

## Merchandisers' Performance and Supply Chain Competitiveness in Apparel Export Units

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**Abstract: Purpose:** The purpose of this research is to explore the various attributes of merchandisers' performance at organisation level and parameters of supply chain competitiveness that affect the apparel industry.

**Design/methodology/approach:** The study has focussed on apparel export companies located in NCR of Delhi. The primary data has been collected through structured questionnaire. The areas covered in questionnaire encompassed aspects of merchandisers' job responsibilities and apparel supply chain competitiveness factors as relevant to apparel industry.

**Findings:** Organisation and Communication skills, knowledge of apparel manufacturing and quality assurance, knowledge of dynamic product costing have a strong association with supply chain competitiveness parameters of product quality, product delivery and retail pricing. Training of merchandisers in the areas which affect supply chain competitiveness of apparel export units is of key importance.

**Research Limitations/implications:** The recommendations have been made for apparel export companies as well as for individual merchandisers. The recommendations primarily include education and training of merchandisers, standardising documentation requirements in the company and having a Standard Operation Procedure (SOP), strengthening of Information and Communication Technology (ICT) and apparel manufacturing systems, performance appraisal with respect to Key Result Areas (KRAs) and training by buyers. The paper opens up scope for apparel industry and organisation specific studies.

**Originality/value:** Identification of merchandiser performance and supply chain competitiveness parameters in apparel industry is based on extensive literature survey supplemented by companies' direct primary responses through a structured questionnaire, which were associated through correlation analysis.

**Keywords-** Merchandiser, Supply Chain Competitiveness, Skill, Merchandisers' Performance

**Paper Type:** Research Paper

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### I. Introduction

Time, cost and agility management have been the major objectives of apparel supply chain management in the last two decades. To achieve these objectives, apparel exporters/suppliers strive to cut down on activities that contribute to value being created for the customer and identify value added at each stage of value chain.

Irrespective of the category, clothing products can take a complex route from fabric production, through garment production and distribution, ultimately to an individual retail customer (Johnson, 2002).

A global supply network comprises of diverse entities including retailers, designers and merchandisers, fabric producers, garment manufacturing plants, as well as distribution, logistics and warehousing companies (Dickerson, 1999).

Apart from the final customer, the three key entities of the apparel supply chain are:

1. The Apparel Importer/Buyer-The apparel export industry is a buyer driven industry, hence comprehending the expectations of the buyers is of utmost importance. The buyer could be a retailer, a brand owner or a wholesaler based in the country of selling.
2. The Buying House- The buying house is a mediator between the buyer and the seller and helps to liaise all activities in the country of manufacture for its principals. The buying house plays a vital role in offering the kind of service levels which their principal(s) expect and ensuring that they upgrade the vendors.
3. The Apparel Manufacturer/Exporter-Also referred to as vendor/seller/exporter, the apparel manufacturer/exporter is the most important link in the supply chain. The manufacturer produces the merchandise demanded/ordered by the buyers in the specification, quality, price and time decided by the buyer.

A clear line of communication amongst all members of the value chain is of prime importance. All efforts must be participative and must involve linking amongst all chain members.

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Key issues that need to be understood here include the different participants within the network; the nature of their relationships; ownership, power and control structures; how the network is managed, coordinated and controlled and how information flows in the network (MacCarthy and Jayathnae, 2009).

## **II. Indian Apparel Export Competitiveness**

Each firm's performance and survival is dictated by a combination of external and internal factors (Anand, 2003). But a firm cannot compete externally if its internal operations are not geared to deliver. The firm level initiatives suggested to improve competitiveness are:

- a) Core competencies: Each firm needs to identify its core strengths benefits and build on them to create its own niche in the marketplace through an extensive benchmarking and hence draw up a business plan to reach its goal.
- b) Market responsiveness: Given their small operational scale, most Indian textile firms are unable to respond to market challenges. Market responsiveness is a combination of various factors such as communication, transparency, delivery timeliness, social and employment and environmental aspects. All these have a bearing on the sourcing decisions of international buyers.
- c) Organisational restructuring: Most garment units are family run businesses. The infusion of professional management at senior level would enable them to access experienced and talented pool of manpower. Investments in IT and communications could help reduce response time

To improve supply chain efficiency, Indian suppliers must develop collaborative links with buyers working together as partners during the buying-supplying process (Singh, 2008).

