

# Using a collaborative supply chain integration business essay



A supply chain is a set of three or more entities or organizations directly involved in the upstream and downstream flow of products, services, finances, and/or information from a source to a customer (Mentzer et al. 2001). The end of the quota regime in 2005 resulted in a new and highly competitive business environment in the apparel industry. The effect of removal quota will put pressure on the price and will effect the profit . Inefficient and incompetent manufacture will exit and the companies will choose the supplier who can provide comparatively cheap price , quality product and service as well as speed the market and supply chain efficiency and reliability. Competitive advantage in the apparel industry could now be achieved only through rapid reaction and adaptation to changing customer taste and preferences which required synchronization, and convergence of information among all members throughout the supply chain (Ross, 1998). By Improving the apparel supply chain we can better response the customer needs and collaboration with the key supplier and market we can reduce the lead time which will created value to the customer.

Traditionally the various value adding processes in apparel sector was carried out by firms operating as separate entities, where information was generally shared with a time-lag which weakened the system . The apparel industry is low service oriented and their are gaps in the customer management because business processes operated in silos and technology was either limited or fragmented and the decision making was based on past information . Implementation of the of supply change is always in the big challenge because the firm can` t address their strategic , processual and organisational dimensions of the supply chain integration due to the loose

alliances. The same is the case here, where the major supply chain partners are the leading fashion brand Polo Ralph Lauren, the apparel manufacturer Luen Thai, and the raw material provider Ruentex. These were separate but interdependent business entities which had to function as a whole.

In a collaborative supply chain, partners agree on a set of commonly defined objectives, and use their individual but complementary assets to gain long term competitive advantage. The common objectives are defined with respect to a particular function, and achieving it.

The five major area of activity involved were product design, raw material sourcing, manufacturing, logistics by a third party logistics provider, and retail.

The major weakness in the supply chain process was that all the activities happened in a sequential rather than a synchronous manner. For example, the product design was carried out by the design team of Polo using the latest technology like CAD which reduce the design time and transfer to the manufacturing unite by fax , e-mail , or phone . If the designer is change some thing in the last minute the process of communication will be still the old methods so the quick and efficient transfer of information to Luen Thai, especially when last minute changes in design had to be incorporated, was almost never accomplished.

Modern technological breakthroughs like the EDI were already implemented but the focus was intra-firm rather than inter-firm, keeping information more or less compartmentalised with limited and old information available to channel partners which lead to decision making based on past information.

<https://assignbuster.com/using-a-collaborative-supply-chain-integration-business-essay/>

Effective supply chain linkages and collaboration using information technology could create value through better management of inventory, production and delivery flow. For an example Polo had implemented various modern technologies including EDI, intranets, and customer and supplier databases. But the technology was fragmented Polo keep his relationship with the Ruentex and Luen Thai through point to point technology where the partners generally communicated through fax or email, which many times was haphazard and non systematic. Due to there is no data synchronisation and database resided on the computers the information can not be shared . The high quality of using the technology was fragmented here.

Again, lack of real time information was a major weakness that plagued the entire system. This resulted in increased inventory carrying costs, and many times the occurrence of the bullwhip effect. The bullwhip effect distorts demand information within the supply chain, with different stages in the chain having a different estimate of the demand, which results in loss of supply chain co-ordination. This bullwhip effect increased inventory carrying cost, manufacturing cost, replenishment lead time, transportation and labour costs. Above all, the large fluctuation in order affect the efficient marketing of the product as customers and revenue are lost due to stock out. Also if the order arrives a little late in to the season will result in reduced profits due to mark-down of prices.

Polo Ralph Lauren also traditionally followed a silo approach which reduced its ability to track inbound transportation and logistics. There was a mismatch as Polo was tracking shipments for the wholesale division using an access database that received Advanced Shipment Notices (ASN) from <https://assignbuster.com/using-a-collaborative-supply-chain-integration-business-essay/>

vendors and freight forwarders while the retail division mostly used Excel spreadsheets to manage and share information with manufacturers. And they are managing the process by with the telephone calls , e-mails and meetings . So the inbound tracking was mostly depending on the updating of the spreadsheets and there is possibility of error and omission as a result any human error from the employees updated the spreadsheets could bring drastic consequences. If it is not properly notified that the shipment is going on time or not then it will effect the whole sale shipping target . like If it is delay and it is not upgraded on the spreadsheet and the big sale advertised product will not reach as per planning and it will lose it sell and effect the profit .

