



EASTERN UNIVERSITY, SRI LANKA

Faculty of Commerce and Management

Third Year – Second Semester Examination in Bachelor of Business Administration/

Specialization in Marketing Management – 2013/2014

(September/October 2016) Proper

MKT 3063 Supply Chain Management

Answer All Question

Time:03 Hours

Q1. Read the following case study and answer the questions given below.

A World Prominent Retailer - Wal-Mart

Walmart is a well prominent world's biggest retail shop. When understanding Walmart operations and its competitors yield more insights about retail world. Wal-Mart's revenue for the trailing twelve months was \$205 billion, while Kmart reported \$37.1 billion for the same period; what's more, Wal-Mart's profit margins were more than ten times Kmart's margins. Wal-Mart has about 1,750 discount stores, plus some 900 Supercenters, almost 500 SAM'S Clubs, and about 20 Neighborhood Markets, and has used its heft to become a true multinational, with hundreds of stores in Mexico and Canada and scores more around the world. Kmart operates its 2,105 in the US and its territories.

One of the biggest reason for Walmart success was the founder of Sam Walton. The ways Sam Walton, who used information technology to keep track of what sold in his stores, replenish the products that were selling the fastest, and kept inventory costs down. Even more important in the long run: Wal-Mart's systems have been used to support a coherent and consistent strategy of everyday low prices and customer service, while Kmart has lurched all over the map. Although Walton was very cheap, he could be convinced to spend money on things that would save the company money in the long run and allow it to grow. On the same issues, Kmart had the tendency to be penny-wise and pound-foolish. In the 1970s and early '80s, Kmart lagged Wal-Mart on adoption of several waves of retail technology, including back-end computers for individual stores, electronic cash registers and scanners that could read UPC bar codes. By 1973, the growing Wal-Mart chain had computers in 22 of 64 stores. Kmart didn't get serious about putting them in every

store until 1978. By 1982, it had computers throughout its stores, but the lack of scanning registers meant that sales data wasn't kept as current.

As a result, Wal-Mart got a head start on many elements of what is now called "supply chain management." The scanning cash registers fed updates to store computers, which adjusted sales and inventory records. Store managers could watch the inventory of a fast-moving item drop and electronically file replenishment orders with Wal-Mart's distribution centers. Using technology to simplify processes, eliminate waste, and analyze and react to more meaningful information has been the execution focus of Wal-Mart. Thus, far technology has aided in Wal-Mart reducing operating and selling & administrative expenses as a percentage of sales to less than 15 percent. Technology is the catalyst that enabled Wal-Mart to wring efficiencies out of processes that were unmatched by leading companies in other industries. Take, for instance, the replenishment problem. At any given moment, a typical Wal-Mart Discount Store has more than 70,000 standard items in stock. Every one of them has to be identified, ordered, inventoried, and replenished. A typical Supercenter is even tougher to stock since it carries more than 20,000 additional grocery items, many perishables. These have to be reordered frequently, sometimes even daily.

How does technology enable this? Since 1996, Wal-Mart has been using handheld computers linked to in-store servers by a radio-frequency network. It's a high-tech conduit to an integrated inventory system. These handhelds help keep track of real-time information for the inventory on hand, deliveries, and back-up merchandise in stock at distribution centers. Mobile computing has enabled Wal-Mart to have higher quality sales and inventory information. As a result, suggested ordering quantities on many items are available to associates in real time to assist them in the task of keeping stores replenished and items in stock.

Across all of its formats, Wal-Mart is one of the most effective users of technology. Some of its impressive technological feats include:

- In the 1980s, using satellite communications to link stores to headquarters for Just-In-Time inventory management (the first major retailer to do so).
- In the early 1990s, building the Retail Link system, which provides sales data—by item, store, and day—to vendor partners. This information saves suppliers time and expense in planning their production and distribution, which translates to lower merchandise costs.

- In the mid-1990s, utilizing an item locator system that allows associates to scan an item and electronically check on its availability in other area stores.
- In the late 1990s, creating the New Retail Link Private Hub, which allows more than 10,000 Wal-Mart suppliers to log into a Web portal, peruse databases, and find out which store sold how much of its products. With a latency of a mere six hours from transaction to analysis, Wal-Mart is using the Web to provide real-time information not only to stores and corporate managers, but to vendors as well.

Wal-Mart's next logical step was into the world of Electronic Data Interchange, using virtual documents to place orders and receive shipping notices. In the late 1980s, it began supplementing those EDI connections with a system called Retail Link that allowed suppliers to access sales data and projections, and help Wal-Mart plot ways to drive up sales. Today, this electronic networking with business partners would be called an "extranet." Retail Link started as a proprietary dial-up service, but smoothly evolved into a browser-based system.

