

A study on the Supply Chain Management Strategies of Structured, Unstructured Apparel Companies and Handloom Sector during Covid-19 and Solutions

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ABSTRACT

The Pandemic bomb that dropped on the world disrupted every business in ways they would have never imagined. Every corner of the world has been affected not sparing the MNCs or the MSMEs. The scenario of Indian Textile and Apparel Industries is no different. The major challenges faced by them leading to a disruptive supply chain includes migration of labor forces, constraints in cash flow, sourcing issues, transportation issues and so on. The Apparel Exports Promotion Council (AEPC) has stated that 65% of exports payments has not been completed due to the pandemic, which amounts to \$2 Billion. The disrupted supply chains due to lockdowns and cancellation of many orders in the domestic apparel retailers have also caused many retail shops to close because of the huge losses incurred.

Objective: *The purpose of this study is to analyze the different strategies in handling the supply chain for both structured and unstructured apparel retailers that they adopted during this pandemic. By comparing the strategies of companies that have been able to survive with those who couldn't, the flaws could be understood and improvement methods for the poor performing companies can be suggested. Moreover, the study would also help to understand the critical points of operation controlling which; the companies could improve their survival conditions in the market as well as prepare themselves for the onset of any other disaster conditions in the future. Further, the study would also understand the supply chain management strategies of handloom sectors and come up with plausible solutions for improving their condition.*

Methodology: *The data collection for this study is done through primary and secondary sources. Information regarding company performance, growth statistics before and after pandemic, customer base and losses incurred were posed to the structured, unstructured and handloom businesses. They were asked regarding the strategies they employed to control the operations and the issues they faced in detail. The analysis of the supply chain strategies was done taking into consideration the supporting factors including the reach of the companies, financial backing, help from government, transportation facilities and troubleshooting capabilities.*

Results: *Through this study, a detailed insight is obtained on all the parameters which are important in the developing a strong supply chain for companies that aided in their survival. Moreover, the important factors were identified which led to possible disruptions in the supply*

chain. The study will also help in coming up with damage control and prevention strategies that could be implemented whenever the company would face unpredicted problems.

Keywords: Covid-19

Introduction:

A supply chain, in a simpler statement, can be described as the interaction between a system of entities such as people, activity, technology, information, resources, infrastructure and organizations involved in moving a product or service from supplier and delivering it to the customer. SCM is no longer restricted to operation and functional areas of a firm; it has turned into a strategic issue acquiring attention from higher level of management in all sectors of industry (Jana, 2010). A supply chain is the global network used to deliver products and services from raw upstream to downstream through an engineered flow of information, physical distribution, and cash (Walker, 1999). Christopher (2006a) defined a supply chain to be a hub of organizations that are involved, through forward and backward connections, in the different processes and activities that generate value, which is delivered to the ultimate customer through products and services. A typical supply chain may involve a variety of stages like customers, retailers, wholesalers, distributors, manufacturers and component or raw material supplier (Jana, 2010).

The Covid-19 Pandemic has made the world stand still, disrupting peace, bringing in chaos and ambiguity. Since its inception in Wuhan China, Coronavirus has successfully reached all the corners of the globe, thereby spreading difficulties, miseries and introducing a never-ending crisis in our lives. Coronavirus has affected around 136 million people globally, out of which 2.94 million people have lost their lives to this dreadful virus.

The pandemic has led to the shortening of scope for job opportunities, restrictions on trade, disruption in supply chain management, closure of businesses and production units, lockdown of the economy

and ultimately leading to global recession. Not only the supply and operations have been affected, but also there has been a drastic change in the demand and consumption level. The pandemic made people realize the definition of essential and non-essential items and unfortunately, the fashion industry which is one of the major contributors to the total exports of the country, has been termed as non-essential by the consumers. The change in the dynamics of work in the form of Work from Home, in most of the companies has led to the decrease in the sale of fashion wear. With global lockdowns and social distancing rules, people are left with very minimum choices to make in terms of travel and leisure which has majorly affected the demand for new fashion products.