Another joint initiative was the scan and pack order fulfilment solution or the ASNx/FGA system. This system enabled the scanning of finished goods before placing in cartons. This helped to conform to buyer packing standards and also send an advanced shipment notice (ASN) to Polo over the EDI. This integration initiative was also fragmented though it also helped Luen Thai to rapidly fill Polo's orders as well as to shorten the order life cycle. But again there were no efforts to introduce the initiative across the supply chain.

Optimal order forecasting and replenishment was never properly achieved as there were many problems with information sharing and collaboration as each partner had point-to point integration with one equipment at a time.

Traditionally sourcing factors affected the manufacturing cost.( like labour cost , material cost and shipping cost). But changing of the frequent customer demand of more variety , more fashion , more product access and

lower prices , retailer are looking for the new supplier who can provide them more flexibility to product , lower cost , material cost and more over the faster shipment and less inventory . Because due to quota eliminations retails managing its sourcing through supplier negotiations.

Logistic is one of the important part which effect the time and cost . It starts from the manufacture and finish in the retail outlets. If the logistic process is improve by reducing time- in-inventory and transit then the manufacture and retailer management will improve which decrease the cost. One of the reason if the order is not reach on time in store then they have to mark down more.

By sharing the day -to-day information about the market and product (like consumer purchasing decision ) manufacture can manage the better inventory and make more accurate delivery . which will help to reduce the economic cost for manufacturer as well as retailer .

As we analyze the case, we can see that initially there is sequential interdependence as the activities of one partner in the chain preceded another. Thus only when one stage completed the other stage began. Later there is reciprocal interdependence as parties in the apparel chain come together and bilateral/ multi lateral exchange of information and inputs take place. It is the threats of the post quota regime that leads a shift from the traditional thinking and a new focus on improving the entire supply chain.

Thus traditionally each member of the apparel chain functioned more or less independently, without trying to jointly solve common problems. Each member distrusted partner members and trusted only individual capabilities.

<https://assignbuster.com/using-a-collaborative-supply-chain-integration-business-essay/>

Although collaboration idea was good, serious commitments were never made towards achieving it, either in terms of information sharing or through serious financial commitments. Thus though the triad was interdependent, they functioned as discrete entities.

Modern collaborative supply chain management will lead to the exchange of real time information exchange across all business processes amongst the partners including design, sourcing, manufacturing, and final product delivery. The shift from “ Original Equipment Manufacturer” (OEM) to “ Design-to-store” (D2S) model would lead to greater and tighter collaboration with Luen Thai playing a very important role. There is also the big factor of trust here as a retailer is dependent on the manufacturer to a very great extent. Since both are mutually dependent there is all probability that this kind of collaboration would be more effective than the traditional way when the retailer hardly trusted the manufacturer’s capability and involved him only in the area of his expertise.

## Part 2

**Critically analyse how supply chain technologies may be used to facilitate collaboration between Luen Thai and its partners and evaluate the effects of such collaboration in terms of efficiency and effectiveness. Please use diagrams to illustrate your answer.**

Sharing of information of the supply chain management is very important . Using of technology among the partner and its implement depends on various factor accuracy, trusty agreement of the use of technology , cost and

as well the adaptation of the technology . Some important implementation of the modern supply chain is EDI

( Electronic data interchange ), ERP ( Enterprise resource planning ), MRPII(Internet based service ) (Logistic and retail), SAP( system analysis and program development) , ASNx / FGA(Scan & pack technology ), (VMI) Vendor management . It can be seen in the case how Luen Thai becomes a partner of strategic importance to Polo Ralph Lauren. The collaboration facilitated through IT helped Polo to achieve its objective of differentiation from its competitors. It also leads to lesser stocks, thereby leading to reduced inventory and holding costs. The collaboration also ensured speed-to-market and lesser mark downs. The three partners had built a strong foundation to a lasting and committed relationship but the relationship was not institutionalised till Luen Thai committed itself to a greater role in the entire apparel supply chain. This greater role leads to better collaboration among all channel partners and greater integration in the supply chain.

