

Espousal of E-Commerce Elucidation in Bangladesh: Intention of Newest Business

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Abstract

Apparel and Textile manufacturing industries have been considered to be an important element in Bangladeshi economy. This paper provides an overview of e-commerce activities in the textile and apparel industries in Bangladesh. We begin with a brief look at the current competitive landscape in the "bricks and mortar" apparel industry, highlighting the changes that have occurred over the past decade as retailers have adopted "lean-retailing" business models in response to increased product proliferation and shorter product life cycles. The study analyses the espousal of modern commerce on Bangladesh and the exploitation of electronic generated issues from different categories of input businesses. It also explores the e-commerce rate for the accumulated basis in the several sections of commerce industry of Bangladesh, and the market collision for this. Nevertheless numerous issues are allied to the world market analysis in terms of the congregated investments, the study briefly analyses those issues with a prominence on management attempt and especially for the apparel industry of Bangladesh.

Key words: Apparel, E-commerce, Textile, Manufacturing, B2B, B2C

1. Introduction

With the advent of the internet, apparel sales have started to move on-line. To understand how the pattern of growth of on-line apparel sales might differ from that of other products, we outline some of the critical ways in which the apparel purchase decision differs from the purchase decision for other consumer products, such as books and compact disks, which have experienced rapid growth in on-line sales. In view of these differences, we characterize some of the new technologies and business practices that are being developed to facilitate on-line apparel purchasing. The paper then focuses on business-to-consumer (B2C) business models that have emerged to sell apparel on-line. We will explore a range of B2C business models, from the introduction of new "pureplay" business models to the development of on-line strategies by incumbent brick and mortar retailers, catalog companies, and apparel manufacturers, highlighting some of the challenges relating to channel conflict and supply chain management that incumbent firms face as they enter into the world of apparel ecommerce. We then turn to an analysis of business-to-business (B2B) models that are beginning to surface, concentrating on the potential benefits of these models to the operations of the textile-apparel-retail supply chain. We also discuss some of the different models that are emerging, and how they are related to differences in channel power. The apparel industry has started using the Internet in an attempt to improve the efficiency and effectiveness of marketing, provide customers access to information about products and their availability, build brand value, and to offer customers a convenient medium to make purchases online. The most valuable aspects of Internet shopping, as compared to store-based ad catalog shopping, are typically perceived to be competitive pricing, onesource shopping, convenience and time-savings. However, the potential impact of the internet on the consumer, and on the industry, lies not in what the consumer sees and does on a computer, but in how retailers and manufacturers leverage the internet to meet both expressed and latent consumer needs. The technology now exists to reinvent the textile-apparel supply chain to provide consumers with what they want, when and where they want it. The barriers to implementation lie more in the willingness of the members of the supply chain to redefine their policies and practices to take full advantage of the internet technology.

2. Literature Review

In recent years, fashion attributes have infused nearly all garment types: product life cycles are shortening and product proliferation is accelerating even in the most basic garments. These trends have engendered increasing demand uncertainty that has changed radically the basis of competition in the textile-apparel-retail channel. Increasing demand uncertainty has led to the advent of "lean retailing" retailers who once purchased large quantities of each item far in advance of the selling season now avoid the risk of carrying inventory of increasingly unpredictable items by ordering smaller quantities of each product in advance and ordering, on a weekly basis, replenishment quantities of those products that have sold in the previous week. No inventory has been made to assess the extent of fabric and solid waste in Bangladesh knit apparel industry and no regulations specifically deals with waste in the country. The apparel industry can be segmented in several ways that are



useful for trying to make sense of the different business models that characterize the industry. Cost is one basis for segmentation. A large segment of the apparel industry competes on cost. To achieve rock-bottom costs, manufacturers typically pursue production in low-labor cost countries and endure the long lead times that usually result from low-cost transportation. (The single-minded pursuit of low costs in general results in longer lead times, since firms try to minimize costs by manufacturing and shipping in large lot sizes). Lower cost clothing is typically sold through mass merchants (such as K-Mart and Wal-Mart). Firms in the industry choose to sustain increasing costs in order to obtain better quality (look, feel, fit and durability) or more fashionable goods.

The degree to which garments follow the latest trends and fashions (that is, how "fashion forward" the garment) is the basis for a second type of industry segmentation. Garments can be roughly classified as basic, fashion-basic, or fashion goods depending on the length of the product life cycle and the degree of demand unpredictability for the garment.

3. Aspects of the Textile and Apparel Industries: Factors Affecting E-Commerce Adoption

A number of distinctive aspects of the textile and apparel industries provide challenges to the implementation of electronic commerce. First, and perhaps most important, is the difficulty of accurately characterizing the product on-line. Many of the characteristics of a garment that are pivotal in the consumer decision-making process -color, touch and feel, and fit -- are difficult, if not impossible, to communicate virtually. Moreover, unlike books, music, and consumer electronics, the difficulty in describing the product cannot be offset easily with customer reviews, reviews by industry experts, or comparisons based on independent performance evaluations.

