



CII Institute of Logistics

PGDSCM & Certificate Programs
Semester-end Examination – June 2010

SUPPLY CHAIN METRICS

Time : Three Hours

Marks : 100

Part A

Answer all questions

(10 x 1 = 10 Marks)

1. The primary purpose of any vendor performance system is to:
 - a) Evaluate their product quality over time
 - b) Decide on vendor selection
 - c) Evaluate vendor performance
 - d) Assess if meeting all buying requirements
2. Customer satisfaction is predominantly determined by their experience during the:
 - a) Pre- transaction and post – transaction phases
 - b) Pre- transaction and in –process transaction phases
 - c) In-process transaction and post- transaction phases
 - d) None of these phases
3. The ABC analytical tool as applied to inventory management is best aligned to
 - a) Activity –Based Costing
 - b) Analytical –Based Costing
 - c) Alpha –numeric Based Classification
 - d) Pareto’s Analysis
4. The SCOR Model is characterized by the following distinct management processes:
 - a) Plan, Select, Make, Deliver, and Return
 - b) Plan, Source, Make, Deliver, and Return
 - c) Process, Select, Manufacture, Deliver and Recycle
 - d) Process, Source, Make, Destroy and Return
5. In the BSC model , each of the four perspective is to be examined in relation to:
 - a) Objectives, Methods, Tools and Initiatives
 - b) Objectives, Measures, Targets and Introspection
 - c) Objectives, Methods, Targets and Inspection
 - d) Objectives, Measures, Targets and Initiatives
6. EVA can be variously described as below. Pick the wrong one.
 - a) Sets managerial performance targets and links them to reward systems
 - b) Measure of total factor productivity
 - c) Representative of value addition
 - d) Multiple value – based measure of financial performance
7. The Analytical Hierarchy Process decision-making technique links the following tools:
 - a). SCOR model and BSC model
 - b). BSC model and Activity –Based Costing
 - c). SCOR model and Mission-Objective - Strategy
 - d). Mission –Objective – Strategy and Target –based costing
8. While doing customer service analysis for considering making improvements:
 - a) Performance – Importance matrix precedes cost- time matrix
 - b) Cost-performance matrix precedes time- importance matrix
 - c) Cost-time matrix precedes performance –importance matrix
 - d) Precedence does not matter
9. Agility in a supply chain is a measure of its:
 - a) Speed of deliveries
 - b) Responsiveness to uncertainties
 - c) Flexibility to meet increased demands
 - d) Adaptability to change
10. In making a trade-off between customer service and costs, the optimal decision is arrived at by:
 - a) Enhancing customer service and reducing costs
 - b) Reducing customer service and reducing costs
 - c) Enhancing customer service and increasing costs
 - d) None of the above

Part B

Answer any FOUR

(15 x 4 =60 Marks)

1. Compare and contrast Activity- Based costing and target-Based costing Methods as tools for cost-reduction. Illustrate your answer with suitable examples.
2. Every organization swears by customer service to satisfy their needs and even exceed their expectations. But more often than not, they do not succeed. Why do you think this happens? Choose any specific industry or Product group as an example, and explain how such an organization can establish suitable and focused metrics on customer satisfaction.
3. Few organizations know the true length of their end –to end supply pipeline. One useful overall measure is the cash-to-cash cycle time. What is its significance considering the various elements of a supply chain? How does tracking of these individual elements help to monitor and improve their performance?
4. A large nationally dispersed firm wishes to select a logistics services provide amongst several contenders. Prepare a detailed list of background information and performance indicators / metrics that you would seek from all prospective service providers to assist in your vendor assessment and selection.
5. Quality is a vital performance measure which has several dimensions and with internal and external implications. Why do we say so ? Elaborate your answer using the example of a high-class multi-cuisine restaurant and identify at least 6 different metrics to assess its quality performance.
6. What are benchmarking and its levels? Why is it so important? Why is it useful in supply chain performance management? As a FMCG firm how would you see this evaluation tool?

Part C

Case Study

(3x10=30 Marks)

FAST DEL SERVICES (FDS) is a courier based in Mumbai offering local, domestic and international courier services. They have been in business for the last 3 years and managed to capture about 10% of the market share during 2009 in a market which was worth Rs 2500 crores. They complete against global leaders like DHL/Blue Dart and Fedex amongst others who together command about 70% shares. Large numbers of small players are also in the businesses that are estimated to cumulatively hold balance 20% share. Several of these small players are now scaling up their operations and threatening FDS’s position based on better service, quicker deliveries and at lower costs.

FDS’ recent performance in 2009 is a cause of worry as the percentage deliveries with problems was a high as 8% compared to the global industry norm of only 2% and the domestic industry norm of 5% . The management is really rattled and very keen to get down to the bottom of their problems to see how to even hold on to their market share in this overall market currently growing at around 20% per annum.

Detailed 2009 performance data has been urgently called for. Such data for the last 20000 consignments spread over the last 6 months had 1600 such problem cases with the following pattern:

| Nature of Problem | Number of Occurrences | Percentage Occurrences |
|-------------------------------------|-----------------------|------------------------|
| Late deliveries | 944 | 59 |
| Early deliveries | 32 | 2 |
| Shipment batches too large | 192 | 12 |
| Shipment batches too small | 64 | 4 |
| Consignments delivered with defects | 128 | 8 |
| Mix-up in consignments delivered | 16 | 1 |

| | | |
|-----------------------|------|-----|
| Documentations errors | 224 | 14 |
| Total | 1600 | 100 |

Questions:

1. To find solutions to their problems, where would you begin? What additional data/ performance metrics would you seek to do a more detailed analysis?
2. Based on your insights and developed metrics, do visualize the possible detailed nature of their problems and how they can overcome them.
3. While managing performance thro' metrics between a service industry and a manufacturing unit, do you find there are any differences or not? Justify your answer either way.
