

Supply chain management in fast fashion industry- a strategic approach

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ABSTRACT- Today people will not step out of the house even at the darkest hour without having their best outfit and shoes on them. In such a competitive, fast pace, large scale and highly profit giving market supply chain management is the need of the hour because it is one process that make sure that brand moves forward on the path of becoming a success in any upcoming fashion season. Also, supply chain plays an important role to quickly disseminate latest fashion statements and styles that are viral and trending. Supply chain management has become an essential ingredient for all the individuals and business houses who source the product from outside. The clothing business/ fashion is one thing that changes more quickly now, and it has endless options in several products that give rise to complex supply chain. Supply chain can be described as management and movement of products and resources between two places or parties; and also from one section or department to the next. Timely management of needed resources to reach their appropriate destination in the exact time in enough quantity is what the supply chain provides.

Keywords: Fast fashion, supply chain system, garments, environmental concern

Introduction- Fashion is the latest fad that rules the world and apparel industry was around \$1.5 trillion in 2020 and estimated to grow to \$2.25 trillion by 2025. Each and everything element to live life now-a-days goes by the sense/ flavor/ and taste of fashion. The social media has popularized things with jet speed and enhanced per capita income of majority individuals have made them fashion freaks and also fashion slaves. The pivotal aim of framing a supply chain management is locating necessary resources at minimum available cost which is followed by proper management of dispersing the goods and to find services linked with logistics. This makes logistics another important pillar of clothing business supply chain management.

Various fashion industries like H&M, Zara and Forever 21 have entirely transformed the way Americans dress up and many of these popular plants brands including Zara Tokyo talkies, Global desi, Ginger, Mango, Label Ritu Kumar are available even in India. Those days are bygone when fashion was released according to the four seasons of the year. Now new fashion styles are introduced not only weekly but on a daily basis and on very affordable price which initiates an otherwise passive customer to engage in active shopping and here comes the need of supply chain management. To fulfill the ever-growing demand of low-cost clothing various brands have now joined hands with supply chain management processes that are responsible to manufacture enormous quantity of synthetic petroleum based products and garments in third world countries which has resulted in gigantic level of greenhouse gases and land fill waste. This led to many world-famous campaigns¹ (e.g. by brands like **Outland Denim, Ecoalf, Toad&Co**) and controversies² (Allbirds, Nike etc.) all jarring at the fashion industry due to which they had to kneel down in 2010 and were made to adopt sustainability initiative under the umbrella of going eco-friendly. But these efforts undertaken by fashion industries are very paltry and nanoscopic and it is estimated that till 2030 fashion industry will keep on crippling and crabbing the environment in irreversible way despite of its pompous sustainability efforts.

The fashion industry needs to be more environment-friendly and sentient towards environment and to garner this they should purport to whittle environmental impacts of their entire supply change which will clamor for sustainable supply chain management that inculcates sustainable planning banausic in the entire supply chain operation. Fashion totems can invigorate a two step approach the first one being diminishing indirect influence created by upstream and downstream actions and secondly re-designing habiliments designing in a sensible manner so that present sustainable tenor capstone in their firepower.

Moving one step forward now has evolve the idea of ultra-fast fashion which is ere in fast fashion in ways that ultra-fast fashion does not create any surplus inventory, ultra-fast-fashion targets on demand production, and emphasizes on manufacturing at local level, also there are short lead times (varying from few days to a week); with a combination of agile supply chain strategies are responsive which is the actual need of eco-friendly and environment friendly business to survive [1].

2.0 Methodology

2.1 Review of literature

Until last century fashion industry used to follow fixed calendar dates of festivals and trade fairs which were optimal time to introduce new fashion and also forecast for coming season [2]. When this pattern was followed in fashion industry it was even possible to forecast demand and trends for the next coming year which was based on sales data from previous year [3]. Due to certain elements and changes in the fashion industry the stable situation that had continued for long has now transformed into a new model called as Street fashion or fast fashion [4]. Fast fashion here employees to production and transformation of trendy designs into finished articles that are within the reach of general masses [5]. The main target of this industry is to attract customers to visit stores very often which would directly increase the purchase frequency and number of fashionable apparels [6]. This can be achieved by inculcating clothing which is economic and low cost and whose shelf-life is shorter than otherwise conventional drapes [7].

