MMS - III
(Mktg.)

25/10/2012

DSCM 03

mms (mkt)

Distribution & Supply Chain Management

Roll No._____ **Total No. of Printed Pages: 3**

Total No. of Questions: 3 **Maximum Marks: 30**

Duration (hrs.) : 2

Note : There are three questions carrying equal marks (10 marks each) and all are compulsory, although they may have internal choices.

Q.1. Explain the following [ANY TWO]:
(A) Fiscal Levies in Distribution
(B) Channel Conflicts and Its Resolution
(C) Tasks and Responsibilities of Distribution Channel Members
(D) ERP Solutions: Opportunities and Challenges

Q.2. Design the Distribution Channels and Sales Promotion Strategies adopted for each channel for following:
(A) Rural Distribution Channels for Electronic Goods (Dealing with distribution of multiple brands in home appliance category).
OR
(B) Managing Supply Chain of Perishables (fruits and Vegetables): Distribution from production centers to national and International destinations.

Q.3. Read the following case carefully and answer the given questions precisely:

Streamlining Logistics at General Motors Corp

"The problem is we can't afford to take 11 to 12 days to get a car to a customer."

– Harold Kutner, Vice President, Purchase, Production Control and Logistics, GM.[1]

General Motors Corp. (GM), the world's largest automaker, came into existence in 1908. By mid-2005, GM had manufacturing bases in about 32 countries, sold its vehicles in about 200 countries, and employed around 324,000 people around the world.[2] GM's brands included Buick, Cadillac, Chevrolet, GMC, Holden, Hummer, Opel, and Pontiac. GM set records in industry sales in the US for the fourth consecutive year in 2004 for total trucks, pick-up trucks, and sports utility vehicles. To improve and streamline its logistics system, GM entered into partnerships and joint ventures with various companies both on a global platform and locally.

The Brazilian subsidiary of General Motors was established in 1925. It was GM's largest subsidiary in South America. As of early 2004, GM Brazil had annual exports of over US$1 million.[3] It exported Completely Knocked Down (CKD) kits to Chile and Colombia, built-up vehicles to GM Uruguay, Single Unit Pack (SUP) like Omega and Blazer to Paraguay, and passenger cars and vehicles to GM Argentina.

In late 1990s, in a bid to introduce the economy range cars in Brazil, GM planned to start an assembly of 100,000 cars on an annual basis. For this purpose, GM needed constant inputs from various suppliers who were physically located about 1200 km away from the manufacturing site. Further, it also wanted to implement 'Just in Time' management, which emphasized the continuous supply of raw materials. This required an efficient logistics mechanism that would minimize the chances of supplier related delays. As Thomas Nationwide Transport Logistics (TNT) was already in a business relationship with GM in North America, Europe, Australia and Asia, TNT was the natural choice for GM Brazil as its third party logistics provider (3PL).

TNT introduced an efficient in-bound logistics system, which also included emergency plans for contingencies. To cut delays in production schedules, WAP[4] (Wireless Application Protocol) technology was used to monitor the line haul routes from GM plant. Any delay created an alert in the system, which used a track and trace mechanism. In addition, there was an hourly monitoring of the transport movement using the Global Positioning System (GPS). TNT also restructured the transport system to fully utilize the time of the transporters. This logistics system helped GM to avoid any shut down in the three years from 2001 to 2003. As a result of these changes, TNT received the '2002 Supplier of the Year Award' and 'Certificate of Merit' from GM. TNT was elected the 'Best Transportation Company' in Brazil in July 2001 and 'Best Company of the Year' in Brazil's Automotive Sector in

---

1 "GM Inks Huge Logistics Deal with CNF," Ephraim Schwartz, www.infoworld.com, December 13, 2000.

2 www.gm.com.

3 <http://www.gm.com/company/corp_info/global_operations/south_america/braz.html>

4 WAP is used in Wireless Communications to Facilitate Access to Internet Pages from a Mobile Telephone.

November 2001. TNT received the ISO 9002 certification in 2002. In Mexico, the GM subsidiary utilized the services of Penske Logistics (Penske). Penske implemented a logistics system that provided real time updates from every supplier and carrier. This enabled proactive action on the inbound transportation network.

In 2000, GM had around 12,000 suppliers and daily shipments of 180 million lb of materials; it produced more than 35,000 vehicles on a daily basis. Therefore, GM felt the need to outsource its logistics management and entered into a joint venture with CNF Inc. Instead of utilizing the services of CNF as a third party logistics provider like TNT or Penske, GM set up a separate company called Vector SCM (supply chain management). Vector SCM was a fourth party logistics (4PL) provider that was set up to integrate all 3PL providers into one system. Under this arrangement, Vector SCM would manage logistics for all GM businesses across the world.

The main reason behind this joint venture was to build an order to delivery (OTD) concept that would help in developing a build to order manufacturing machine. In the existing system at GM, once a vehicle was ready for delivery, there was a delay of 13 days due to non-coordination with the transport system. Another hurdle that GM faced was the slow information flow between the various components of the supply chain due to which the OTD concept was not being implemented. Therefore, GM needed a solution that would offer the status of the transit vehicles as well as identification of each vehicle depending on the kind of sales order it was fulfilling. This would enable GM to redirect the vehicle to any contingency requirements.

Vector SCM essentially provided a package of solutions that resulted in giving more visibility to GM on the supply chain angle. This included integrating the back end functions with the front end process, reducing total order cycle time to less than 50%, that is, from 60 days to around 15-20 days. Shipping time was also expected to come down from 13 days to 8 days. This would help speed up deliveries, resulting in better sales for GM. Vector SCM would also bear the logistics costs of GM that amounted to US$5 billion. Vector SCM was to develop this system globally over a three-year transition phase which would gradually help GM to become a 'Bricks and clicks' organization.

Questions to Discussion:

1. Why did GM Brazil choose TNT as its logistics partner? How did TNT help GM in achieving its objectives of following the Just in Time concept? Explain by bringing out the advantages of logistics systems to GM.
2. Apart from generating a super efficient logistics system to help develop the OTD concept and increase Internet sales, what are the other benefits that GM could have obtained by forming a joint venture with CNF Inc.? Why did it avoid the traditional contracting arrangement with the logistics firm?
