

Magnitude of Supply Chain Management on Ready Made Garments to the eventual Buyer

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Abstract

Supply Chain Management (SCM) is the vital issue for the Ready Made Garments (RMG) sector around the world. Bangladesh garment industry development is most wanted in reducing the supply time required to manufacture and fulfill the orders placed by foreign companies. One way to decrease the supply time required for producing RMG is to increase domestic linkage extension way we can have deep level improvements in the readymade garments industry too. Supply time refers to the time required for supplying ordered garment products after the export order has received. Using modern fast and effective machinery can reduce time taken to deliver the order. The implementation of SCM had been beneficial as this helped in improving the communication channels, production and services of the companies. Considering the important role of apparel manufacturers within the global chain, we conducted a research on the Bangladesh garments industry and focus on several important supply chain operational issues. The objectives are to analyze apparel supply chain matters such as new orders, raw materials supply, production processes and logistics related to finished goods delivery. I will analysis to shows how apparel manufacturers can supply the readymade garments to the buyer responsively for proper growth. I will identify related supply chain practices influencing the industry, set guidelines for improvement and offer recommendations for sustainability of RMG.

Keywords: Lead time, Ready Made Garment (RMG), supply Chain Management (SCM), Responsiveness, Product flow, Information Flow.

1. Introduction

The apparel industry is an important business sector in Bangladesh. For this reason, companies operating within this industry must then be able to apply business strategies

that would help sustain the growth of the clothing sector. This means that by modifying some of the existing business procedures of the apparel companies, such as their supply chain management systems, continuous progress and development in the industry may be observed. By means of identifying the current supply chain management practices of some Bangladesh garment companies, business areas for improvement can be identified. This in turn may enable the formulation of better supply chain management practices that would contribute to the continuous progress of the apparel industry. The development of the supply chain management in this Bangladesh business sector can also likely strengthen its connection with the international market.

In the beginning of 1990s, the lead time was 120-150 days but in 2007, it was reduced to 30-50 days, i.e. at present it is 90-120 days. China takes only 30 days due to their textile and other backward linkage facilities as well as export friendly management and Supporting, policy. It is 45-60 days in India and Pakistan. Therefore it appears that in the present situation Bangladesh RMG industry will not be able to compete successfully in the international market for the existence of unusually long lead time. This is specifically the main problem area of present research.

Supply chain management, the information between business partners are optimized and collaborated; most importantly, supply chain management systems help in reducing inventories, which in turn can lessen operational costs, compress order cycle time, enhance asset productivity as well as increase the companies' responsiveness to the market.

Aside from these benefits, the apparel industry is able to achieve quick response through efficient supply chain management practices. Quick response is a concept pertaining to the collaboration and sharing of information among manufacturers, suppliers and distributors, allowing them to respond more rapidly to the needs of the customers.

Another factor that relates the apparel industry to SCM is the companies' connection with the retailers. While some apparel companies distribute their products directly to consumers, most manufacturers utilize the services of the retailers. The application of an SCM system on the other hand helps in strengthening the relationship between both parties as well as in achieving positive business outcomes. Considering that the apparel sector encounters the problem of demand uncertainty, SCM allows the companies to communicate with their retailers; this feature of the SCM enables them to forecast product demand jointly. The participation of the retailers with the SCM system of the company helps the apparel companies to obtain valuable consumer data such as end-customer demand levels; this will then help in reducing the manufacturers' errors in determining raw material and production volume.

As apparels is seasonal demand. Buyers give the orders for their customer demands. If the production make delay buyer can't caught up the season. So order time management is one of the big issues for Bangladesh readymade garment industry. Foreign buyer is likely to need short leading time for manufacturer the apparel.

Object of the Study

As Bangladesh is earning more than 75% foreign currency from RMG sector so that I have selected to study on Bangladesh garment industry is the main source for economic development of Bangladesh demands examination and evaluation of multidimensional aspect of garment sector and its impact on the economic condition of Bangladesh.

In such a context, the main objective of the study is to examine, evaluate and analyze Business process and buyers order time, supply chain management garment industry and identify the techniques used by some apparel business operators in Bangladesh.

Aim of Research

The overall aim of the research is to consider the Bangladesh garment management approaches used in the textiles and apparel sector. This is addressed through case studies of companies at different points of the apparel chain, ranging from fiber producers downstream in the chain to manufacturers and foreigners.

