sellers, negotiating the terms of the operation and closing the deal. Motivation costs are those associated with asymmetric information and imperfect commitment.

### **7.2. End To End Process Integration (Cards, EDI and XML)**

Corporate cards and electronic data interchange (EDI) are two examples of evolving business applications. "Once available only to purchasing managers, corporate cards are

now utilized throughout companies of all sizes to make procurement of goods and services streamlined and efficient,” (Lucas). The advantages of corporate card programs include better information for vendor analysis; volume discounts and improved pricing; stronger controls of procurement and travel policies; improved information management and reporting; reduced per-transaction costs; less time spent tracking small-dollar purchases; enhanced supplier relations; and more time to focus on core business functions.

EDI consolidates file transfers into a single standardized format. Automated processes lead to streamlining issues like accounts payable and receivable etc. thereby reducing the amount of paper—and the time spent re-keying data—there is the opportunity to save money as well.

The most recent development in EDI is related to the use of XML. In today's economic and competitive environment, process automation or straight-through processing (STP) is a critical factor in attaining financial success for all areas of a company, including payables, receivables and treasury, EDI will remain an integral facilitator of business-to-business commerce, with strong growth continuing for years to come. While XML is the ideal conduit for sharing business and workflow information, it is still a language in which a business vocabulary needs to be defined between trading partners. For XML messages to be interpreted by other companies, both partners need to agree on a common XML-based B2B standard, which will define the document, formats, allowable information, and process descriptions. There are a few such standards that are specific to vertical industries or other like-minded.

### **7.3 Improving Forecasting Capability**

Supply chain forecasting ability depends on the collaborative model between various supply chain players. The demand analysis and the supply production and inventories all are to be managed comprehensively so that the customer walking into a Macy's Department store does not come out without the pair of shoe he had intended purchasing in the very first place. The internet facilitates the whole community looking at the forecasting expected to manage the volatility of the consumer markets.

### **7.4 Reducing Inventories**

The high cost of carrying inventory in this industry will make reduced inventory a significant benefit. VMI's are example of the vendor taking the lead to maintain smaller buffer stocks and yet fulfill orders at a frenetic pace.

### **7.5 Shorter lead times**

The notion of shorter cycle times can be directly translated into bottom-line revenue for nearly all companies. The time it takes to plan, order, build, inventory, deliver, and invoice a particular product causes incremental costs as the cycle lengthens. Effective supply-chain process management can optimize this cycle, measurably reduce inventories and help build exactly the products that the market demands at any given time. Wherever there are manual tasks in the product cycle, there is opportunity for overhead costs, delays, and errors, all of which can contribute to longer cycle times.

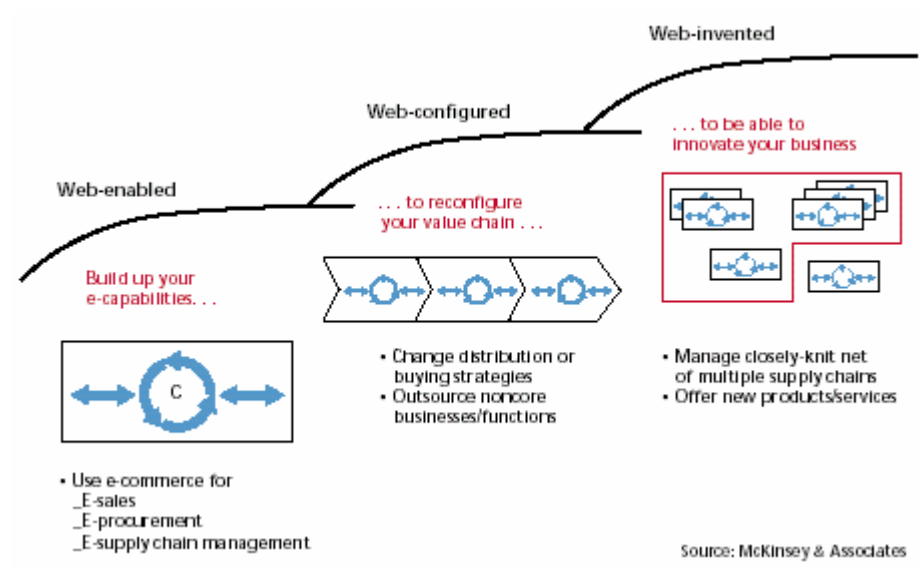
ERP Applications like SAP focus on the bottom line—improved customer satisfaction and reduction in the operational costs. Arvind mills in India producing denim for major players of the world is using ERP and after a heartbreaking decade they are finally seeing light at the end of the tunnel and their bottom lines have significantly improved.

