



CII Institute of Logistics

PGDSCM & Certificate Programs
Semester-end Examination – June 2009

SUPPLY CHAIN METRICS

Time : Three Hours

Marks : 100

Part A

Answer all questions (20 x 1 = 20 Marks)

1. A clear distinction between metrics at strategic, technical and operational levels is called for. For example, in dealing with the inventory, it would be most suitable to assess it from strategic point of view. TRUE/ FALSE
2. The decisions associated with supply chain management can only be long term TRUE/ FALSE
3. Agility implies from one end of the supply chain to the other. It focus upon eliminating the barriers to quick response regardless of geography and demand, be they organisational or technical and quickest satisfaction of customers. TRUE/ FALSE
4. 3 – Dimensional concurrent engineering approach i.e. 3 – D CE, begins with designing the product and then either designing the supply chain or the manufacturing process – in the bargain. TRUE/ FALSE
5. The goal of making measurements in supply chain concepts to permit the managers to see their company more clearly from many perspectives and hence to make better decisions. TRUE/ FALSE
6. EVA does not set managerial performance target and limits it to reward systems. TRUE/ FALSE
7. The main reason for measurement, evaluation and improvement of logistics service provider quality are
 - a. The importance of a service to customers.
 - b. The performance of that service by the organisation.
 - c. cost and time required for improvement
 - d. All the above
 - e. None of the above
8. A value impact analysis provides a process for evaluating how the supply chain is performing in terms of internal metrics. TRUE/ FALSE
9. Supply chain analysis cannot drive down costs but can increase market opportunities. TRUE/ FALSE
10. There are only two structural dimensions for describing, analyzing and managing the supply chain viz. horizontal structure and vertical structure. TRUE/ FALSE
11. A supply Chain Metrics performs two main roles of Physical Distribution and Market mediation TRUE/ FALSE
12. Among the three main flows in supply chain, which flows in one direction?
 - a. Finance
 - b. Information
 - c. Material
 - d. a and c only.
13. Supply Chain Design has pursued which as core competitiveness:
 - a. Product
 - b. Price
 - c. Time
 - d. All of the above
14. Agile Supply Chain improves:
 - a. response to rapid and unpredictable market
 - b. Product life cycles
 - c. Mass Customization
 - d. All of the above
15. In a Traditional Supply Chain
 - a. Focus on lower cost
 - b. Cycle time is much lower
 - c. Is very efficient and improves customer satisfaction
 - d. Agile
16. All Potential Gaps in SCOR model are:
 - a. There are no gaps
 - b. Marketing
 - c. Manufacture
 - d. Finance
17. Balance Score card is
 - a. used to write stock of items at stores
 - b. Other name for Bin Card
 - c. is a management system that enables organizations to clarify their visions and strategy and translate them into action
 - d. used to maintain pending supplier payments
18. Which of the following limit EVA:

- a. Can be manipulated by Managers
- b. Diminished Innovation
- c. Does not control size differences across plants
- d. All of the above

19. ABC and Balance Score Card systems can provide inputs to a firm's distribution channel strategy. TRUE/ FALSE

20. Which of the following Abbreviations is not correct?

- a. AHP- Analytical Hierarchy Process
- b. EVA- Economic Value Added
- c. EVA- Economic Value Addition
- d. SCOR- Supply Chain Operations Reference

Part B

Answer all FOUR

Marks: 4 x 10 =40

1. (a) Explain the concept of Supply chain management
(b) How can you improve the SCM competitiveness?
2. (a) What is EVA
(b) What are the advantages claimed for EVA? What are its limitations?
3. (a) Explain Activity based Costing system?
(b) How can you use ABC system and balanced scorecard in a complementary fashion?
4. Emphasise the importance of customer service and set out the elements of Customer service.

Part C

CASE STUDY

Two Brothers Automobiles Ltd. (TBAL)

Two Brothers Automobiles Ltd. (TBAL) is a Bangalore based well established medium sized company engaged in the manufacturing and distribution of automotive V belts and break - linings used in the automobile.

Presently the company has experienced some very challenging environment not only due to the prevailing competition in the auto component industry but also due to liberalisation of the Indian economy, which cleared the way for the entry of global players with world class technology and managerial acumen.

At present the company is managing its marketing and distribution functions from its Bangalore head office. It has two major customers, as an original equipment manufacturer (OEM) contributes nearly 60 percent of the business and the

remaining orders come from the national replacement market through a network of wholesalers and retailers. The OEMs are located at Mumbai and Gurgaon, respectively.

Due to the cut throat competition in the automobile industry, OEMs have become more cost sensitive and implement Just-in-Time (JIT) inventory management to reduce their inventory cost. That is why, they are putting pressure on locating warehouses near to OEM plants in order to reduce their own replenishment cycle time from 15 to 20 days to 3 to 5 days. Management have been concerned as to how this would affect the company's inventory necessary to provide local warehousing for two of its large OEM customers would be almost Rs 20 lakh, apart from infrastructural cost.

The objective of the company was to double its turnover to Rs 500 crore by increasing its OEM base (as a large number of automobile manufacturers have been situated near Delhi as well as Mumbai) as well as being more aggressive in replacement market. To achieve the above objective and become the market leader, the management emphasizes on using customer service as a means of core competency.

A project has been initiated to determine the feasibility of the regional network of the distribution centres at Pune and Delhi as the former is an emerging automobile hub which is linked with Mumbai by expressway, whereas Delhi is the largest replacement market in India. The project focused on studying the firm's current customer service capabilities and the recommended logistics strategies it should pursue in the future. Management identified the following key issues:

- Logistics systems currently being used by the competitors
- Competitive advantage in the long run by improved customer service
- Just – in – Time program response
- Warehousing strategy with regard to the number and location
- Logistical productivity improvement
- Methods of performance measurement and how can they be adopted
- Logistics interface with their functional areas of the organisation

To answer these issues a SWOT analysis was conducted to alert the management with its firm's current performance, customer expectations regarding service capabilities such as consistent and reliable replenishment cycle time, speedier order processing, availability of goods with the corresponding ability to meet unforeseen requirements in a cost efficient manner without any defective delivery along with point-to-point information which will be achieved by improving logistical productivity and state of art technology.

Answer all FOUR

Marks: 4 x 10 =40

1. What are the problems presently faced by TBAL?
2. Suggest a logistical customer service strategy?
3. What changes would you recommend for the implementation of the new strategy?
4. What type of new technology is required for the improvement of productivity and customer service capability?
