FEEDBACK TUTORIAL LETTER

1st SEMESTER 2018

ASSIGNMENT 2

INTRODUCTION TO SUPPLY CHAIN MANAGEMENT

ISM511S
Dear Student

Congratulations to those that managed to submit their second and final assignment. Most of you did much better, but we still experience that some assignments are submitted without being referenced in text.

Once again, please do not submit work copied from the internet without referencing it. Plagiarism is an offence at NUST if you did not know. We would like to acknowledge Mr Shivute, who really did a very good job in his attempt to answer question 1. All questions were answered satisfactory. Please be guided by the marks allocated for each question when you attempt to answer any question. A 10 mark question = 1 A 4 typed.

Please start preparing for your examination now.

Question 1 (Assignment 2)
If you were in a hospital and need blood transfusion, would you choose the transfusion service that uses traditional system of holding stocks of blood, or just-in-time system, What does this tell you about JIT in other organization? (25 marks)

Blood inventory management entails maintaining a delicate balance between guaranteeing maximal availability of blood and at the same time minimizing wastage. Wastage can occur at many points across blood supply chain. Identification and analysis of various factors of wastage can provide insight to ideal inventory management, thus help in formulating policies and improve efficiency of blood transfusion services

JIT Definition: An inventory strategy companies employ to increase efficiency and decrease waste by receiving goods only as they are needed in the production process, thereby reducing inventory costs. The objectives of JIT are achieved through several physical systems or projects.
Some of JIT objectives are as follows: To reduce the set-up times and lot sizes; To achieve zero defects goal in manufacturing, To focus on continuous improvement; To concentrate on involving workers and using their knowledge to a greater extent; Layout of equipments in such a way so as to minimizes both travel distances and inventories between the machines; To reduce inventories and thus economize on inventory carrying costs; To eliminate waste (such as long set-up times, zig-zag material flow, scrap, machine breakdown, higher stocks, rework, inspection etc.); To identify any problem related to waste and solve that through total employees involvement; To eliminate all non-value adding activities by systematically identifying these; To cross-train the workers in multi-functions to maintain and enable them to run several machines at a time.

Traditional system of holding stock of what contribute to or become part of a firms product output and is classified in raw materials, finished products, components parts, supplies and work in process.

Traditional system of holding stock will Maintain independence of operations-decoupling blood to people who need it in time; it allow Flexibility in collecting scheduling stock of inventory relieves the pressure on production system to get the blood out, causing longer lead times; Buffer Uncertainties to protect the SC against uncertainty of future demand, lead time uncertainty in raw material delivery time and uncertainty in supply; Geographical Specialization as Factors of locating blood type, blood should be located and collected in time because it’s difficult to get some blood types; and it Prevent the cost of Stock out of blood. It will work as a Safety Stock-Buffer Inventory Held over and above the cycle stock to make provision for uncertainties and irregularities

Because JIT production is based entirely on existing orders, it is not the most efficient system for dealing with the unexpected like blood transmission. A hospital that will use this strategy may be ill-equipped to handle a sudden surge in demand for a blood. The lack of back-up inventory means customers must wait for the company to receive blood. This can mean extended delays, dissatisfied customers and potential forfeit of part of all of an order if any supply chain issues in getting the blood arise. JIT is a great cost cutting and less intensive but not in all situation like in this blood transfusion.

Even though demand uncertainty means your business has difficulty accurately projecting customer demand for blood in the future. This poses a significant challenge because it makes blood inventory hard to control and manage
The traditional system of holding blood will work most effective and efficiently in this situation due to the fact that blood is always needed in an emergency situation. An effective way to manage inventory is to measure inventory turnover and delivery turnaround time. This involves measuring how often your inventory sells and how long it takes to get into the hands of your customers.