Literature Review:

Pandemic Led to Disruptive Factors in Supply Chain

The Covid-19 Pandemic has led to multiple disruptions and disorientations in the supply chain network thereby adversely affecting it. The Supply Chain, being one of the most essential part of the business is under great pressure and scrutiny. Disruptions at various levels have led to the closure of many businesses. The Textile and Apparel Supply chain has also witnessed a slowdown in the business due to the pandemic, which resulted in the migration of labor forces, difficulty in sourcing and availability of raw materials, delay in delivery of finished product orders, maintaining the warehouses, managing the inventory. The manufacturing units that were operating during the pandemic with reduced labor forces following the social distancing guidelines showed lower productivity and efficiency. A digital survey conducted by ILO Siraye program to assess the impact of COVID-19 on factory operational activities

highlighted that; the capacity utilization rate decreased by 30% in quarter 1 2020 as compared to 2019 statistics. There will be a decrease of revenue by 20% in 54% of the factories surveyed in 2020. 58% of manufacturers are willing to re-purpose production towards Covid-19 response goods (face masks, towels, bed linen, and patient gowns). They will need support on sourcing of machinery, raw materials, foreign exchange and training workers, etc. (Dawit, 2020). Global consulting firm McKinsey in its report of Immediate sourcing responses to Covid-19, 2020 has stated that the sourcing executives have to focus on four priorities securing inventory and managing the ramp-down and ramp-up of supply chains; optimizing cash flow along the supply chain and ensuring optimal trade-off between cash position, profit impact, and supplier stability; proactively managing financial risk across the entire supply chain, and finally adjusting internal costs, including open commitments and operating expenses of the sourcing function. (Berg, Haug, Hedrich, & Magnus, 2020).

Sourcing Issues

The sourcing of raw materials has also been very challenging for the textile and apparel industries. China, being one of the prime producers of various raw materials had suspended its exports to other countries, leading to sourcing issues for all those manufacturing units, which were dependent on it. Moreover, there was a shift in the production of cash crops, as more emphasis was given on the production of food crops. Hence, this led to the lower availability of fibers like cotton, silk. With majority of chemical industries, either being shut down or shifting the focus towards the production of sanitizers, disinfectants and other chemicals, the availability of synthetic textile fibers also reduced (Berg, Haug, Hedrich, & Magnus, 2020).

Transportation Issues

The transportation and logistics sector has also experienced a backlash due to global boundaries remaining shut during pandemic.

The air freight was available for the transfer of essential goods, majority of which were PPE kits, masks but the fashion items were left unattended in the warehouses. The relaxation in the lockdown rules saw the revival of logistics and supply chain and with the international travel, the transportation industry is gradually bouncing back.

Labor Issues

As the pandemic led to the global lockdown and business shutdown, the labors' life got adversely affected. They were forced to leave to their hometowns without proper financial aid. Many labors were forced to walk down the road to go back to their homes and were not allowed to work in the company until the lockdown was lifted up completely (Gulrajani, 2020).

Constraints in Cash flows

The cash flow during pandemic became stagnant, as the transaction rate had fallen low. With businesses shutting down and turning uncertain, the monetary transactions have been on hold. Also, the existing fund was not sufficient to pay for the operational expenses, wages of the employees and procuring the raw materials. The incoming of cash was restricted due to the pandemic which resulted in reduced outflow of cash. Many manufacturers, suppliers, retailers had to roll off their employees as they were unable to pay them for their service.

Retailer Issues

The retail segment has been disproportionately hit by the pandemic. There has been a drastic reduction in the consumption pattern of the consumers which led to the decrease in footfalls at various retail stores. Hence, many finished products could not be sold. Moreover, people were also not willing to step out of their houses during pandemic and visit retail outlets. The inclination shifted towards the digital platform of various retail outlets, which mildly compensated the business loss due to pandemic. Hence, this situation built an opportunity for the brands and retailers to

have an omnichannel presence. With China being the first country to be hit by the Covid pandemic, it suspended the export of raw materials to the neighboring and western countries giving rise to disruptions and breakdowns in the supply chain. Due to unavailability of raw materials and nationwide lockdowns, the manufacturing units had no choice but to shut down their businesses. The delay in the availability of raw materials, lack of transportation facilities, migration of labor, cash flow constraints disturbed the whole supply chain management of various apparel export houses as well as textile businesses (Kumar, Luthra, Mangla , & Kazançoğlu, 2020). Global brands like H&M, Inditex, Mark & Spencer, PVH, VF Corporation, Kiabi and Target have assured to fulfil the existing contractual obligations between the brands and the export houses situated in countries like India, Bangladesh, Vietnam etc. for the orders placed pre-covid, but that is not enough to compensate the losses caused by the disruption of supply chain (Seifert & Markoff, 2020).