This has brought into trend shorter market cycles, a large number of seasons and buying requirements of various organizations that include low-cost; flexible manufacturing; high end motif; purposeful blending of trending clothing, raw material, and available supplies all in a very short lead time. Supply chains in fashion industry in earlier times were protected by massive retail stores to competition out of market which was later replaced by quickly responsive and strategically linked rock-bottom supply chains having shorter lead time and who were customer oriented [8]. These structural changes were imbibed by applying just in time strategies, agile supply chain structures [9] along with strategies driven by information like those utilized by quick response systems that are based on real time data of sales points, where was also needed a quick and prompt response to present market information [10]. According to Bruce and Daly (2006)

[11] in fast fashion business even the distinguished and venerable supplier buyer- association ought to possess short response nature so that they are able to milk both lean and agile supply change strategies and on the other hand their intrinsic functions should stage-manage to execute mint and inerrant buying process. All these agglomerations have nocuous and sinister environmental impacts which is why fast fashion companies need to adopt sustainable strategies in supply chain management. Because of globalization a large part of manufacturing textiles business has shifted to less developed countries and companies like Zara and Marks and Spencer who initially were highly dependent on domestic alternatives also have widened their horizon reaching to countries like Bangladesh India and Turkey where they have search and spotted manufacturers that can match their flexibility and design requirement standards [12].

2.2 Methodology- Detailed study of several secondary sources was conducted, the case studies related to renounced brands like Zara and Marks&Spensor (M&S) were given special attention.

3.0 Results and Discussion- Various types of supply chain strategies have become widely popular among fast fashion companies that are working in the retail sector both at domestic level and international platform. This sector is ballooning and hence it becomes vital that it is able to maintain its pace with escalating demands of fashion requirements by people not only in urban residencies but also in sub-urban townships. To meet and fulfill customer demand one of the pivotal factor is to understand customer importunity and dun based on that to cobble up and promulgate effective supply chain strategies for example people from millennial generation prefer latest brands and designs and are less focused about the customer service and quality; their sine qua non also reflects by the disposable income in hand where blue blood people are seen to be brand loyal and always opt for better quality products even if they have to pay a fat amount to procure it. 21st century environmentally conscious consumers have seen to switch away from disposable clothing which mirrors their environmental advertency.

Just-in-time approach in fast fashion industry believes in delivery of finished goods at the blink of an eye and satisfy customer demand and does not slay down to hold burdensome and costly inventory. For e.g. supply change strategy of Zara exhibits that about 40% of the clients wanted to see new gaiety every month while about 23% wanted to see it each week (Fig. 1). This gives us the conclusion that on an average customer demand to buy a new design is around every 2 weeks which can become a gigantic success with good supply chain management strategy like quick response. Another most popular supply chain strategy also used by Zara is centralizing the production of their goods which makes Zara more efficient and effective to meet ever growing customer demands.

