

ADMISSION NUMBER											

## School of Business

Master of Business Administration MBA Dual Specialization  
Mid Term Examination - Mar 2024

Duration : 90 Minutes  
Max Marks : 50

### Sem IV - MBOP6014 - Supply Chain Analytics

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) As a supply chain consultant, appraise a real-world scenario where the cycle view and process view of the supply chain are distinctly evident. K5 (5)
  
- 2) In the context of a global manufacturing company, describe the key components of logistics and supply chain management. How can an integrated approach enhance overall efficiency and customer satisfaction? K3 (6)
  
- 3) Imagine you are a consultant advising a retail company. Explain how effective Supply Chain Management can be leveraged as a strategic tool to gain a competitive advantage. Provide specific examples from the industry. K4 (8)
  
- 4) A company is undergoing a strategic review of its supply chain. Discuss the concepts of strategic fit and scope in the context of supply chain management. Identify examples of how aligning the supply chain with business strategy can lead to a competitive advantage. K3 (9)
  
- 5) Case: St James's Hospital K5 (10)  
St James's Hospital, affectionately known as 'Jimmy's', is Europe's largest teaching hospital. It employs around 4500 people to support the 90,000 in-patient treatments per year and over 450,000 total admissions. Under increasing pressure to reduce costs, contain inventory and improve service, the Supplies Department has recently undertaken a major analysis of its activities, helped by the consultancy division of Lucas Industries, the UK-based manufacturing company.

The initial review highlighted that Jimmy's had approximately 1500 suppliers of 15,000 different products at a total cost of £15 million. Traditionally, the Supplies Department ordered what the doctors asked for, with many cases of similar items supplied by six or more firms. Under a cross-functional task force, comprising both medical and supply staff, a major programme of supplier and product rationalization was undertaken, which also revealed many sources of waste. For example, the team found that wards used as many as 20 different types of gloves, some of which were expensive surgeons' gloves costing around £1 per pair, yet in almost all cases these could be replaced by fewer and cheaper (20 pence) alternatives.

Similarly, anaesthetic items which were previously bought from six suppliers, were single-sourced. The savings in purchasing costs, inventory costs and general administration were enormous in themselves, but the higher-order volumes also helped the hospital negotiate for lower prices. Suppliers are also much more willing to deliver frequently in smaller quantities when they know that they are the sole supplier. Peter Beeston, the Supplies Manager, said: 'We've been driven by suppliers for years ... they would insist that we could only purchase in thousands, that we would have to wait weeks, or that they would only deliver on Wednesdays! Now, our selected suppliers know that if they perform well, we will assure them of a long-term commitment.

I prefer to buy 80 per cent of our requirements from 20 or 30 suppliers, whereas previously, it involved over a hundred.' The streamlining of the admissions process also proved fertile ground for improvement along JIT principles. For example, in the Urology Department, one-third of patients for non-urgent surgery found their appointments were being cancelled. One reason for this was that in the time between the consultant saying that an operation was required and the patient arriving at the operating theatre, there were 59 changes in responsibility for the process.

The hospital reorganized the process to form a 'cell' of four people who were given complete responsibility for admissions to Urology. The

cell was located next to the ward and made responsible for all record-keeping, planning all operations, ensuring that beds were available as needed, and telling the patient when to arrive.

As a result, the 59 handovers are now down to 13 and the process is faster, cheaper and more reliable. Jimmy's also introduced a simple kanban system for some of its local inventory. In Ward 9's storeroom, for example, there are just two boxes of 10 mm syringes on the shelf. When the first is empty, the other is moved forward and the Ward Sister then orders another.

The next stage will be to simplify the reordering: empty boxes will be posted outside the store, where codes will be periodically read by the Supplies Department, using a mobile data recorder. The hospital's management is convinced of the benefits of their changes. 'Value for money, not cost cutting, is what this is all about.

We are standardizing on buying quality products and now also have more influence on the buying decision ... from being previously functionally oriented with several buyers, we now concentrate on materials management for complete product ranges. The project has been an unmitigated success and although we are only just starting to see the benefits, I would expect savings in cost and in excess inventory to spiral!

The report on Sterile Wound Care Packs shows the potential that our team has identified. The 'old' pack consisted of four pairs of plastic forceps, cotton wool balls and a plastic pot, which were used with or without additional gloves. This pack cost approximately 60 pence excluding the gloves. The "new" pack consists of a plastic pot, swabs, etc., and one pair of latex gloves only. This pack costs approximately 33 pence including gloves. Total target saving is approximately £20 000.'

Questions:

- (a) List the elements in St James's new approach which could be seen as deriving from JIT principles of manufacturing.
- (b) What further ideas from JIT manufacturing do you think could be applied in a hospital setting such as St James's?
- (c) Suggest a suitable title and theme for the case.

6) Case Study: Starbucks Competitive Strategy

Starbucks is the world's largest speciality coffee retailer, with over 1,700 coffee shops in 55 countries. For years, Starbucks grew throughout the United States and internationally, opening franchises at an impressive rate. From 2002 to 2007 alone, the company tripled the number of stores it operated worldwide. Starbucks offers a unique experience: high-end speciality coffees and beverages, friendly and knowledgeable servers, and customer-friendly coffee shops. This was a winning formula for many years and enabled Starbucks to charge premium prices.