Research Methodology:

The pandemic has led to the shutdown of various businesses globally. In this study, various structured, unstructured and handloom businesses were approached through telephonic and personal interviews and their supply chain strategies during the pandemic were recorded. Also, using secondary sources of data, strategies implemented by various fashion giants was understood. Limited number of export and manufacturing firms from big to small like Shahi Exports House, Aditya Birla Fashion and Retail Limited, Paragon Export House, Ampersand Design Pvt Ltd, Li & Fung (Buying House) were approached to understand how they have retained the business during this dreadful situation and their views have been highlighted in the study. Through the secondary sources of data available, few fashion giants and retailers who have tried to survived in the pandemic and managed their operational activities were recognized. Local businesses that fall under

the unstructured business category were approached to know about their survival hacks during the pandemic but unfortunately, they are the worst affected category due to multiple factors, which have also been discussed in the paper. Handloom is considered one of the important sectors for Indian economy as far as its magnitude and livelihood of artisans are concerned across the country. This sector provides ample size of job opportunity in the rural non-farming sector and importantly it stops rural-urban migration. The handloom sector has also been adversely affected by the pandemic. Such that, to understand their issues and challenges during that period, a few selected experienced artisans from reputed clusters such as Kotpad, Gopalpur and Nuapatna in Odisha were approached and their views have been discussed.

The approach in this study is qualitative based and respondents who were contacted were having more than 15 years of experience in managing their business operations. Although the plan was to take wider samples from different sectors, however, due to the surge in Covid cases, it became difficult to approach more sources. Hence, the sample size is restricted to few selected.

Findings:

The organized textile and apparel businesses have cleverly retained their positions in the fashion market. They have tried to mitigate the risks by analyzing the situation and acting to it in real time. In the light of the ongoing pandemic and based on the discussions with various structured businesses, it would not be wrong to say that the art of dressing up and consuming fashion products has toppled. The customer preferences have vividly changed from impulsive buying to essential buying that led to demand deprivation. Due to the lockdown restrictions and social distancing guidelines, most of the retail stores saw a huge decline in the number of footfalls leading to loss of sales and there was much difficulty in managing the inventory for AW-20 collection. Orders got cancelled at both retail stores as well as

export houses. The compensations for the assignments were also rejected due to which major companies faced financial constraints and liquidity crisis (Anner, 2020). The payment agreements also toppled which resulted in the closure of various retail stores, export houses and manufacturing units (Karim, 2020).

Uplifting of lockdown brought about a spark in the supply chain management of the structured businesses. Most of the businesses shifted to omni-channel retailing in order to avoid congestion at the brick-and-mortar stores, abiding to the social distancing norms stated by the Government. The digitalization during pandemic led to the plunge in sales as most of the customers were unwilling to step out of the house and visit physical stores to shop. The last mile delivery has been getting better day by day with the advancement in the technology. Apparel retailers have provided discounts, special offers and off-season sale to sell the existing inventory of Spring Summer-20 and Autumn Winter-20 collections over both online platform and physical stores. This strategy helped them to reduce the cost of holding the inventories. Also, retailers implemented cross-selling strategies to sell the existing inventory. Fashion labels like Biba, an Indian Fashion brand for women and girls, opted for cross selling post lockdown by selling masks that complemented the existing apparels. This strategy helped Biba revive its sales and with festive season ahead, it caught the attention of customers too. John Lewis, a UK retailer, launched free virtual personal shopping service as a replacement for in-store product advices and suggestions during the pandemic (Nazir, 2020). Similarly, Gucci launched its own video service Gucci Live that provided video consultations to the customers, which spurred their sales. The retailers have shifted their focus on sustainable supply chain, which strikes balance between over and under stocking, making the process a mix of pull-push driven, ensuring transparency in the whole process. Businesses, especially the global luxury retailers namely Louis Vuitton, Dior, Gucci, Prada have diversified into the production of essential items like masks,

gloves, hand sanitizers in order to sustain in the market (Bramley, 2020).

