**SCLM 5th Edition End of Chapter Questions and Answers**

Chapter One: 21st Century Supply Chains

# Study Questions

1. **Compare the concept of a modern supply chain with more traditional distribution channels. Be specific regarding similarities and differences.**

Traditional distribution channels typically had an order fulfillment time of 15-30 days. However, if something went wrong, this time could increase dramatically. It was a common practice to maintain inventory at every stage of the supply chain like retailers, wholesalers, and manufacturers. The market was characterized by scarcity to the primary goal of traditional model was to ensure availability of products. However today customers want more options in product offerings. Modern supply chain is geared towards meeting the changing consumer needs. Transportation capacity and operational performance has become more reliable and economical. Logistical systems are capable of capable of delivering products at exact times. So, customer orders can be fulfilled faster. With massive development in information technology, the need to maintain inventory has reduced dramatically. The occurrence of failures, characteristics of traditional supply chain, has been replaced by a commitment towards zero-defect of six sigma performance. In essence a high level of performance is achieved at a lower total cost with commitment of fewer financial resources than that in the past.

1. **What specific role does logistics play in supply chain operations?**

Logistics is the primary conduit of product and service flow within a supply chain arrangement. It is the work required to move and to position inventory throughout a supply chain. It is a combination of order management, inventory, transportation, warehousing, material handling and packaging as integrated throughout a facility network. Logistics is essential for effective supply chain connectivity.

1. **Describe and illustrate an integrated service provider. How does the concept of integrated service provider differ from traditional service providers, such as for-hire transportation and warehousing?**

Integrated Service Providers (ISP) also known as third-party logistics providers offer a range of logistics services that includes all work necessary to service customers. With the regulatory changes in transportation the traditional logistics services providers started offering warehousing and shared transportation services. The ISPs initiated the radical shift from single function to multifunction outsourcing. Their services include order entry to product delivery and in certain situations they also provide wide range of value-added services. For example, United Parcel Services (UPS) stocks Nike shoes and warm-ups at its Louisville warehouse and processes orders hourly. All the related communication and financial administration are handled by a UPS call center in San Antonio. Therefore, UPS handles the basic logistics and value-added services for Nike.

In contrast the traditional service providers, such as for-hire transportation and warehousing specialize in specific functions. For instance, the for-hire transportation industry consists of carriers who specialize in moving products between geographic locations. The companies offering warehouse services are traditionally called public warehouses and they provide storage supplemented by specialized services.

1. **Compare and contrast anticipatory and response-based business models. Why has responsiveness become popular in supply chain collaborations?**

Anticipatory and response-based business models are the two ways used by firms to fulfill customer requirements. However, the fundamental difference in the two models is timing

The **Anticipatory model** has been the traditional business practice, which was mainly forecast driven. Since information about purchasing behavior was not readily available, and the channel partners were loosely collaborating, businesses were driven by forecasts. However, the forecasts used by the manufacturers, wholesales, distributors, and retailers were often different resulting in excess inventory in the system. All the work was performed in anticipation of future projections, so the likelihood of misgauging customer requirements was very high. In addition, each firm in the chain duplicated the anticipatory process.

The **Response-based model** aims to reduce or eliminate forecast reliance by joint planning and rapid exchange of information between supply chain partners. This model is possible because managers can now obtain and share accurate sales information more quickly. Consequently, customers can be provided with their desired items faster. This model requires fewer steps and therefore less cost to complete fulfillment compared to the anticipatory model. A Response-based model is similar to a build to order model however the former has a faster response time and allows higher degree of customization.

Responsivenesspropelled by information technology development has become the cornerstone of today’s supply chain collaboration. Higher responsiveness can not only increase the level of customer satisfaction but can also reduce the overall cost of doing that.

1. **Discuss five non-traditional supply chain applications and describe the similarities and differences between traditional supply chain applications**

Students can choose from numerous non-traditional supply chain applications as presented in Table 1.2. Similarities could be the inclusion of similar supply chain activities, however differentiated for the very specific application. For example, a construction supply chain still includes concepts such as procurement and logistics, however it is hyper specialized to emphasize just in time delivery performance to keep construction operations moving and not dwell product or cash, for undue periods of time. Each example will combine traditional supply chain elements with modifications specific to the application and goal of the given supply chain.

1. **Describe how one of the consumer disruptors and one of the technology disruptors will impact supply chain design and strategy?**

Students could choose the following disruptors: (1) “want it now” mentality (2) personalization (3) millennial preferences (4) omni-channel shopping or (5) aging consumer needs. Technology disruptors include: (1) autonomous vehicles and the internet of things (IOT), (2) artificial intelligence (3) Uberization (4) 3D printing (5) big data (6) alternative fuels. Answers should focus on how these consumer preferences and technologies will impact traditional supply chain strategies such as manufacturing, procurement, and logistics. In particular, answers should focus on how the consumer preferences and technology will change the decision. For example, consumers with a “want it now” mentality require a supply chain with inventory positioned closer to the end consumer and/or expedited transportation capabilities and capacity.

# Challenge questions

1. **What are the operating challenges related to a brick-and-mortar retail toy stores plan to establish 600 temporary or pop-up seasonal retail outlets? Be specific concerning the supply chain challenges leading into, during, and after the Christmas selling season.**

There are several challenges when a brick and mortar retailer establishes temporary retail outlets.

**Staff:** First, recruiting temporary staff and training the staff to meet the customer service requirements of the toy store may turn into a significant challenge.