Lean retailing has been facilitated greatly by the introduction and maturation of several key technologies:

- 1. Product identification using bar coding and point-of-sale scanning, used to provide immediate, accurate information on which products have sold;
- 2. Electronic data interchange (EDI), used by the retailer to place replenishment orders quickly and accurately; and
- 3. More sophisticated, often automated distribution centers, which allow manufacturers to pick and pack small replenishment quantities based on EDI orders.

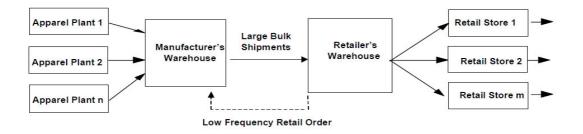
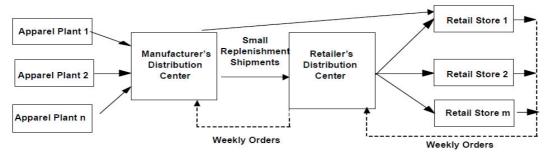


Exhibit 3b: Channel Structure: Lean Retailer-Supplier Dynamics



These obstacles likely will act more as a deterrent in the B2C segment of electronic commerce than in the B2B segment, since industry standards for characterizing color and fabric will be more familiar forms of communication for business partners than for individual consumers. Compounding the difficulty in characterizing the product is the personal, often emotional nature of an apparel purchase. Apparel purchasing decisions are closely linked to individuals.



	% of companies % of companies		
	offering	planning to offer	Total
Sizing information	80%	15%	95%
Fashion advice	43%	13%	56%
Lifestyle/entertainment content	38%	10%	48%
Outfit cross-sales	25%	18%	43%
Zoom technology	23%	55%	78%
Virtual model	13%	15%	28%
View items together	8%	10%	18%
Recommendations based on prior purchase	5%	28%	33%
Custom fit service	5%	5%	10%
Webcasting	3%	13%	16%

4. Apparel Distribution Channels: Industry Trends and Current Status of On-Line Sales

During the past decade, apparel sales through discount and specially stores have grown at the expense of department store sales. For example, in 1990, apparel sales through department sales represented 22% of all apparel sales, compared to 19% in 1998, as shown below. Exhibit shows the volume of apparel distributed through major types of distribution channels in 1998 and 1999. Although still the lowest volume channel, on-line sales of apparel totaled \$1.1 billion in 1999, up nearly a factor of three from the previous year.

	2012	2012	2013	2013
	(\$ billion)	%	(\$ billion)	%
Discounters	\$34.7	20.1%	\$36.9	20.5%
Specialty stores	\$38.4	22.2%	\$40.4	22.2%
Department store	\$32.9	19.0%	\$34.4	19.1%
Major chains	\$29.4	17.0%	\$29.2	16.2%
Off-price retailers	\$11.2	6.5%	\$11.4	6.3%
Factory outlets	\$6.6	3.8%	\$6.7	3.7%
Catalog	\$17.0	9.8%	\$17.2	9.6%
Online	\$0.4	0.2%	\$1.1	0.6%
Unreported	\$2.4	1.4%	\$2.5	1.4%
Total	\$173	100%	\$179.8	100%

Estimates for future on-line sales of apparel suggest great optimism. One estimate puts on-line sales at over 7% of sales in 2003. A more aggressive projection estimates that on-line apparel sales will account for 9% of apparel sales in 2000, and 18% of sales in 2010. What rate of growth prevails will rely heavily on the implementation of some of the technologies discussed above.

5. Emerging B2C Business Models in the Apparel Industry

Apparel web sites have been launched by established apparel retailers and manufacturers as well as by new entrants. Forrester breaks the B2C firms into five categories:

- 1. Catalog companies (retailers that derive the majority of their revenues from catalog sales);
- 2. Brick and mortar retailers (retailers that derive the majority of their revenues from physical stores);
- 3. Pure manufacturers (apparel manufacturers that sell products only through stores owned by others);
- 4. Hybrid manufacturers (manufacturers that sell both in their own stores as well as stores owned by others);
- 5. Pure play firms (retailers that sell apparel only on-line).

6. Entry of Incumbents

Catalog companies have experienced the easiest transition to B2C apparel retailing, since their "back-end" systems for inventory management and order fulfillment are better tailored for selling and delivering products to individual consumers. The most successful of these have realized, however, that they must make significant changes to the consumer interface. They must exploit the internet's capabilities to add value beyond simply putting their catalog on-line. (For example, Land's End provides customized fashion models the customer can use to "try on" products virtually.)