Study on buyers' perception of India as an apparel sourcing country has shown that while India was perceived satisfactorily on price, quality, technology, flexibility, small order quantity etc., it was perceived unfavourably on lead times, responsiveness, communication, trust, meeting contractual obligations, ethical standards etc. (Verma, 2002).

## **III. Merchandising in Apparel Industry**

Merchandising is defined as activities undertaken to ensure that the right product reaches at the right price in right quantity and at the right time to the final destination. (Gowrek, 2004). In the apparel industry, merchandiser is the bridge between the management (or) industry and the buyer. Merchandiser is the person responsible to make the product according to the buyer's parameters and satisfaction. Merchandisers coordinate various functions like buying the raw material (which is required to finish the product), making the apparel, finishing the apparel, documentation (over all view), finally shipping.

A fashion merchandiser needs to be (Gowrek, 2004)

- a) Versatile and flexible as the buying schedule may include many tasks.
- b) Enthusiastic, self motivated, creative, imaginative
- c) Conscientious, professional, decisive and numerate.
- d) Foresighted and people's person

Responsibilities of the Merchandiser

Muhammad and Brookshire's (2011) study results revealed daily duties of merchandiser as:

- i. Vendor management-Vendor relationship building and maintenance are considered one of the most important firm activities because vendors or suppliers are a critical element of a firm's profitability
- ii. Product development -The knowledge of product development and its role in global sourcing seemed to be important for merchandisers. The responsibility could be as small as acquiring materials for product development, extending to dynamic work relationships with product developers. Merchandisers must understand the product development process and international sourcing. Also a time and action calendar, to communicate the significance of timely follow-ups in sourcing is a pre requisite.
- iii. Production management- The study data showed that merchandisers are responsible for managing entire production or manufacturing processes . In overseeing production, merchandisers are responsible for three major production factors – cost, on-time delivery and quality. To achieve the objectives of cost, delivery, and quality, merchandisers are responsible for resolving production issues and problems with vendors. They must know different objectives of costing and quality assurance. Other responsibilities, such as scheduling, vendor performance tracking, and quality evaluation may help achieve cost, delivery, and quality objectives.
- iv. Internal collaboration- Collaboration helps to foster internal relationships between colleagues with whom individuals can consult about work related matters that internal interactions among different constituencies to negotiate and resolve various conflicts may occur during planning, managing, and executing processes.

Apparel firm employers sought merchandisers to coordinate meetings, interface between departments, and play a liaison role within all levels of the firm. Merchandisers work closely with the quality assurance, importing, logistics and legal departments, suggesting a wide range of responsibilities directly related to various departments.

In a paper by National Skill Development Corporation on Human Resource and Skill Requirements in the Textile Industry, India (2010), the skills required in a merchandiser are:

- a) Understanding of various production activities as the merchandiser is interface between the buyer and the company
- b) Soft skills like negotiation and communication skills. These skills assume more significance for export oriented units.
- c) Ability to handle multiple accounts/customers.
- d) Thorough understanding of costing.
- e) Understanding of buyer requirements of design and quality.
- f) Reviewing materials used for garment manufacturing
- g) Understanding of various production activities
- h) Ability to work closely with other functions like design, production etc.
- i) Time management skills to handle multiple orders at the same time.

Jobs of a Merchandiser in an apparel manufacturing company can be seen in **Table I**.

Pre-production	Production	Post- production
-Product Development and Sampling -Costing and Negotiation -Fits and Pre-Production Approvals -Color / Fabric approval -Fit approval -Plan Factory Capacity and Allocations	-Production and Line Planning -Fabric and Trim Sourcing -Maintaining Records -Fabric Booking -Trim Confirmations -Testing -Product Safety -Production follow up -Quality Audits	-Shipment Status -Vessel / Flight Planning -Documentation -Payment Follow up

**Table I** - Jobs of a Merchandiser in an apparel manufacturing company

(Source: Paper Presentation by the author at International Conference on Apparel and Home Textiles, New Delhi, Sept 2008)

#### **IV. Apparel Supply Chain Competitiveness & Performance**

Competitiveness is defined as relating to, characterized by, or based on **competition** (Merriam- Webster, 2010).