The senior level of management from various export houses were approached, who further stated that during the first phase of covid, most of their orders were cancelled by the buyers due to global lockdown. In addition to that, compensation to the manufacturers had been declined as the suppliers had incurred investment on sourcing of raw materials as per the buyer order. In some cases, it was revealed that the payment term was also increased from the buyer's end. It was found that buyers had declined to accept the delivery of finished products and advised the suppliers to sell the same either in domestic or any international market with or without their label as well as delay the shipment and production. This led to liquidity crisis due to financial burdens. It was observed that in most of the export houses, the management of supply chain became strenuous. They faced a lot of difficulty while sourcing and procuring the raw materials. Apart from that, the labor availability fell drastically which resulted in lower efficiencies. With ongoing travel restrictions, it was difficult on their part to deliver the finished goods too, which led to the loss of capital and cash flow constraints. However, the need for essential items helped the export houses survive in the market and changed the dynamics of their business. Shahi Exports Pvt Ltd., India's largest apparel exporter, remained resilient during the pandemic and repurposed its manufacturing units to produce Personal Protective Equipment (PPE) suits and face masks for the frontline workers. The research and development team of Shahi Exports also focused on growing cotton fiber from recycled cotton clothes so that they can reduce their dependency on the sourcing of the raw material from external sources and have an in-house sourcing. This would bring down the cost of their supply chain to a great level (Kent, 2020). Aditya Birla Fashion and Retail Limited, a domestic apparel manufacturer in India, strived to manage their operations and supply chain during pandemic. One of its manufacturing units in

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the city of Bhubaneswar, Odisha which manufactured formal wear only, shifted to the production of casual wear as well as essential wears like Reusable masks and PPE suits during the pandemic with the existing fabrics that they had pre-ordered. The company also adjourned its outsourcing from neighboring countries like Bangladesh during pandemic until the right time, so that it can control its expenditures. Similarly, Delhi based Paragon export house, a medium size export firm started the production of PPE kits and other essential items shifting from their core production and supplied to the Government and the health sector as a part of their business strategy to survive the pandemic.

The handloom sector struggled a lot during the initial phase of pandemic. The nature of the handloom industry makes it difficult to survive in such situations but gradually with the easing of lockdown rules, it managed to survive. Besides, they managed their business to some extent by getting raw materials from government supporting agencies such as Boyanika, Sericulture department and their own networking channels. Understanding the difficult phase of artisans during pandemic period, Delhi based NGO provided financial support to Kotpad weaver society for their sustenance as mentioned by master weaver, Kapilo Mahanta. Although, there was a demand and supply crisis, few of the skilled artisans started developing new product designs and utilized their idle time during the pandemic. The sourcing of raw materials turned out to be very difficult in this phase. Also, the weavers and artisans had not received their wages which made their survival quite burdensome. Few artisan communities were on the verge of quitting their work. However, the Government's demand for masks was their only survival aspect. Similarly, with the rise of e-commerce during the pandemic, artisans felt that it will help in revoking the demand as well as need for the handloom products. Also, the pandemic brought about the concepts of sustainability, resiliency and slow fashion in the minds of people which have the potential to increase the demand for handloom products. Currently, the demand is

not much but weavers and artisans feel that there will surely be an increased demand for such products in the coming years.

Observations and Discussion:

The majority of businesses have lost their positions in the market, very few of them have managed to retain themselves during the pandemic. All the three sectors of businesses have seen the deprivation and losses in terms of demand, capital, sales, manpower, efficiency, availability of raw materials etc. The supply chain of all these sectors has tumbled like never before. But only the e-commerce businesses and omni channel retailing have emerged victorious in the retail sector during the dreadful pandemic. There has been an immense boom in the e-commerce as people are not willing to go to the physical stores and buy things. Various fashion giants as mentioned in this study have followed the retail strategies, which had more of technology intervention than human, and hence were able to survive in the market. Even though they witnessed issues pertaining to the logistics and transportation management, which led to a delay in the delivery time of the products, yet they tackled those issues cleverly. Most of the unsold inventory in the retail stores was later sold through cross-selling and upselling techniques as well as by providing discounts and giveaways over both physical and online platforms. The retail businesses understood the importance of factors like sanitization inside stores, promoting awareness about how they maintained covid protocols so that customers do not lose their trust on the brand. Also, they realized that it was more important to survive in the business rather than focusing on profits at this time of global crisis. Businesses that could not adapt themselves to the new survival strategies of push-pull supply chain network where they can forecast demand patterns more efficiently ultimately laid off their employees and shut down their businesses.