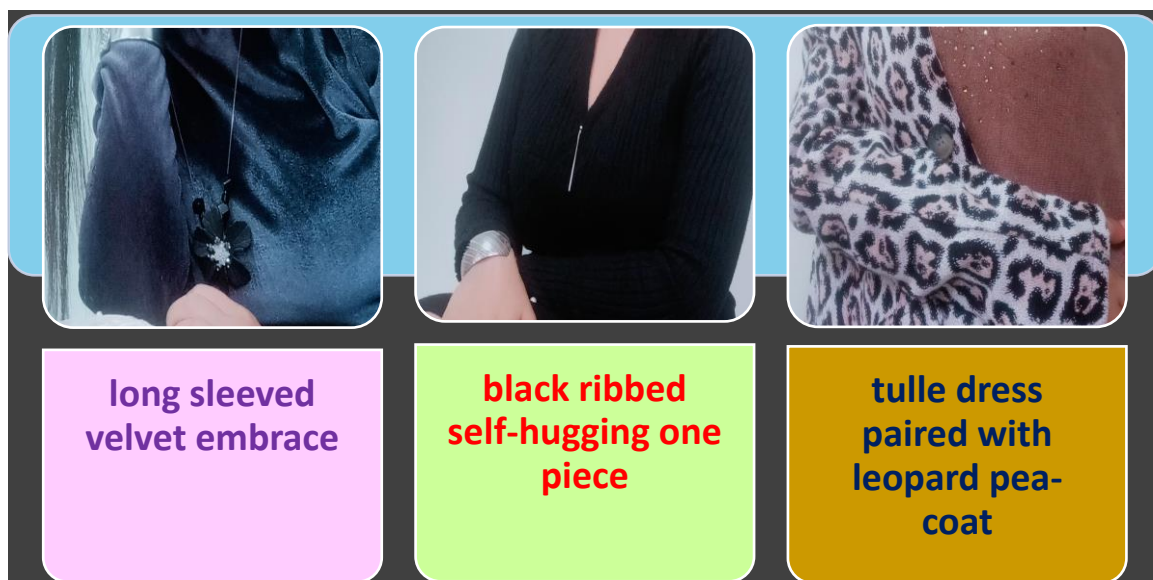


Fig. 1- Zara stand-outs for the latest winter season

Other supply change strategies like the one used by H&M is in-house production of goods which enables them to keep a vigilant eye on the entire production cycle and they are always sure that the demand and supply gap can be reduced to the minimum. But because in house production can cost an arm and a leg to the fashion house most fashion organizations

rarely deploy in house production. A strategy used by Zara parent company Spanish Inditex is that it has broken down the production into specialized activities and each specific activity is carried-out at a place where it can efficiently contribute to the overall product value.

Mechanism of working of Supply chain system- There can be different strategies for managing the supply chain and fast fashion industry and few common methods have been briefly discussed underneath-

- a. **Pull supply chain management** - This Pull strategy is a method where the right time to customer demand to rise is awaited and then forecasting is done. The manufacturers of products here produce items only when they know that the consumers are going to purchase them. This can also be said that the end product users and customers approach the retailers asking for their demands and then the retailers are those who manage supply chain and source consumers demand. This is a beneficial practice because it helps diminishing risk of inventory and also abolishes over stocking thereby managing the inventory.
- b. **Push supply chain** - The strategy applied here includes forecasting in the initial stages about the market and then predictions are made in the supply chain. The manufacturers and designers bring out products and clothing pieces inspired by styles after analyzing trending demands. It can also be observed here that this type of supply chain is dependent on various upcoming seasons for example with the approach of summer season summer outfits and swim-wears will likely go popular so the manufacturers start production in the winter season itself. The reverse cycle happens where winter clothes are produced in summer season because it is known that summers will be followed by winters.
- c. **Hybrid supply chain management** - Intelligent conglomeration of push and pull supply methods is known as hybrid supply chain management. Under this method production companies and brands save inventory cost and it also assists in reduction of unpredictable demands from the customer side. The hybrid chain management is also profitable for industries that manufacture textile and helps them to create latest designs and garments this type of supply chain starts working as a push system where demands and needs of new products Pull these raw materials into garment manufacturing phase.

Steps involved- Supply chain process is involved in several stages of clothing industry starting from designing where we can see that the designs of clothes and garments quickly change with change in trends. Various types of linen, silhouettes, frills and frolics, fur/satin/velvet/cotton/spandex are identified each year from where the choice gets decided. It is estimated that every year million tons of garment constituting of rubbish clothes get dumped on lithosphere every second. Getting rid of old-fashioned clothes by discarding and abandoning them has become a very common practice nowadays.

Many fashion brands are working towards slowing down the wheel of fashion progress and trying to adopt a supply chain which is also sustainable and has a long lasting approach and in the process many famous brands have come up with cradle to cradle design framework and this type of framework should adopt either of the two cycles described below- industrial cycle - which closes the recycling loop by recycling of non-degradable material biological cycle - the recycling loop closes and the products are returned to nature in a harmless manner.

Next, comes the productions phase (Fig. 2) where creation occurs before which the raw material should be gathered and transformed into a fiber which later is into a fabric this face also includes other associated processes like dying/ washing/ finishing/ roll- press/ screen printing etc.