Firm competitiveness is the basic capability of perceiving changes in both the external and internal environment and the capability of adapting to these changes in a way that the profit flow generated guarantees the long term operation of the firm (Gelei,2004).

A company's competitive strategy defines, relative to its competitors, the set of customer's needs that it seeks to satisfy through its products and services. (Chopra & Meindl, 2008).The competitive strategy is based on its customer's priorities.

The term market competitiveness can be defined as: Having a position of superiority over competitors in satisfying the aggregate demand for certain products or services (Nowell, 2004). In the textile and apparel industries, being competitive in the market means that companies must also be competitive economically. Economic competitiveness in the textile and apparel industries means that one must sustain and grow a business within the global environment, through optimization of products, processes, and strategies to gain a competitive advantage.

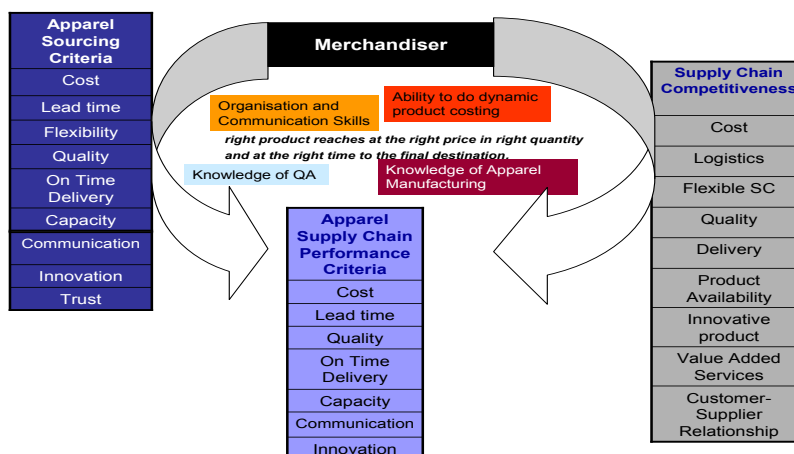
Supply-chain competitiveness is a holistic matter that requires each partner within the supply chain to align their structural elements. Some important elements of supply chain competitiveness as established by various researchers are cost, logistics, flexible supply chain, quality, delivery, product availability, innovative products, value added product and customer supplier relationship (Nowell 2005, Cooper et al. 1997).

Though there has been much research in terms of performance measures for supply chains, textile and apparel specific research in the area is lacking (Allen, 2008).Most important metrics to gauge the performance of textile and apparel supply chains are-cost, on-time delivery, quality, lead time and capacity.

In a research on 'Improving the Competitiveness of the Haitian Apparel Supply Chain' (Uluskan 2010), service level was an important parameter to improve competitiveness. Service refers to response rates and communication levels in case of a problem, suggestions for the solution to that problem, the sample

preparation and delivery time, being proactive in helping buyer companies to run their business, watching the marketplace for the type of products that they produce and bringing new ideas to buyer companies.

### V. Conceptual Model Linking Merchandisers' Functions to Supply Chain Competitiveness



### VI. Need for Research

Considering the important role that apparel manufacturing companies play in the buyer driven apparel supply chain, the role of a merchandiser in such companies is of prime importance. The literature available on 'merchandiser' most often focuses on the retail companies' merchandiser. Research on the role of merchandiser in apparel export manufacturing companies was found lacking.

Merchandisers play a pivotal role in ensuring right product reaches the consumer at the right price, quality and time. Price, quality and timeliness are also important factors of supply chain competitiveness in the apparel industry and hence it obviously emerges that merchandisers' performance is likely to have an impact of supply chain competitiveness.

