



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

June 2018

Post Graduate Diploma in Materials Management

Paper 17

ADVANCED SUPPLY CHAIN MANAGEMENT

Date: 15.06.2018

Time: 2.00 p.m. to 5.00 p.m.

Max. Marks 100

Duration 3 hours

Instructions

1. The question paper is in three parts
2. Part A is compulsory. Each sub question carries one mark.
3. In Part B answer any 3 questions out of 5. Each question carries 16 marks
4. Part C is a case study with sub questions and it is compulsory.

Total marks-32

Total marks-48

Total marks-20

PART A

(32 x1 = 32 marks)

(compulsory)

Q. 1. Fill in the blanks.

- a) Customers and retailers are stages of a _____.
- b) Supply chain flows within the _____ are the internal supply chain.
- c) Physical distribution is concerned with _____ shipments.
- d) Demand uncertainty leads to _____.
- e) The external supply chain connects the key _____ and _____.
- f) When a firm moves from a decentralized to centralized system _____ reduces.
- g) ABC classification is based on the _____ value.
- h) Aggregation of demand across locations leads to _____.
- i) _____ states that 80% of a nation's wealth is held by 20% of the population.
- j) When the shipment is directly from the supplier to retail stores it is _____.
- k) RSP means _____ partnership.
- l) A fast and high volume channel for movement of information is _____.

Q. 2. State True or False

- a) The success of supply chain is based on their ability to deliver quality.
- b) Movement of finished products to customers is physical distribution.
- c) In a pull process there is no demand uncertainty.
- d) Cycle time is the total time from the beginning to the end of the process.
- e) In the systems approach, a channel is viewed as a set of fragmented parts.

- f) Direct shipment strategy was made famous by Wal Mart.
- g) A strategy that has a narrow competitive scope is a focus strategy.
- h) Distribution side of the firm is managed by MRP.
- i) When a buyer enters into a purchase and a sale transaction, it is called hedging.
- j) Average setup time related to cost capability area.
- k) Supplier selection is outside the purview of the procurement cycle.
- l) In cost focus, a firm seeks a cost advantage.

Q. 3. Match the following:

A

B

- | | |
|------------------------------------|-------------------------------------|
| 1. FSND, ABC, Golf | a. Commercial Tax |
| 2. Decision analysis | b. White Box |
| 3. Third party logistics | c. Inventory classification methods |
| 4. Formal supplier integration | d. Differentiation strategy |
| 5. Automatic identification method | e. Focus on core strength |
| 6. Product dimension uniqueness | f. Information functionality |
| 7. Informal supply integration | g. Grey Box |
| 8. Excise duty | h. RFID |

PART B

48 marks

(Answer any three. Each question carries 16 marks)

- Q4.** A) Explain the principles of supply chain information with suitable examples.
B) Explain the Blue whip effect.
- Q5.** A) Discuss any two functional strategies impacting supply chain performance.
B) Explain the impact of customer needs on implied demand strategy.
- Q6.** A) What are the goals of supply chain information technology?
B) What are your thoughts about the future of supply chain management?
- Q7.** A) Discuss the essential elements of geographical information system.
B) Explain any two performance metrics along the supply chain.

Q.8. Write Short Notes any four. 4 x 4 = 16 marks

- A) Third Party Logistics
- B) Retailer Supplier Logistics
- C) Mass customization
- D) Data warehousing and data mining
- E) Effective Forecasts

PART C

20 marks

Q.9 Case Study (compulsory)

In the new economy, Information Technology (IT), new business models, Supply Chain Management (SCM), the Internet, e-Business are all key buzzwords that formed the driving force of the prosperous American economy in recent years. After the passing or fading of such enthusiastic fervor, it is only natural for businesses and corporations to face the harsh reality. This is manifested in the sharply falling stock prices on the NASDAQ, the bankruptcy of ill-formed IT venture companies, virtually unprofitable new business models, soaring unemployment in the IT sector, huge stockpiles of inventories in the PC and semiconductor industries aggravating by shrinking demand. Nonetheless, before arriving at any conclusion, careful must take to distinguish what are the real phantoms and bubbles, and what are the seeds of future growth. Hence, it is timely to review two examples of such IT rage and downturns.

e-Business was one of the favorite buzzwords during the years 1999 and 2000. Popular success stories on e-Business have included the likes of Amazon.com, Dell computer and Cisco systems. The most notable example is Amazon.com whose stock price soared to more than 100 US dollars in 1999, but now trades at around 7 US dollars. Even more interesting about Amazon.com is that this company has never been profitable since it was first established in 1995. The company had spent a lot of money collected from the stock market to build the IT and logistics infrastructure to support the business. When the stock price was at its peak in 2000, many people believed that retail stores will no longer exist in future. Instead, everybody will buy goods from the Internet. Today, casual observation shows that many retail bookshops have their own web sites to sell their web centric products as well as through the retail shops. For this sector, to have both retail shops and web sites is considered as a competitive advantage since the customer can now physically go to the shop for service claiming. This strategy is now called the 'Click and Mortar' strategy.

While Amazon.com and other legendary e-commerce venture companies have been experiencing difficulties, consumers steadily increased their purchases from the Internet. Purchasing from Internet became an alternative to going to the retail shop to procure goods and services. Although some Internet shops disappeared after the recent downturn, there are still surviving click and mortar companies and these are yielding some profit. One example is the Japanese Internet mall called Rakuten that purchased the famous search engine company Infoseek recently. Rakuten provided a market portal on the Web so that many small companies can open their online shops with relatively small amounts of time and monetary investment. Today, the Rakuten mall has more than 20,000 retail shops and the number is still increasing. These small e-commerce companies which have very unique business models and good business strategies are surviving and are expected to grow even in the current IT recession.

A second example is about SCM. SCM was also one of the fashionable elixirs, which many large companies were looking for. Many software companies tried to sell their SCM component, claiming

that customers can save a lot of money by implementing their software. Indeed, there have been reports of customers that have successfully implemented SCM and as a result saved a lot of money. They have reduced either material inventory by strategically implementing Vendor Managed Inventory (VMI) or reduced finished goods inventory through obtaining more accurate demand forecasts. Nevertheless, bad news soon arrived at the SCM community in early 2001. It was in the form of the sneaker company Nike suing i2, one of the leading Supply Chain Planning (SCP) system developers. Nike had claimed that i2's demand forecast system provided the wrong information about the demand for sneakers. As a result, Nike suffered monetary losses by producing the wrong sneaker model, leading to a huge increase in the inventory of that model, while suffering from shortages of the other better demanded models. Lawsuits aside, apparently, Nike did not understand how to apply SCP properly in their business.

SCP is not a magic box that will yield freely the sales forecast in any circumstance. Instead, the user has to enter all the needed information accurately. As usual, there are always assumptions and conditions required to obtain the desired forecast out of the system. The caveat of garbage in (wrong data) garbage out (wrong results) still holds. If anyone were to be blamed in this i2 incident, it had to be the i2 sales personnel who misled the customer's expectation during the selling of their SCP product. Nevertheless, there are many companies using SCP properly today and have as a result improved their business bottom lines. No doubt, the final customer's demand on such software is increasing as this is an important weapon for survival in the global competitive marketplace. On the other hand, the customer's spending on such software has decreased.

Questions:

1. Discuss the major initiatives associated with the supply chain of the company.
2. What are the strategies that you would suggest to the company to become proactive in ensuring supply chain efficiency?