## 8.0 EXPECTED EVOLUTION OF B2B IN THE APPAREL INDUSTRY

Recent studies from Morgan Stanley Dean Witter (2000), Forrester (2000), McKinsey and a new book by Tapscott (2000) draw on the early work of Coase (1937) and Williamson (1975) to develop a dramatically new view of the Internet-based enterprise. The writing on the wall is clear that the Internet is rapidly transforming both supply and demand chains into business webs of collaborative electronic commerce. Thus the focus has shifted from organizations to collaborative partnerships through the Internet. At the same time, the rise of Internet-based Business to Business (B2B) digital marketplaces (from catalogs to auctions to spot exchanges to automated RFQs) is progressing rapidly in many industries as new software platforms are implemented and links to legacy computer systems are developed.

No one doubts the new fact of life that the networked economy will dramatically transform the Landscape of corporate transactions. Despite the widespread acceptance of these two important trends, there has been surprisingly little research that ties the two together. How will business webs operate in this landscape of digital markets? What new building blocks will be required? How will the modern enterprise remain connected as it disperses functions and tasks to partners? What are the critical success factors of competitors in this new environment?

**Figure 1**



The figure 1 from Mckinsey above shows how E-commerce is evolving from the web enabled to web invented system to mage multiple supply chain systems. This is also indicative of the changing role of the marketplace and the role of the firm. Indeed, the changing relationship between the two is a critical feature of the developments that we see on the horizon. For example, there will be constant questions for companies as to

what functions to perform on its own and what functions to outsource to other participants in the marketplace

The firms in the economy progress through three Internet-caused stages: web-enabled, web-configured, and web-invented. In the web-enabled stage, firms build up their e-commerce capabilities. In the web-configured stage, firms reconfigure their supply and demand value chains to increase efficiency. Finally, in the web-invented stage, firms innovate their value proposition to transform into a truly flexible organization that dynamically assembles virtual products to quickly take advantage of fast moving supply chain.

The apparel industry worldwide is dynamically and continuously evolving the industry always faces volatility of demand due to unpredictable consumer. The fashion-buying consumer is mercurial and the volatility is so high at times that it causes turbulence in the supply chain. The story becomes more complicated when touché, feel and the fit come into play and the customer walks out of a store without purchasing the clothing item on account of any of these factors which are difficult to visualize on the Internet. This makes the role of web-based services very important and critical to the supply chain efficiency and the profitability of the organization. The growth of web based logistics and market places has also been due to fragmentation of apparel production worldwide which makes the B2B Internet services an important candidate for the same.

Communicating about product design, product quality, plant capabilities, involves significant subjectivity. This type of communication will be harder to put on line. Intermediaries provide domain expertise and local knowledge that will be hard to automate.

In general, we expect the strong suppliers to get stronger, and the weak weaker, as B2Bs transparency in the global supply chain increases. Firms with relatively high prices or lower quality that existed primarily due to buyers' lack of market information will lose ground as market transparency improves. The rate of adoption in the industry should fall in the middle of the range: it will not be as swift as in some due to the complexity of interactions in the channel, but the motivation for improvement is high.

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