### VII. Objectives of Research

This study was descriptive-cum-diagnostic research work. The aim of the study was:

- i. To identify the most instrumental factors, for assessing merchandisers' performance.
- ii. To analyse the relationship between merchandiser performance factors and supply chain competitiveness factors for apparel export units.

### VIII. Research Methodology

Out of an initial population frame of 2300 apparel export companies located in National Capital Region of Delhi, 128 companies were selected on random basis out of which 92 were selected on judgement cum convenience basis. Consequent upon the response rate, 80 companies agreed to participate in the research study on merchandiser performance and supply chain competitiveness of apparel export units. The response rate was 87%.

The following criteria was adopted in selecting sample companies

- i. The company should have a manufacturing/processing/assembly unit or head office/sourcing office in NCR of Delhi.
- ii. The sample company must have annual turnover of at least Rs 20 crore.
- iii. The companies could be apparel export manufacturing units, buying agencies and international apparel buyers.
- iv. The merchandising department of participants should have minimum staff strength of 5 merchandisers.

The research covered 80 companies. Of these 80 companies 50 were manufacturers for exports and 30 were apparel buying agencies/liaison offices. Fifty eight percent of the sample represented private limited companies where as proprietary firms accounted for twenty five percent of the total sample, followed by eight percent of public limited companies balance being joint ventures.

**Pre testing of Questionnaire:** A tentative questionnaire comprising of about 40 questions was developed for pre testing purpose. The questionnaire was then administered to 10 conveniently selected samples of apparel export companies and personal interviews were conducted.

**c) Content Items of the Questionnaire:** As a result of pre testing and feedback from respondents and experts of the apparel industry, questions were edited, re-designed, consolidated, simplified. The final questionnaire consisted of 45 questions which covered aspects of merchandiser job responsibilities and apparel supply chain competitiveness factors as relevant to the apparel industry

**d) Response Mechanism:**

70% of interviews were in-depth personal interviews, 20% were structured telephonic personal interviews and balance 10% responses were received on email.

Those answering the questionnaire were top management of the apparel export company-the owner/CEO, General Manager or Merchandising manager of the apparel export unit/company selected

**e) Reliability of Variables Measured-**To measure the extent to which a procedure yields consistent results on repeated administrations of the scale, the reliability analysis was performed using SPSS 16.0. The cronbach alpha value was .911

**IX. Data Analysis**

The data analysis was conducted in 2 steps:

- i. Hypothesis Testing.
- ii. Correlation Analysis.

**9.1 Hypothesis Testing**

The factors that could help enhance merchandiser performance were enlisted at the beginning of the study, as derived from literature survey.

Twenty one hypotheses were formulated and t-test was then chosen to determine the statistical significance between sample distribution mean and a parameter and the key inferences at 95% confidence level were drawn.

The hypothesis testing in Table II showed that the mentioned variables have an effect on merchandisers' performance (null hypothesis was rejected):

**Table II. Hypothesis Test Results (Null Hypothesis rejected)**

	Hypothesis	t	df	Sig(2-tailed)
H1	Merchandiser performance affects the business results of apparel export units	7.955	79	.000
H2	Understanding needs of the end customer helps enhance merchandiser performance	6.553	79	.000
H3	Capability for collaborative forecasting is crucial for performance of merchandisers	-7.010	75	.000
H4	Proactive product and market research is a pre requisite for a merchandisers' performance	-9.205	79	.000
H5	Enhancing use of ICT tools is critical to the overall functioning of the merchandisers	2.212	79	.030
H6	Capability of dynamic product costing ameliorates merchandisers' performance	3.321	79	.001
H7	Global sourcing and supplier management strengths help enhance merchandisers' performance	-3.287	77	.002
H8	Understanding of import regulations helps merchandisers in planning orders and styling in a better way	-10.911	73	.000
H9	Appropriate and timely information sharing with all internal departments and buyers is crucial for performance of merchandisers	8.232	79	.000
H11	Knowledge of quality assurance in apparel manufacturing helps enhance merchandisers' performance	-5.000	76	.000
H12	Co-ordination skills for third party logistics and distribution facilitates merchandisers' performance	-7.891	79	.000
H13	Capability to help plan and schedule production capacity and resources is crucial in improving merchandiser performance	-2.257	79	.027
H15	Strong knowledge of garment manufacturing is expected to improve performance of the merchandiser	2.351	79	.021
H16	Customer centric sense of design and aesthetics enables better performance of the merchandiser	-4.114	79	.000
H17	Organization and Communication skills help enhance merchandisers' performance	6.813	77	.000
H18	Ambiguous job order description and performance standards may	6.633	78	.000