**Source: Kumar, M. 1996.**

The matrix above is illustrating Ralph Lauren's dependence and Luen Thai's dependence as the supply chain partnership progresses. We see that at present there is a high level of interdependence between Ralph Lauren and Luen Thai and the relationship is as shown in the top right hand box of the matrix. Initially the relationship among the partners was one of lower interdependence, which did not lead to effective collaboration. In the case of Polo, it was the market pressure that leads to the change and role in the supply chain while in the case of Luen Thai it was a reassessment of the company's role in the value chain that made them to get involved in design

<https://assignbuster.com/using-a-collaborative-supply-chain-integration-business-essay/>



development, logistics and greater collaboration with upstream and downstream partners.

Luen Thai thus had to co-ordinate with Ruentex and ensure that the correct fabric supply as well as with Polo for their design requirements so as to manufacture the right garment cost effectively and speedily.

Henry Tan, CEO of Luen Thai being a visionary had evaluated various supply chain models before incorporating the present one. The major models that were evaluated included models adopted by Liz Claiborne, Howick, PTC and VF. All these apparel manufacturers to some extent had incorporated various Supply Chain Technologies to ensure that every player of the supply chain was up to date with the designs and other requirements.

### **(A) Supply Chain City.**

Luen Thai adopted a different model called the Supply Chain City. Originally, Luen Thai was receiving various products required for manufacturing the goods from distributors/manufacturers spread across the globe. This necessitated precise control of supply chain to ensure that the required number of goods reach the Luen Thai the manufacturer. Besides, this also increased the cost of transportation to the manufacturers. Perhaps the most critical lacuna was the delay in receipt of drawings and ideas from the designer to the manufacturer. Keeping this as the prime motive, Luen Thai evolved the idea of a supply Chain City that would manage various apparel supply operations such as design & development, logistics & distribution, supplies, testing, production, printing, washing, embroidery and sample making in one location.

## **Contribution to Collaboration**

This process allowed Luen Thai to foster closer relationships between the upstream and downstream partners.

This also enabled the manufacturing unit to access the design Centre of Luen Thai and provide technical support like embroidery, printing, washing and sample making.

This allowed Luen Thai to take up design process for Polo in addition to arranging smaller batches of supply.

It allowed seamless exchange of information and experience between Luen Thai and Ruentex the fabric manufacturer.

## **(B) Integrated Logistics**

Luen Thai historically was embracing Information Technology to be ahead of their nearest competitors. Their earliest initiative, in the 1980's included automation of accounts, finance and human resources. In the late 80's Luen Thai developed an in-house logistics operations division to meet industry demand for greater efficiency. However, in 1998 this division spun off as a separate business unit providing integrated logistics and end-to-end supply. This Luen Thai's, CTSI, the in house logistics firm which migrated to conducting business electronically and facilitated trading activities through the internet by acting as a Third party logistics provider.

## **Contribution to Collaboration**

By controlling the entire supply chain beginning with products from supplier to factories, to the end consumer, Luen Thai was able to improve the inventory management thereby improving margins.

## **(C) Introduction of internet based Electronic Data Interchange (EDI)**

The adoption of internet and EDI helped in real-time data accessibility among the supply chain partners.

## **Contribution to Collaboration**

This enabled Polo to access information like when the goods had left a certain place, its arrival and dispatch from customs area and delays caused. This enabled Polo Luen Thai to adopt a proactive approach in reducing the inordinate delays that were being faced earlier.

Automatic Generation of reports like scheduling, shipment delays etc.

Adoption of internet as the integrating technology helped partners to design common interfaces. It also helped the partners to build a common platform on which to manage their business interactions and supply chains while standardising interchange of information such as design, sales and inventories.

## **(D) Vendor Managed Inventory**

Polo recommended the incorporation of Vendor Managed Inventory (VMI) since, this acted as a key model and transformed Luen Thai from Original Equipment Manufacturer (OEM) to Design 2 Store (D2S). VMI was a

continuous replenishment program in which Polo could create purchase orders based on store demand and warehouse stock levels, front-line sales information which were all instantly transmitted to the manufacturer.

### **Contribution to Collaboration**

VMI helped Polo to automatically create purchase orders based on warehouse or store demand levels in real time.

Thus as Luen Thai contemplates its move from OEM to D2S it may lead to greater synchronization and modern technology would facilitate the process. There is a bigger risk to Luen Thai but also a greater trust between channel partners. The risk and dependence is also great for Polo, and as effective collaboration is only possible with greater trust, the three partners may shift to an inter-company focus, sharing information and plan joint strategies for gaining competitive advantage.