Export houses have shifted their focus towards having a balanced supply chain during the pandemic so that they can easily control the upstream and downstream

activities. They settled for having a combination of pull-push strategies in the supply chain so that they can continuously monitor the changing behavior of customers and accordingly forecast the demand patterns. Through the discussion with the export houses, it was found that post pandemic, buyers will shift to a more reliable and lean supply chain, to alleviate risk and potential losses. The complex nature of the fashion supply chain compels it to strike a balance between resiliency and efficiency pertaining to the levels of sustainability.

Handloom Sector undoubtedly has a great future in the coming years as people are leaning towards sustainable and eco-friendly products and services. Hence, it is important for the handloom sector to understand this need of the customers and accordingly manufacture. They also need to be agile in their supply chain activities so that the sourcing issues can be handled timely. With government's support, they can step up their business and make themselves available on the e-commerce platforms. During the pandemic, artisans had enough time to think innovative handloom product designs which will not only help in product innovation but also help in introducing product diversification in the handloom clusters. Apart from this, Government can try to provide the wages of the weavers and artisans in advance so that it will become easier for the artisan communities to manage their operational expenses such as sourcing the raw materials in advance. In this way, the supply chain will become agile and the lead time can also be managed. During the pandemic, Indian Government has been very supportive towards the textile and apparel sectors. Various funds have been initiated for the benefit of this businesses. Ministry of Textiles, Government of India has decided to continue with the Roskill (Rebate of State and Central Taxes and Levies) scheme in the textile sector. This will help in making the sector competitive by rebating all the taxes in the international market. It also approved Ad-hoc allocation of funds of Rs. 7398 crores for the FY 2020-21 to issue the duty credit scripts under the scheme. Along with this scheme,

Government has also announced a Special Economic Package under Aatma Nirbhar Bharat Abhiyan so that the artisans and weavers can avail the benefits of relief and credit support and revive their business (PIB Delhi, 2020).

Conclusion:

There is no certainty to the end of this global crisis; all of the predictions are going in vain. However, there is always a ray of hope even in the darkest hour. The dependency on technology is increasing in every sector of business; it is the same case in the textile and apparel sector. The intervention of technology even in the simplest step of business activity will boost up the market value of the business. Coming to the Supply chain management, it is no different. Having a resilient and agile technology driven supply chain in the coming years will only help the businesses to revive themselves from this horrifying pandemic. The integration of sustainability with efficiency and resiliency will bring back the disrupted supply chain and make the whole process more convenient and normal again (T.S & Desai, 2020). The design of the supply chain should be such that it can collect data and analyze it in real time, respond swiftly to the change and absorb any sudden disruption in the chain. Apart from this, training the work force to handle and troubleshoot the automated supply chain is more important than involving them in the physical material movement.

Major structured businesses should create a temporary crisis management team in their organization, specialized in crisis management and develop tactics to handle unexpected situations like the one we are going through with prior planning and timely execution. In case of Export houses and production units, the manufacturing system should be made flexible enough to adjust its processes as per the situation and produce as per the varying demand. It should be equipped with technological tools such that a real time information exchange can take place during crisis thereby mitigating the risks. Every business sector should look for

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alternate products prior to the crisis as well as during the crisis so that they shall be able to deliver required products to the customers at the need of the hour. Along with product development, businesses should also focus on increasing the transparency in the whole process of supply chain management so that customers will be able to know about the products they are buying and consuming. Use of transparent promotional activities will boost up the sales and help in reviving lost businesses. Transparency will not only add value to the products but also strengthen the customer relationship and loyalty. Along with this, export houses and retailers can make use of idle handloom workers, train them and provide them with work in case of labor shortage in the factories for the crisis evasion. This will also help in boosting employment for the ones in need and few of the handloom workers can be engaged in retail houses selling. This is known as Cross-Utilization, by doing this we shall be able to solve the major problems of labor shortage and underutilization of machines in the factories.

Crisis is always short term. It all depends on how strong the business is during the crisis and how efficiently it tries to keep the command over the operational activities. It is during crisis only when businesses take risk and experiment with new strategies, few succeed and few fails. Nonetheless, a business sector should always be prepared to handle any kind of crisis as there is always a scope for improvement and learning.

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