H19	hamper the performance of the merchandiser Thorough raw material and product knowledge enables better merchandiser performance	6.133	77	.000
H20	Pre-emptive capability to solve production and logistics problems enhances merchandiser performance	11.497	79	.000
H21	Training on regular basis	3.460	79	.001

The two variables where null hypothesis was not rejected are mentioned in Table III.

**Table III.** Hypothesis Test Results (Null Hypothesis not rejected)

	Hypothesis	t	df	Sig(2-tailed)
H10	Constant feedback from buyer impacts merchandisers' performance	.234	79	.815
H14	Ability to maintain requisite documentation is important to enhance overall performance of a merchandiser	1.136	78	.259

## 9.2 Correlation Analysis

Correlation Analysis was carried to find out the correlation between variables of merchandiser performance and supply chain competitiveness. Correlations measure how variables or rank orders are related.

**Table IV.** Correlation between Merchandiser performance and Supply Chain Competitiveness Variables

Merchandiser Performance Variable	Supply Chain Competitiveness Variable	Pearson Correlation (r)	Sig.( 2-tailed)
Knowledge of quality assurance in apparel manufacturing	Delivery	.502	.000
Knowledge of dynamic product costing	Retail Pricing	.525	.000
Organisation and communication skills	Attitude and Work Culture	.525	.000
Organisation and communication skills	Responsiveness to buyers	.614	.000
Knowledge of apparel manufacturing	Sampling Lead time	.565	.000
Knowledge of apparel manufacturing'	Production Lead time	.512	.000
Knowledge of apparel manufacturing'	Product Quality	.504	.000
Knowledge of dynamic product costing	Product Quality	.487	.000

The variables that have 'strong' and 'positive correlation' between them are:

- i) Knowledge of apparel manufacturing has strong correlation with-Sampling Lead time, Production Lead time and Product Quality
- ii) Knowledge of dynamic product costing has strong correlation with- Retail Pricing and Product Quality
- iii) Organisation and Communication skills are strongly correlated to-Attitude and Work Culture and Responsive to buyers.
- iv) Knowledge of Quality Assurance (QA) has strong correlation with Delivery.

## X. Conclusions

### 1) Key Merchandiser Performance Parameters are

- |   |  |
|---|--|
| a) Customer centric sense of design and aesthetics                          | h) Organisation and communication skills                             |
| b) Thorough raw material and product knowledge                              | i) Understand needs of end customer                                  |
| c) Fabric and trim sourcing capability                                      | j) Capability of collaborative forecasting                           |
| d) Share appropriate and timely information with all departments and buyers | k) Actively involved in product and market research                  |
| e) Help plan and schedule production capacity & resources                   | l) Global sourcing and supplier management                           |
| f) Knowledge of Quality Assurance (QA) in apparel manufacturing             | m) Knowledge of apparel manufacturing                                |
| g) Knowledge of dynamic product costing                                     | n) Co-ordination skills of distribution and logistics                |
|   | o) Pre-emptive capability to solve production and logistics problems |

### 2) Correlation analysis showed the parameters of merchandiser performance that have an impact on supply chain competitiveness

- a. 'Knowledge of quality assurance in apparel manufacturing' and 'Delivery' suggesting that merchandiser's knowledge of apparel manufacturing and quality assurance helps them manage the delivery schedules in a better manner.
- b. 'Knowledge of dynamic product costing' and 'Retail suggesting that retail pricing calculation exercise is better managed by those merchandisers who have the knowledge of costing dynamics.
- c. 'Organisation and communication skills' with 'Attitude and Work indicating those merchandisers who have developed themselves on organisation and communication skills have better attitude and contribute in improving work culture of the organisation.