In contrast, according to one former Kmart IT executive from the mid-1990s, Kmart's first experiments in collaboration with supply chain partners came about at the prompting of suppliers who had been involved in similar projects with Wal-Mart, and not because anyone at Kmart took the initiative. Kmart wound up with a split distribution network. Because its apparel sales were originally handled by independent companies, and later an organizationally separate subsidiary, the "Softlines" group for apparel and related products had a separate distribution network. Softlines also had different computer systems than those used by the "Hardlines" group that handled products like appliances. As of the mid-1990s, business analysts still couldn't generate one report that would give a complete picture of supply and demand—they had to run multiple reports, then bring the results together in a spreadsheet. Flash forward to 1997, and the same problem is a priority for then CIO-Donald Norman, who was billed in the press as a turnaround artist.

When Joseph Antonini became CEO in 1987, he announced a \$1 billion investment in faster technology adoption. But Kmart never used the technology it had to its full potential, Carlson says. The data warehouse could have been used more aggressively to forecast demand, but Kmart's merchandizing executives preferred to trust their own judgment. At the very least, historical data should have been used to determine which products ought to be dropped because they weren't selling. But the merchants tended to keep broadening the variety of products rather than narrowing in on the ones that sold best, Carlson says. Greg Buzek, who studies retail technology as president

of IHL Consulting, says the problem Carlson lamented continued long after he was gone. The warehouse, which Kmart and NCR recently announced plans to expand to 92 terabytes capacity, "will churn out all the information you need about what's selling and what's not," he says, "unless management pays attention, the data is worthless. "Because they didn't believe the system they had trucks, and trucks, and trucks of inventory just sitting there."

Under Chuck Conaway, those truckloads of inventory no longer sit behind Kmart stores. The absence is a clear sign that the company has made visible progress toward its goals. Whether this is truly the beginning of a new chapter in Kmart's use of technology to meet or beat its competitors remains to be seen.

Questions:

- a) How far has Wal-Mart's supply chain contributed to its competitive advantage over other retailers? Explain. (09 Marks)
- b) Wal-Mart has always used innovative information technology tools to supplement its supply chain. Briefly describe, how use of IT tools/enabled processes have benefited Wal-Mart. (09 Marks)
- c) Wal-Mart invited its major suppliers to develop profitable supply chain partnerships. Discuss how good and bad are sharing knowledge/critical information with vendors/suppliers or even customers? (10 Marks)

(Total 28 Marks)

Q 02.

- a) Explain the factors affecting on Order Processing Time with suitable example. (06 Marks)
- b) Define the term "Green Supply Chain Management" and briefly describe its Environmental and Social impact of it. (06 Marks)
- c) Assume that you are a Supply chain manager of a production company. Explain the factors you should consider in concern of Green supply chain management. (06 Marks)

(Total 18 Marks)

Q 03.

- a) Illustrate the "Control process frame work" in supply chain management with suitable diagram. **(06 Marks)**
- b) The emergence of supply chain management has broadened the scope across which companies make decisions. Briefly describe the "Macro Processes" in a Supply Chain. **(06 Marks)**
- c) SCOR model provides a systematic approach for identifying, evaluating and monitoring supply chain performance. Explain the objectives of SCOR model. **(06 Marks)**

(Total 18 Marks)

Q 04

- a) Define the philosophy of JIT supply scheduling and explain the Characteristics of it. **(06 Marks)**
- b) Innovative approaches to logistics/ supply chain strategy can give a competitive advantage. Briefly describe the logistic/supply chain strategies with suitable examples. **(06 Marks)**
- c) Suggest five documents that might be needed for each following international movement.
 - i. Importing mobile phones from South Korea to Sri Lanka **(03 Marks)**
 - ii. Exporting tea to Sidney, Australia from Sri Lanka. **(03 Marks)**

(Total 18 Marks)

Q 05.

- a) E-business affects a supply chain's ability to meet customer needs. Briefly explain the Impact of E-Business on logistic Customer Service. **(06 Marks)**
- b) Storage and material handling is a part of the logistic system. Briefly explain the four basic reasons for using storage space in supply chain management. **(06 Marks)**
- c) Six distinct distribution network designs may be used to move products from factory to customer. Identify two Design Options for a Distribution Network and explain those with suitable diagram. **(06 Marks)**

(Total 18 Marks)