Research Methodology

The research will be based on primary as well as on secondary data basis. The secondary data will be collected from various books, publications, audit reports, Bangladesh Economic review and the annual reports and the primary data will be taken through interview of key person of the garments factory, foreign buyers. In this research qualitative method will be used.

History of Bangladesh RMG sector

The garments industry of Bangladesh has been started in the late 1970's as a small non-traditional sector with slight export base, the readymade garment (RMG) sector, by the year 1983, come out as a promising export earning sector of the country. Within a short period of time, it has attained high importance in terms of its contribution to GDP. Bangladesh Garment Manufacturers and Exporters Association (BGMEA) is the apex trade body of more than 5000 apparel-manufacturing companies of Bangladesh. Since the inception, the association has been working to promote and protect the greater interest of RMG sector of Bangladesh. BGMEA also acts as a pressure group to protect the higher interest of the sector and as a promoter of trade negotiation in international market with global trade bodies like WTO, concerned UN agencies like ILO etc.

Although it was only supposed to be a temporary agreement, the MFA was extended four times, the last time being in 1986. Then the WTO wants textiles to be under its control, the abolition of the MFA over a ten-year period commenced from January 1, 1995. As a result, the quota system that has provided some security for those in the industry in Bangladesh may be eliminated by the beginning of 2005.

The elimination of quotas has come about as a result of decisions made by the WTO, of which Bangladesh is a member. The decision affects not only Bangladesh but also some other countries in South Asia, such as India and Sri Lanka, and the entire textile industry that has been enjoying the quota facility since 1974.

Bangladesh mainly exports garment, knit and woven

goods including shorts, trousers, shirts, sweaters, blouses, skirts, tea-shirts, jackets, sports attire and many more casual and fashion items with the changing times. As per the statistics of BGMEA (Bangladesh Garment Manufacturers and Exporters Association), an apex trade body of the country, that the RMG export was 31.57 million US\$ in 1983-84 and goes up to 12347.77 million US\$ in 2008-09. RMG export of Bangladesh was 3.89% of total export in 1983-84 while in 2008-09 it was about 80%. After quota removal in 2004 average more than 16% growth were observed from 2004-05 to 2008-09 and during this period total export growth rate be also more than 15%.

Supply chain management process

The success of readymade garments industry of Bangladesh after 2005 depends on how fast she can prepare herself for producing fabrics and yarn at home to meet the demand. Bangladesh produces 8% and 45% of the total demand of woven fabrics and knit fabrics respectively. Bangladesh is expected to be self-sufficient in production of fabrics by 2005. The process is visualized in fig.-1 below:

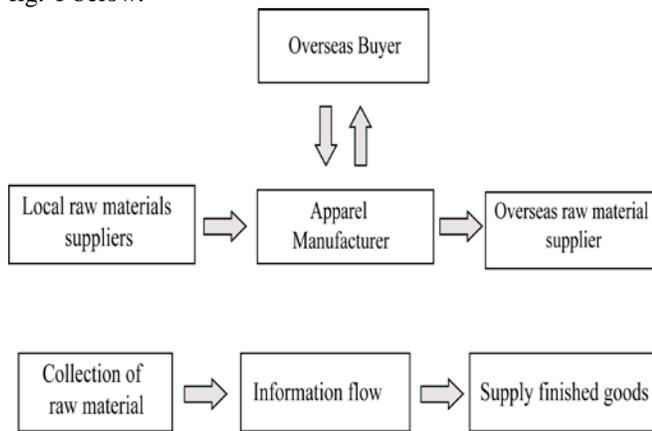


Figure 1: Process of Supply Chain Management

In the RMG sector, the Manufacturer - Raw materials Supplier relationship is different. In this Industry the main raw materials are fabrics (Cloths) and few accessories are like button, collar etc. About 80% of the suppliers of accessories are local and accessories suppliers are not responsible to increase time. Bangladesh garment manufacturer need more time is getting higher due to import of fabrics mainly from China, Indonesia and India, The total average time to import fabrics from abroad is 50-65 days and this is the main reason for long lead time (BGMEA research cell).

In the process of import of fabrics from the foreign suppliers lies the main reason for long lead time. The process is visualized in fig.-2 below.