- d. 'Organisation and communication skills' with 'Responsiveness to indicating that merchandisers with better organisation and communication skills can be more responsive to needs of buyers.
- e. 'Knowledge of apparel manufacturing' and 'Sampling Lead Time' implying the fact that sampling time can be optimized by merchandisers who have better technical knowledge (that of apparel manufacturing).
- f. 'Knowledge of apparel manufacturing' and 'Production Lead Time' implying that merchandisers who have knowledge about apparel manufacturing are better equipped to manage production lead times.
- g. 'Knowledge of apparel manufacturing' and 'Product Quality' suggesting that product quality is managed better by merchandisers who have knowledge about apparel manufacturing.
- h. 'Knowledge of dynamic product costing' and 'Product Quality' suggesting that the merchandisers who have command of product costing skills can manage product quality (and design) better.

## **XI. Recommendations**

### **i. Systems within the organisation-**

- a) Dedicated training cell- A dedicated training cell which assesses the training needs and organizes training of merchandisers on a routine basis.
- b) Training of Trainers- Apart from getting external expertise in training, the trainers in many cases could be senior people from within the company. Refresher training for trainers is also required.
- c) Role of Information and Communication Technology (ICT)- Resource planning systems like ERP systems for in-house coordination with real time EDI (Electronic Data Interchange) systems to communicate with buyers and suppliers could help merchandisers organize their work better, communicate, share and coordinate faster with all functions concerned
- d) Robust infrastructure and quality management systems- The merchandiser in any organisation has to coordinate with various functions/departments and ensures that the processes therein are executed in a timely and orderly manner. Strengthening the functioning of each department particularly the production and quality assurance departments could strengthen the execution skills of the merchandiser.

### **ii. Merchandisers' Initiatives**

- a) Right from the time new products are sampled, the merchandisers need to acquaint themselves with the behaviour and feel of the raw material and the apparel products. The initiative of the merchandisers in this area could help prevent buyers from selecting a difficult to produce product, help the apparel export unit do appropriate costing on tough product and help production department of the company handle the new product in appropriate manner.
- b) Apart from learning execution of merchandising job responsibilities, merchandisers need to understand the larger and aggregate picture as regards supply chain, positioning of their organisation is in the supply chain and ways in which their role can enhance the competitiveness of their organisation.

## **References**

- [1]. Allen, Ronald Maurice ( 2008), 'Performance Measurement of Textile and Apparel Supply Chains in Developing Countries', <http://repository.lib.ncsu.edu/ir/bitstream/1840.16/6200/1/etd.pdf>
- [2]. Ali, Saqib , Ali, Zeeshan (2010), 'The Role Of Merchandiser In Managing The Supply Chain', <http://hdl.handle.net/2320/6708>
- [3]. Anand, Shobhna (2003) 'Indian Textile And Garment Industry: Roadmap To Enhance Its Competitiveness. CRISIL Infrastructure Advisory', <http://www.crisil.com/downloads/publications.html>
- [4]. Beamon, Benita (1999) 'Measuring Supply Chain Performance', *International Journal of Operations and Production Management*, 19(3), 275-292.
- [5]. Bhavani, T. A., & S. D Tendulkar (2001), 'Determinants of firm-level export performance: a case study of Indian textile garments and apparel industry',
- [6]. <http://www.cdcdse.org/papers/work81.pdf>
- [7]. Birnbaum, David, *Importing Garments through Hong Kong* (Hong Kong, Third Horizon Press, 1993)
- [8]. Banomyong, Ruth, (2010), 'Supply Chain Dynamics in Asia', [http://www.adbi.org/working-paper/2010/01/07/3427\\_supply\\_chain\\_dynamics\\_asia/](http://www.adbi.org/working-paper/2010/01/07/3427_supply_chain_dynamics_asia/)
- [9]. Carr, J.E and M Hasan (2008), 'An empirical study of performance measurement systems in manufacturing companies', *Journal of Achievements in Materials and Manufacturing Engineering* (2008), Vol 31, Issue: 2, pp 616-621
- [10]. Cesca, Lynsey Anne, (2006), 'Economic Competitiveness in the Global Textile Supply Chain: Examination of Logistics Cost Structures', [repository.lib.ncsu.edu/ir/bitstream/1840.16/935/1/etd.pdf](http://repository.lib.ncsu.edu/ir/bitstream/1840.16/935/1/etd.pdf)
- [11]. Chandra Pankaj (2006), 'The Textile and Apparel Industry in India, *Indian Institute of Management*', <http://www.indiantextilejournal.com/articles>
- [12]. Christopher, M., R.Lowson, H.Peck, (2004) 'Creating Agile Supply Chains in the Fashion Industry', *International Journal of Retail & Distribution Management*, Vol. 32 No.8, pp.367-76.
- [13]. Christopher, Martin, Helen Peck and Denis Towill (2006) , 'Taxonomy for selecting global supply chain strategies, <http://www.martin-christopher.info/downloads/creating%20agile%20supply%20chains%20in%20the%20fashion%20industry.pdf>
- [14]. Christopher, Martin and Denis Towill (2002) , *Developing Market Specific Supply Chain Strategies*, *International Journal of Logistics Management*, Vol. 13, No. 1, 2002, pp 1-14