K6 (12)

During the economic downturn beginning in 2008, profits plunged. Customers complained that the company had lost its hip, local feel and had become more like a fast-food chain. Many coffee drinkers went in search of cheaper alternatives from McDonald's and Dunkin' Donuts for their coffee fixes. Starbucks stock lost over 50 per cent of its value by the end of 2008.

Major changes were in order. Starbucks seized the opportunity to overhaul its business by using several different strategies simultaneously. First, the company has revamped its in-store technology and sought to integrate its business processes with wireless technology and the mobile digital platform. Also, rather than copy the practices of competitors, Starbucks pursued a more aggressive product differentiation strategy, intended to emphasize the high quality of their drinks and efficient and helpful customer service. At the same time, however, Starbucks also focused on becoming 'lean', like many of their competitors, eliminating inefficiency wherever possible.

When Starbucks set out to improve its customer experience, it found that more than a third of its customers are active users of smartphones. The company set out to implement several features and improvements that would appeal to this segment of its customer base. First, Starbucks implemented a technology that allows customers to pay using a smartphone app.

The app is integrated with the Starbucks Card system, which allows regular customers to pay with a pre-paid and rechargeable card at any Starbucks branch. When customers make a purchase using the app, a cashier scans a bar code displayed on the phone, and the resulting sale is charged to the customer's Starbucks Card account.

Customers report that paying using this app, available for all major smartphone operating systems, is much faster than traditional forms of payment. In its first 15 months of use, the Starbucks mobile payment system processed 42 million transactions. Many of Starbucks' most loyal customers regularly spend time using the free Wi-Fi wireless network offered in each store.

A majority of these customers also use mobile devices to connect to the in-store Wi-Fi networks. Recognizing this, Starbucks launched

what it calls the “Starbucks Digital Network,” a portal designed specifically for mobile devices as opposed to traditional Web browsers.

The site is optimized for all major smartphone operating systems (iOS, Android, and BlackBerry), and responds to the multi-touch capability of devices like the iPad. The Starbucks Digital Network site was developed in partnership with Yahoo and functions as a content portal. Starbucks customers using the site will receive free Wall Street Journal access, free iTunes downloads, and a wide variety of other content.

The site will integrate with Foursquare, a location-based social networking site for mobile devices. This arrangement will allow users to check in and receive award points using Starbucks’ site. Because Starbucks has the most Foursquare check-ins of any company to date, this feature has been popular with customers.

Rather than serve ads on the site, Starbucks has opted to offer the site free of advertising, hoping that striking deals with content providers will make it a profitable venture. Even if the Starbucks Digital Network is not highly profitable, analysts suggest that the site is an effective way for Starbucks to improve its relationship with its most valuable customers and creative use of the mobile digital platform to enhance customer satisfaction.

In addition to revamping their business to better serve the needs of their mobile users, Starbucks has made a concerted effort to become more efficient, reduce waste, and use the time saved to provide better customer service.

Starbucks set out to streamline the business processes used in each of its stores so that baristas do not need to bend down to scoop coffee, cutting down on idle time while waiting for coffee to drain, and finding ways to reduce the amount of time each employee spends making a drink. Starbucks created a 10-person “lean team” whose job is to travel the country visiting franchises and coaching them in lean techniques made famous by automaker Toyota’s production system.

Store labour costs Starbucks about \$2.5 billion, amounting to 24 per cent of its annual revenue. If Starbucks can reduce the time each employee spends making a drink, the company can make more drinks with the same number of workers or with fewer workers. Alternatively, Starbucks could use this time savings to give baristas more time to interact with customers and hopefully improve the Starbucks experience. Wireless technology enhanced Starbucks’ business process simplification effort.

Starbucks district managers use the in-store wireless networks to run store operations and to connect to the company’s private corporate network and systems. Starbucks district managers were equipped with Wi-Fi-enabled laptops for this purpose. Before the in-store wireless networks were implemented, a district manager who oversaw

around 10 stores had to visit each store, review its operations, develop a list of items on which to follow up, and then drive to a Starbucks regional office to file reports and send e-mails.

Instead of running the business from cubicles in regional headquarters, Starbucks district managers can do most of their work sitting at a table in one of the stores they oversee. The time saved from going back and forth to regional offices can be used to observe how employees are serving customers and improve their training. Implementing Wi-Fi technology enabled Starbucks to increase the in-store presence of district managers by 25 per cent without adding any extra managers.

In 2008 and 2009, the weakened economy forced Starbucks to close 900 stores, renegotiate some rents, cut prices on some of their big ticket items, and begin offering price-reduced specials, such as a breakfast sandwich and a drink for \$3.95. Cost reductions from procedural changes made it possible for Starbucks to offer these lower prices.

Major fast food chains already used these techniques. While some baristas have resisted the changes, and analysts were sceptical that the changes would take hold, Starbucks attributes much of its recent uptick in profits to its efforts to go lean. Starbucks CEO Howard Schultz said that “the majority of cost reductions we’ve achieved come from a new way of operating and serving our customers,” and also added that the time and money saved was also allowing the company to improve its customer engagement. By 2011, Starbucks had returned to profitability and continuing growth, with plans to open 500 new stores, in large part because of the success of each of these changes.

- a. Analyze Starbucks using the competitive forces and value chain models.
- b. What is Starbucks’ business strategy? Assess the role played by technology in this business strategy.
- c. How much has technology helped Starbucks compete? Explain your answer.