Brandon Ledesma

Marco Nunez

Bhagyashri Patil

MIS 753

8-February-2022

Assignment 1

**5. Suppose you are a food caterer supplying different types of food items for working people and household in and around your location. Describe how you will increase your responsiveness.**

When one increases responsiveness, one also increases the operating cost. I would increase my responsiveness by undertaking a test study on the flows of my business to increase my service, my sales, and to optimize my revenue based on those increased costs. Through this I would have data on the material (food supplied), funds (the net transactions to support the business), and information (when demand is greatest and to which customers) flows. Using advanced analytics, I could set up the best schedules for my incoming food items in order to expedite them when regular customers are normally ordering them. This would increase the number of products I can carry or increase my distribution channels.

**6. A furniture manufacturer wants to improve his supply chain efficiently. Identify the components of his supply chain and use various supply chain frameworks to formulate strategies for improving the supply chain efficiency.**

The components of their supply chain are the suppliers of the raw material to build the furniture, the website used to sell furniture in the ecommerce, the transportation of the raw materials to the manufacturer, the manufacturer, the warehouse to hold the inventory, the distributor to ship out ordered furniture pieces, the direct sales force, and all retailers. The supply chain can improve its efficiency by implementing technology that uses advanced analytics to develop business models that optimized resilience and adaptation. This could increase the effectivity of just-in-time delivery at various points to reduce holding costs. Also, the assembly of the furniture can be optimized through recompleting the raw materials suppliers or distribution agents and installing automated robots in the assembly lines. Vertical integration could be one method of improving the supply chain. The furniture manufacturer could partner with a foreign organization to facilitate product movements in different regions and to have their supply chain become more competitive through globalization. Through volume discounts, globalization could reduce input costs or increase sales.

**10. Analyze the logistics challenges of e-commerce organizations like Amazon, Flipkart etc. and present few approaches for solving them.**

These e-commerce organizations are in the middle of the supply chain and ultimately sell products that are created by others. E-commerce organization face logistic challenges with the 7 R’s. One of the key challenges is how to stock your inventory so that you can respond to customer demand without your carrying cost being too high. The consumer has created a power shift that requires e-commerce companies to get the right product at the right cost to the right consumer as soon as possible, or at the right time. This can be achieved by companies like Amazon creating more nodes in their network that dedicate warehouses for inventory on popular items bought and freight carriers with dedicated routes. Furthermore, one can try to forecast customer demand, but this introduces risks, surpluses, or stock outs. Applying a newsvendor model would be a good way to tackle part of this problem, but as opposed to a single or limited line of products, a retailer needs to know how to read the market more than a manufacturer does. However, since they’re closer to the end of the supply chain, their risks of being impacted by the bullwhip effect are less.

**12. What are the supply chain challenges during pandemic like Covid-19? Describe few approaches that can help mitigate supply issues of essential commodities to public during such pandemics.**

The pandemic provided two shocks in the global supply chain. Certain industries like meat production have had difficulty with production due the workers being sick. Retailers have had to shut down due to local health mandates or a lack of customers. Moreover, there was a lack of suppliers able to provide material, followed by a lack of customers to buy the material. Once there was a surge of transported freight, there was a lack of labor and inventory space in supply chain interfaces. Few approaches that could help mitigate supply issue of essential commodities can be near-shoring, building a supply chain resilient rework that involves more inventory and less lean processes, and installing robotics and automation. Due to the k-shaped recession, some companies may have to change their target market segment, especially with respect to pricing, and this may require a reworking of their supply chain.

**HBR Case Study**

Five key issues found in the article are:

1. Supply chains developing on only lean manufacturing
2. Supply chains evolving fragile by increasing specialization, which increases inter-reliance as sub-assemblies become smaller and smaller
3. Political issues creating barriers to free trade
4. Deep-tiering that reduces the visibility of your suppliers, which makes it harder to optimize the supply chain
5. Requiring multiple international transportation journeys to reach destinations