- [17]. Cook, Celeste Nicole(2004), 'The role of sourcing agents in global apparel supply chains: An exploratory study', <http://krex.k-state.edu/dspace/bitstream/2097/4159/3/CelesteCook2010.pdf>
- [18]. Cooper, Sharp Dr. Peter Rayson, Dr. Benjamin Botchway and Prof. Ray McCafferty (2005), 'Performance Measurement in UK textile & clothing manufacturing SMEs: Regaining the initiative', [http://webzoom.freewebs.com/sharpcooper67/401\\_17\\_Cooper.pdf](http://webzoom.freewebs.com/sharpcooper67/401_17_Cooper.pdf)
- [19]. Das, Arindam (2005), 'Associative Supply Chain Management, Building Vendor Partnerships' Book of Papers of the 6th Annual Conference of IFFTI.
- [20]. Donnellan, John, (2007) Merchandise Buying and Management, (3rd Edition), New York: Fairchild Publications
- [21]. Dickerson, K. (1999), 'Textile and Apparel in the Global Economy', 3rd ed., Prentice-Hall, Upper Saddle River, NJ.
- [22]. Gamage, A.H.H. (2007) E-Business Impact on SCM in the apparel industry operating between a developing and a developed economy, <http://dspace.bucks.ac.uk/dspace/bitstream/10239/132/1/Gamage,%20Asanka%20-%20Thesis%20Pdf.pdf>
- [23]. Gandhi, Archana (2008), 'Merchandisers' role in quality improvement', Paper presented at International Conference of Apparel and Home Textiles, Organized by Okhla Garment and Textile Cluster.
- [24]. Gelei, Andrea (2003), 'Competitiveness: A match between value drivers and competencies in the Hungarian automotive supply chain', [www.iimm.org/knowledge\\_bank/IFPSM/Andrea%20Gelei.pdf](http://www.iimm.org/knowledge_bank/IFPSM/Andrea%20Gelei.pdf) Gereffi, Gary(2008), 'Global Value Chains, Industrial Upgrading and Jobs in Large Emerging Economies: A comparison of China, India and Mexico', [microlinks.kdid.org/.../global-value-chains-industrial-upgrading-and-jobs-large-emerging-economies](http://microlinks.kdid.org/.../global-value-chains-industrial-upgrading-and-jobs-large-emerging-economies)
- [25]. Gereffi, Gary & Olga Memedovic (2003), 'The Global Apparel Value Chain: What Prospects for Upgrading by Developing Countries?', p.3-10, <http://www.inti.gov.ar/cadenasdevalor/ApparelUNIDOnew2Feb03.pdf>
- [27]. Get connected: E applications in the Textile & Clothing Sector (2005), International Trade Centre, Product & Market Development.
- [28]. Gibbon Peter, (2001), The Cutting Edge UK Clothing Retailers' Global Sourcing Patterns And Practices And Their Implications For Developing Countries, [http://www.dtiis.dk/graphics/CDR\\_Publications/cdr\\_publications/working\\_papers/wp-01-4.pdf](http://www.dtiis.dk/graphics/CDR_Publications/cdr_publications/working_papers/wp-01-4.pdf)
- [29]. Gowrek, Helen (2004) Fashion Buying, Publisher: Blackwell Pub Professional
- [30]. Hsiao Melody J, Purchase Sharon, Rahman Shams,(2002) The impact of buyer-supplier relationship and purchasing process on the supply chain performance: a conceptual framework, [www.impgroup.org/uploads/papers/4210.pdf](http://www.impgroup.org/uploads/papers/4210.pdf)