Brick and mortar retailers have varying levels of functionality on their sites. Most offer store locators and product displays and product news, and some offer on-line ordering. Apparel manufacturers have been the slowest to sell products on line: most have sites displaying merchandise or referring consumers to retail stores or on-line sites that sell their products. Many have been hesitant to sell due to fears about channel conflict,



problems with setting prices for products, and lack of infrastructure to support direct sales. The experiences of Levi Strauss offer insight into some of the challenges manufacturers experience with on-line selling.

7. Levi Strauss Case Study

In November 1998, Levi Strauss launched on-line sales of Levi and Dockers brands. According to a former Dockers marketing director, the top consumer request at dockers.com was for direct on-line sales of Dockers products. Levi had delayed on-line product sales due to legal issues that forbade the manufacturer from setting prices for its products in the US. Potential channel conflict was foreseen at the time of launch: Advertising Age noted that Levi was treading "into the potentially treacherous waters of channel conflict with this week's launch of its first major on-line selling effort." Within a few months of launch, Levi declared exclusive rights to sell Dockers and Levi on-line, thereby prohibiting on-line retailers from selling Levi and Dockers brands. By June 1999, Levi discontinued online advertising for its web site, and shifted money into traditional media in order to drive traffic to the site. Levi claimed that the typical customer order of \$56-\$120 per customer was not sufficiently high to make its online advertising pay off.

8. Order Fulfillment

Third party fulfillment companies offer back end fulfillment services to both incumbents and new entrants. For example, Fingerhut Business Services Inc. (FBSI) offers inventory management and order fulfillment services to companies like Wal-Mart, Kmart, Levi Strauss, and EToys. In 1999, Federated Department Stores, which owns Bloomingdales and Macys, purchased Fingerhut. Federated's chairman supported the purchase, noting Fingerhut's "state-of-the-art infrastructure for catalog and Internet order fulfillment." Fingerhut now has Macys.com, Bloomingdales by Mail, and Macys by Mail on its customer list.

Whereas Fingerhut manages inventory for its customers, some third party companies have emerged that actually purchase the manufacturers stock for on-line fulfillment. For example, SureSource buys and stocks a manufacturer's entire product line, including replacement parts and accessories and takes delivery from manufacturers in full cases, like traditional wholesale customers.

9. New Entrants

Pure-play e-tailers face relatively few barriers to entry in setting up a shop on-line. By focusing on brand names, the pure e-tailer can instill customer confidence in the product offering. Examples of pure plays in the apparel industry are

- o Bluefly.com, an on-line outlet for men, women, teens and kids featuring names brands such as Prada, BCBG, and DKNY. Bluefly offers products at discount, typically 40-75% off suggested retail.
- o Styleclick.com, an e-department store featuring top brand men's, women's, and children's footwear and apparel in addition to specialty accessories and bath and body products.
- o Fashionmall.com, an on-line mall that houses such e-stores as Banana Republic and Brooks Brothers, creates a "mall environment" around "existing brands web pages. Thus, for example, clicking on "Jantzen products" within Fashionmall.com brings up the same screen as just clicking on jantzen.com, but it brings it up within the Fashionmall.com frame. Fashionmall also creates an on-line store presence for brands or product lines that do not have physical stores, such as a BCBG eyewear "e-store." All of these firms essentially offer limited selections of multiple brands of products.

10. Distribution

To date, most B2C players have not made significant changes in their distribution strategies to meet the needs of on-line consumer orders. As Levi Strauss learned during its foray into on-line selling, distributing product through channels designed for larger volumes, manufacturers incur excessive distribution costs. Catalog firms have an advantage in distribution, as their existing systems are suited more closely to e-commerce requirements. In general, many B2C firms are turning to third-party logistics firms to give them the level of order fulfillment and delivery capability that consumers have come to expect. Third party providers include: JCP Logistics, Keystone Fulfillment Inc, founded in 1998 as subsidiary of Hanover direct, SubmitOrder.com, and UPS logistics.

11. Mass Customization

Today's consumers have increasingly high expectations that their individual needs and preferences will be met, they are offered a nearly endless variety of apparel options. Customers are product savvy, price savvy, and information savvy and they have many choices to have their needs fulfilled. To date, the major impediment to getting what you want is simply searching for and finding the product. The internet has streamlined the search process, which further heightens customers' expectations that they will find exactly the product they want. Increasingly, that expectation has come to include customized fit, and customized design. In recent years,



companies like Levi Strauss have started to use mass customization techniques to offer custom-fit products at a relatively low premium over off-the-rack prices. Mass customization, a combination of "mass production" and "custom-made" production, is rapidly becoming a guiding business principle for the 21st century. Although customized, tailor-made apparel products have existed since the advent of the industry, in recent times, only an elite few can afford to pay the significant price premium to hire a seamstress or tailor to make customized clothes.