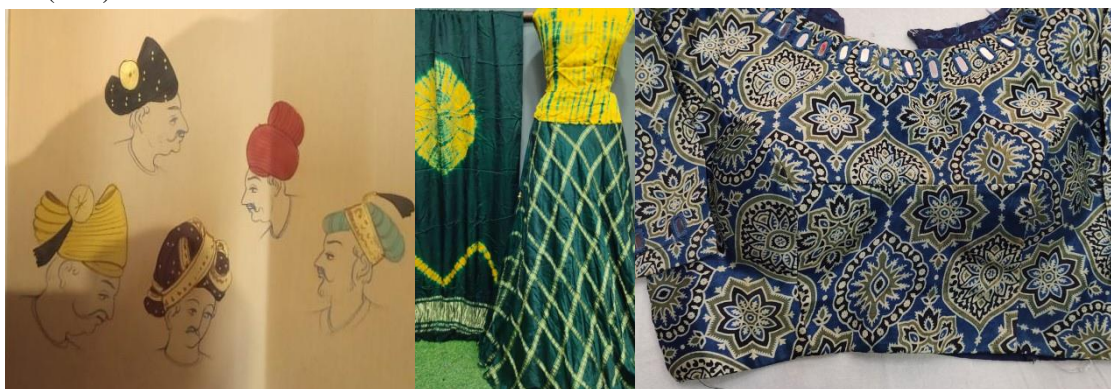


Fig. 2- Designing on paper Finished cloth/linen Tailored final product

This production phase is a major contributor of environmental pollution emitting toxic gases and also chemicals and these waste products lead to air and water pollution. A dark aspect of clothing industry is that it uses many chemicals to turn a fabric into a garment and all the resultant chemicals are washed off in nearby water bodies causing heavy water pollution. It is harmful not only for the environment but also for the aquatic ecosystem disrupting the entire aquatic food chain and responsible for killing of thousands of fishes and aquatic plants and planktons across the globe. Cotton fabric and cotton garments which are known worldwide for their comfort and elegance are actually one of the most detrimental fabrics to process and manufacture because making a single t-shirt requires thousands of liters of water. Another drawback of clothing industry particularly involved with cotton production is that high amount of forced labor is deployed in picking, spinning, and weaving of cotton which is the reason why many celebrities and high-class people now do not use cotton and instead of for synthetic fiber and synthetic fabric material. One of another reason using synthetic material is that they do not lose their sheen and color by repeated washing and can be used multiple times before they are finally aborted for further use (Fig. 3).



Fig. 3- Synthetic fabrics gaining popularity over cotton/natural materials

Various cycles of cloth production and supply chain involvement include production of clothes that involve 21 million people around the globe and around 12 million are women and girls who are working under pitiful conditions where violation and other harassment cases are of common occurrence [13]. The final process is distribution and retail where finished clothes get transported to retailers and to end users which is the customer and it involves high amount of air pollution and carbon emission. The red flag here is that the air pollution produced in this way is irreversible and obdurate. It is only the brands and companies involved in the cloth manufacture which can minimize its effect by taking appropriate actions.

The final stage of fast fashion that involved supply chain (Fig. 4) is when the product has to reach it's and consumer. The supply chain management at this level has to face large number of glitches/ issues problems/ and hassles where having effective backup strategies is the only way to cover up the losses. The textile industry is very poor in recycling of its

products even if the product is 100% recyclable which is a matter of grave concern both for the users and for the environment.