- [31]. Hines Tony, (2001), Fashion Marketing: Contemporary Issues, Edited by Tony Hines and Margaret Bruce, Oxford, Butterworth Hienmann,.
- [32]. Human Resource and Skill Requirements in the Textile Industry (2010), National Skill Development Corporation, <http://www.nsdindia.org/pdf/Textiles-Clothing.pdf>
- [33]. Johnson, M. Eric, (2002), 'Product Design Collaboration: Capturing Lost Supply Chain Value in the Apparel Industry', [www.tuck.dartmouth.edu/cds.../pdf/Press\\_ProductDesignCollaboration.pdf](http://www.tuck.dartmouth.edu/cds.../pdf/Press_ProductDesignCollaboration.pdf)
- [34]. Koprulu, Asli, Albayrakoglu, M. Murat (2007), 'Supply chain management in the textile industry: a supplier selection model with the analytical hierarchy process', <http://www.isahp.org/2007Proceedings/Papers/Working%20Sessions/Suppliers%20Selection/Supply%20Chain%20Management%20In%20The%20Textile%20Industry.pdf>
- [35]. MacCarthy, Bart L and P G S A Jayarathne,(2009), 'Fast Fashion: Achieving Global Quick Response (GQR) in the Internationally Dispersed Clothing Industry', Springer Handbook on Innovative Quick Response Programs in Logistics and Supply Chain Management, pp 37-60, Springer.
- [36]. Muhammad, Amanda J. and Jung E. Ha Brookshire (2001), 'Exploring job responsibilities and requirements of US textile and apparel sourcing personnel', Journal of Fashion Marketing and Management, Vol. 15 No. 1, pp. 41-57
- [37]. Mentzer, John, Min,Soonhoong, Zacharia,Zach (2000), The nature of interfirm partnering in Supply Chain Management, Journal of Retailing, [forums.utk.edu/readings/Nature.pdf](http://forums.utk.edu/readings/Nature.pdf)
- [38]. Nowell, Candace Hope (2005), 'Market Competitiveness in the Global Textile Supply Chain: Examination of Supply Chain Configurations', <http://www.lib.ncsu.edu/resolver/1840.16/2455>
- [39]. Rosenau, J. A. & D. L. Wilson, (2006), 'Apparel merchandising: The line starts here (2nd ed.)' New York: Fairchild Publications
- [40]. Roy Satyaki, (2009), 'Garments Industry in India:Lessons from Two Clusters'. Working Paper No: 2009/01 ISID <http://isidev.nic.in/pdf/WP0901.PDF>
- [41]. Sharma, Sunil, Supply Chain Management: Concepts, Practices and Implementation, Oxford University Press, 2010.
- [42]. Singh, Kamlesh, (2008), 'Building Relationships With India's Suppliers: Exploring Perceptions Of U.S. Apparel Industry Buyers', [libres.uncg.edu/ir/listing.aspx?id=663](http://libres.uncg.edu/ir/listing.aspx?id=663)
- [43]. Tewari Meenu, (2005), 'Post-MFA adjustments in India's textile and apparel Industry: emerging issues and Trends' Working paper no. 167, ICRIER
- [44]. Verma, Samar, (2002), Export competitiveness of Indian textile and garment industry, ICRIER
- [45]. Uluskan,Meryem, (2010), 'Improving the Competitiveness of the Haitian Apparel Supply Chain', <http://repository.lib.ncsu.edu/ir/bitstream/1840.16/6301/1/etd.pdf>