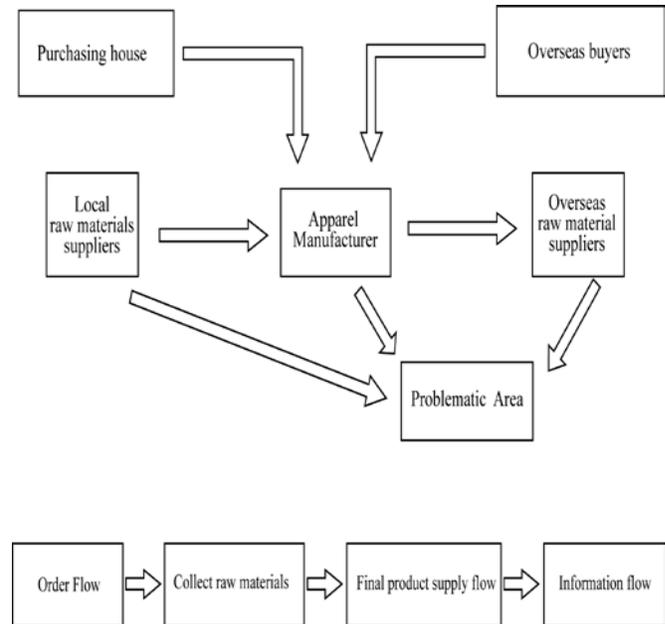


Figure 2: Analysis of Supply Management of Apparel Orders

Garments or apparel buyers around the world demand product as they want it, when they want it and the best possible price. In today's highly competitive global marketplace they are placing greater value on quality and delivery time. Manufacturers similarly have begun to place more value on quality and delivery time and companies are trying to gain a competitive edge and improve profitability through cutting cost, increasing quality and improving delivery. However it is safe to say that the more competitive the industry, the more shortened lead times will help. In competitive industries, short lead time will differentiate a company from its competitors. Lead time is one of the main competitive factors among companies. The ability to deliver quickly influences export, sales and thereby revenue. The definition of lead-time can vary, depending on what part of the company is focused upon. It normally includes all activities from start to end. Lead-time begins with the first receipt of a customer order and ends with customer receipt of the product or service. Everything in between is the lead-time. Lead-time refers to the time lag between placing an order and receiving it. In this study lead-time is defined as the time it takes from getting order from a

customer and received the delivered product by that customer.

Conventional Supply Chain Management of Bangladesh RMG

At present, Bangladesh the average lead time is 90-120 days. It is sometimes 100-130 days. Total lead-time is made up of time dedicated to processing orders, to procuring and manufacturing items, and to transporting items between the various stages of the supply chain. However, lead times can often be reduced if items are transported immediately after they are manufactured or arrive from Suppliers. Lead-time typically includes two components: Information lead times (the time it takes to process an order) and Order lead times (the time it takes to produce and ship the item). Information lead time can be reduced by using very sophisticated and modern communication system while Order lead time can be reduced through efficient supply chain management.

In the RMG sector after order confirmation the process begins by sending information to the suppliers for Raw materials (fabrics + accessories) and the process run through shipment of final product Received by the buyers. The whole of this process is comprised of the following steps – order Submission, scheduling & sequencing, manufacturing and distribution. A manufacturer may be able to reduce lead time by taking some strategic measures in all of these four stages.

From the above theory it is clear that the total lead time is customer lead time. Therefore the equation we can write that; buyer Supply time = [{{Information supply time}} + {{Order lead time}}] Total supply time = [{{Information lead time}} + {{(manufacturing lead time)} + (shipping timefor import fabrics)} + (Shipping time for export final product)}

Shipping time for import includes shipping time, unloading time and transport time from port to manufacturing point. Shipping time for export includes manufacturing time for final products and shipping time for export). The leading time on delivery issues matters most important in RMG export trade. In the beginning the leading time was 120-150 days, but now in 2008 this time has been reduced to 40 to 60 days, thanks to the timely intervention of the join forces.