12. Business-to-Business E-Commerce Models in the Textile-Apparel-Retail Channel

The potential benefits from successfully leveraging web-based B2B models in the textile and apparel industries are tremendous. With increasing product proliferation and shorter product life cycles, these industries incur significant excess costs in the form of inventory carrying costs, stockout costs, and markdown costs. As suggested in Exhibit 2, the very factors that led to the implementation of lean retailing also compel the industry to adopt B2B models that facilitate supply channel integration. Indeed, we can interpret many aspects of certain web-based B2B models as extensions of supply channel management practices brought about by lean retailing. Exhibit 6 shows the general structure of the textile-apparel-retail supply channel, indicating where some of the B2B opportunities lie.

13. Performance Impact of B2Bs

Both vertical exchanges and horizontal B2B are expected to extend and improve performance aspects of supply channels that have been critical to meet lean retailer's 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:

Decreasing the cost of communication in the channel. Electronic data interchange (EDI) has been used to improve the speed, accuracy, and cost of transferring data between channel partners. B2B models rely on webbased data exchange, which has significant advantages, such as

- a. Using a hub-and-spoke type of system rather than pair-wise connections. Having a centralized exchange means that only one additional link needs to be added when a new firm is added to a network, rather than having to add one link between the new firm and each of the established firms in the network.
- b. By keeping the software, protocols, etc. centralized, changes or improvements can be made to processes in one centralized location, rather than requiring each link in the network to be upgraded. This can be a significant advantage, since maintenance and upgrading costs can be considerable for EDI systems.
- c. The use of centralized systems also improves standardization, which decreases costs by reducing or eliminating proprietary standards or requirements.

14. Expected Evolution of B2Bs in the Apparel Industry

The apparel industry has a number of characteristics that make it a prime candidate for the rapid adoption of B2Bs:

- Demand unpredictability is high: the need for improved channel information is considerable.
- The high fragmentation of plants and global dispersion of plants make the need for transparency high: there are many local players who benefit from lack of good market information.
- In short, the pain in the industry is high; there is great room for improvement.

15. E-Commerce Benchmark for the Fashion Industry

As more than 70 fashion companies have participated in the eCommerce Benchmark (The eCommerce Benchmark for the fashion industry is a study, conducted by the eCommerce Foundation. The eCommerce Foundation is a non- profit organisation whose goal is to help companies improve their e-commerce activities), the Foundation decided to publish a detailed report on how they are performing. Both online fashion pure players and fashion retailers participated in the study. Within the retail fashion industry, participants are either Generalist (18%) or operate in specific segments, such as Women (34%) / Men (13%), Shoes (4%), Body (12%) and finally Jeans (3%).

16. Garment Firms E-commerce Network Access

The firms in the study had several options for obtaining network access. The first and easiest was the public Internet, which provides access to foreign company web -sites and to specialised trading sites. However, other options included the use of Intranets, Extranets, and Wide Area Networks (WANs). Intranets are effectively internal min-webs that typically hold directory information, company documentation, and information on employee benefits that may be open to all employees. Parts of a company intranet may be secured and used to transmit financial data and other records from one office to another creating a form of intra-company trade. For example, an integrated textile company may 'sell' fabric from its textile mill to its clothing factory and the



company intranet may be used to execute the transaction.

Network Access	Yes	No
Direct to Public Internet	12	0
Intranet	1	11
Extranet	2	10
WAN	0	12

Source: Enterprise level Interviews 2002; N=12

17. Frequency of Use of Network Applications in B2B E-commerce

The garment firms in the Kenya sample were using e-mail regularly to contact customers and suppliers and to accept product orders. Four firms were 'always' using e-mail to maintain contact with buyers, while eight firms were 'frequently' using e-mail to maintain such contacts. Four firms were 'always' using e-mail to place or accept product orders while five firms were doing so 'frequently'.

Exhibit: Frequency of Use of Network Applications in B2B E-commerce

E-mail	Always	Frequently	Seldom	Never
To maintain contact with buyers	5	7	0	0
To place or accept orders	4	5	0	3
WWW				
To get general information about input markets	1	6	3	2
To obtain general information about product market	0	5	5	2
To obtain information about specific customer	0	4	5	3
To obtain information about specific suppliers	0	6	4	2
To accept orders from international business customers	1	3	2	6
To place orders with international suppliers	1	3	2	6
Extranet				
To accept orders from international business customers	0	1	2	7
To place orders from international suppliers	0	1	1	10
Electronic Data Interchange				
To accept orders from domestic business customers	0	0	2	10
To accept orders from international business customers	0	2	0	10
To place orders with domestic suppliers	1	1	0	10
To place orders with international suppliers	1	0	1	10

Source: Enterprise Level Interviews 2002; N=12

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