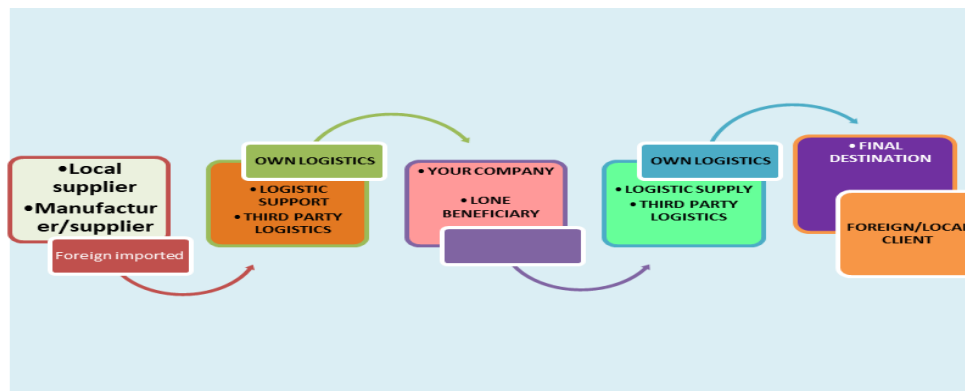


Fig. 4 - Supply chain management in Fast fashion sector

Merits of using supply chain management –

- ✓ In fast fashion industry supply chain management is a significantly important tool that enhances productivity and accelerates institutional cohesiveness
- ✓ Because fashion industry and brands have to work with a large number of suppliers the supply chain management can effectively minimize costs.
- ✓ Before making any commitment for new orders/manufacturing of any items the brand comes up with a sample product.
- ✓ Picking up every microscope detail from the sample product and its forecasting gets more effective and the retailers are able to order the amount keeping in view the market needs which helps in managing a hassle-free inventory
- ✓ Supply chain renders a flexible approach both at operational and organizational level because fashion industry needs to be flexible and also remain up to date with customer requirement
- ✓ The brands can remain constantly in touch with designers and manufacturers and the whole assembly is responsible to create new and latest design which bestows them the necessary flexibility to source the clothes
- ✓ The manufacturers have association with many diverse supply chain management networks with the help of which the brand and the companies are able to source materials in effective way
- ✓ Carefully executed supply chain management paves the path for better resource management and allows sustainability and transparency in the entire process.
- ✓ The methods by which raw materials are produced and processed and also the handling of goods by logistics are undertaken using sustainable practices
- ✓ It accelerates productivity because the brand and the companies should be fully ensured that good communication skills and appropriate collaboration with all partners and suppliers is the only effective way where the brand can produce and reach the customers in whatever circumstances available, hence there develops a friendly relation between brands and suppliers which makes the entire a cakewalk and without any hassle/disruptions
- ✓ This supplier-company assemblage helps the supply chain management and the companies to explore the untapped potentials which again leads to a healthy relation among them

Benefits of using supply chain in fast fashion industry

Supply chain management can enhance and accelerate the overall performance of any fashion organization. Supply chain management processes ply an abysmal sway on client satisfaction because the company that uses them is able to manage customer importunities and requirements and maintain and retain customer loyalty towards the fashion house and the brand. Companies having successful supply chain management system are able to create competitive advantage and also establish high customer felicity and create a niche for themselves in the cut throat competition of fashion industry

Conclusion- Supply chain management strategies like agile approach and in-house production enable the fashion house to be at par with the mushrooming fashion demands and manage everything dexterously. Whenever a company ensures

application of ultimate supply chain strategies which enables use of input and sources it downscales the overall cost and enhances profit margin of the organization. Supply chain management lays an aeonic and far-flung cogency on customer satisfaction because they are designed in such a way that final delivery of the good is guaranteed. It can be concluded that if supply chain management processes are effectively crafted and intelligently implemented then they definitely will fulfill the dreams and desires of modish vendees which will produce clients; that are satisfied and content in all means.

Major Challenges- One of the challenges that come across those fashion houses like M&S because they do not possess manufacturing facilities is that the short-lived products and disposable items can perish and increase the cost because of the involvement of third-party supplier. This is not the case in Zara because Zara manufactures its own items according to the required order and hence is able to bring down waste production to a minimum level. In case of M&S it has managed the shortcomings by applying just-in-time approach of supply chain management where a required product can be ordered and if they need more of the product then it can be delivered to the store rapidly to meet the demand.

Future Recommendations- Fast fashion companies now should also direct their focus and resources to identify demands of modern-day customers which should be accompanied by collection of information and analysis of data which is the important requirement in an agile framework and which will enhance the working and quick response of supply chain management strategy.

The cynosure of the companies should lead to information extraction out of the purchasing trends of consumer that empowers them to vaticinate the supply of required product in pellucid and overt manner. Companies are also recommended to dedicate a part of their system to social media trends (Fig. 5) where they can quickly and abundantly come to know about the likes and dislikes of customers; which will further help them to frame and design their supply chain management strategy which will definitely increase the performance and also lead to customer satisfaction.

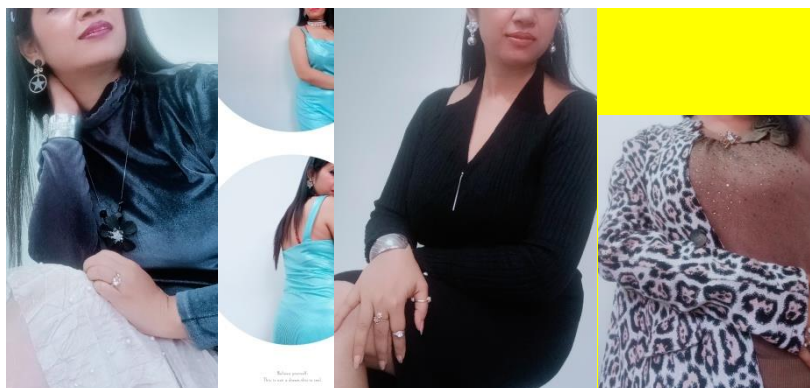


Fig. 5 - Social media representations of fall-winter trends

Adoption of green supply chain management where at the receiving and the products are packed in environment friendly polythene bags/ reusable paper/ paper bags made of reused and recycle paper can also become an effective means to attract new potential customers to a certain brand and ones this customer becomes an active one great supply chain techniques shall able to hold and retain the customer as long as his fashion taste buds are satisfied.

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