The RMG industry of Bangladesh still plays the role of tailor in the garments business. The required fabrics and limited accessories till now come from abroad. The industry is heavily dependent on imports and had to spend

about 55-75 days to import fabrics from abroad. This backdrop is the main reason for long lead time. Bangladesh garment export in volume is increasing at the rate of 15-20 percent for the last 20 years, whereas Bangladesh RMG are depending only on Chittagong port. The facilities of Chittagong port have not increased at the same rate. The containers kept stuck up in the port and findings and analysis

The RMG industry of Bangladesh still plays the vital role of tailor in the garments business. The required fabrics and accessories till now come from abroad. The industry is heavily dependent on imports and had to spend about 45-75 days to import fabrics from abroad. The containers kept immovable up in the port and many containers remain jammed for 15-20 days, which is required to be released within two three days. If the raw materials remain idle in the container at Chittagong port for 10-15 days, the garment industry would definitely face a serious negative impact. According to an estimate, it takes about four days for goods to reach Chittagong from Singapore. But in a very sharp contrast, it takes about 18 to 20 days or approximately three weeks on average for the same goods to travel to the inland container depot (ICD) at Kamalapur in Dhaka. Besides the slow and cumbersome customs procedure and port operations also significantly delay the movement or release of goods. In Chittagong port it takes about 6 days to unload goods from a ship whereas for the same goods it takes just few hours in Singapore.

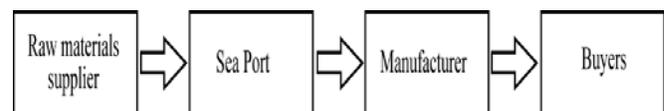


Figure 3: Basic Supply chains of Bangladeshi RMG Industries

Manufacturer Lead time and recommended Supply Chain Management of Bangladesh RMG

Total supply time = [{{Information lead time}} + {{(Order lead time)}}] or, = [{{Information lead time}} + {{(time to manufacturing fabrics)} + (time to shipment of fabrics)} + (time to unloading fabrics and customs formalities at port)} + (time to take fabrics from port to manufacturing point)} + (time to sample approval and production of final product)} + Time to shipment or export of final products)}

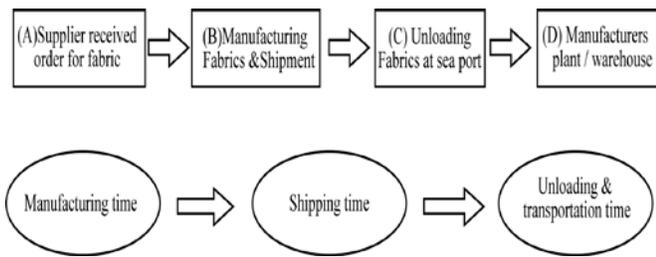


Figure 4: Lead-time and fabrics importing process

From the above chart we can say, after final contract with the buyers, manufacturers first place order to the overseas fabrics supplier (A). Then the supplier manufactures fabrics (B) and sends fabrics by ship. After a definite time the ship reaches at the seaport (C). Here after unloading and completing some custom formalities fabrics are sent through train or road transport to the manufacturers production-plant/warehouse (D). For this total process from A-D manufacturers need 45-75 days. At the time of import a proper management in the supply chain can reduce 30-35 days. The rest of the time of 25-35 days is needed only for shipment. Again the proper and efficient management at port and good transportation system can reduce time to receive raw materials from port to manufacturing plants. But if we avoid fabric import altogether then we can reduce 45-75 days from the total lead time and we will be able to assure export of RMG products by 45-60 days regularly.

Conclusion

SCM plays vital rule for continuous growth of the RMG business of Bangladesh. Bangladesh has entered in the quota free market after 2005. After enter the free market Bangladesh apparels face competition from others competitor. Analysis has been found that import dependence on backward linked industry is the main factor for long lead time. More than 80% imported. Absence of sufficient backward linkage industry and for this reason a total additional 55-75 days are spent in the import process of fabrics by RMG sector of Bangladesh. As a result this sector is facing long lead time which is 90 to 130 days on the average. From the analysis it is clear that the impact of information lead time is very negligible on total lead time. It contributes only 6% by considering the above analysis it has been found that import dependency is contributing 50% or more in the problem of long lead time and it is the main factor for the problem of long lead time in the RMG sector it is the standard lead time to compete with the other manufacturer and exporter of the world. It becomes possible only for avoiding import of fabrics. When the

RMG sector ensure the availability of fabric from the local market by developing backward linkages industries especially in the oven sector and by establishing textile mills by the buyer for their own consumption.

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