**JIT in other originations**

JIT emphasizes on quality, which is essential for a JIT system. The defects not only produce waste but they can also grind the production process to a halt. Since there is no inventory to cover up for mistakes, perfect quality is required by a JIT system. A JIT system is designed to expose errors and get them corrected rather than covering them up with inventory. JIT can be applied to many subsystems of a manufacturing environment such as engineering design, setup time and lot size reduction, purchasing, flexibility, suppliers’ management, product development, inventory reduction at every stage, marketing, lead time reduction. Usually, the purchasing department is expected to procure the right quantity of material of right quality at the right time, from the right source, and at the right cost. JIT system has been implemented in many industries of several countries in the world now. JIT is an approach of excellence in the entire organizations, emphasizing on quality, by eliminating wastages to improve productivity. JIT is an inventory monitoring technique at each stage of the system starting from raw material to finished product to achieve the target in time. The following are some benefits of a JIT system stated by researchers: Close supplier/customer relations, fast response to engineering changes, improved competitive position, Improved equipment efficiency, improved worker efficiency, improved worker motivation, increased administrative efficiency, increased equipment utilization, increased flexibility, increased inventory turns, increased profit margin, increased team work, less scrap, lower overheads, reduced product cost, reduced production lead time.

Students may justify their answers with practical examples to demonstrate their understanding.

**Question 2 (Assignment 2)**

People often say that you should get 3 (three) quotations, even for repeat orders, as this encourages competition and keep prices low. Other people say that you should form an alliance with one supplier so that you understand each other’s needs and can
work closely together. Which of these views do you find more persuasive and why? (25 marks)

Students are required to choose one of these views they find more persuasive and justify their answers. It should be evident from students’ responses that they assessed the benefits, conditions, and risks involved in each of these views to make a decision on the arguments they supported.

The decision whether to choose the best quotation amongst the three quotations or to form a supply alliance with one supply may depend on the nature of purchase, amount of money to be spend and the organizational purchasing policy.

One may need to obtain three quotations for, even for repeat orders when buying a laptop for study purposes. A customer may need to look at different features of the laptop, compare prices, assess the post-transactional elements of maintaining a laptop i.e. replacing of batteries after its life expectancy, repairing of screens when broken, and fixtures required on a laptop. Assessing the pre-transactional elements, transactional elements and post-transactional customer service elements may allow the customer to get the lowest total cost ownership, i.e. value for the money. Three or more quotations may be required when purchasing products such as cars, furniture, computer equipment, tools, etc.

Students should discuss the benefits and disadvantages of choosing one quotations from 3 selected suppliers. The benefits of choosing one quotations from three quotations include:

- Reduction of the supply risk. A company is not fully dependent upon a single supplier, if one supplier cannot provide quality goods, that one vendor can be replaced far easier.
- The quality goods can be obtained from the best supplier for each specialization.
- Access to more diverse and variety of modern choices and brands on products to buy.
- Better customer service since the competition is high.

The disadvantages of choosing one quotations from three quotations include

- More time and efforts is required in the process of obtaining quotations from different supplier. Some suppliers may be reluctant to reply to the request on time, which causes delays.
• It may be challenging and time consuming to assess the value, features and supply terms of the products required.

• Standardizing governance across multiple vendors can be tough, given they all have their own models and processes. Finding common multi-vendor management “rules” that all vendors can accept and live by is a real challenge.

In a situation where a company need to purchase a service or products that are only supplied by a single vendor, a company is forced to form supply alliance with that vendor. For example a company may only have functions of what a required products perform but not sure on the exact products to purchase (conformance), hence they need to rely on the supplier and form alliance to maintain the products throughout its lifecycle. Other products like software are designed and property rights belong to the supplier, hence the responsibility lies with them to maintain and sustain the operations of these software. Any repair or upgrade work must be done by them.

Benefits of using single vendor and forming supply alliances
• There is only one vendor to collaborate with, and a single relationship is easier to establish and maintain.

• Communication and discussion are easy to set up and implement.

• Usually, only a couple of in-house managers will be required to oversee project completion and implementation. Vendor management is simple.

• Minimize compatibility problems – because the vendor specifically designs their products to work together, on the same platform, there are several advantages for the buyer.

• Vendor takes more responsibility – there is only one supply to blame for any wrong supply or work, hence the supplier is more responsible.

Disadvantages of supply alliance:
• It is difficult to find a supplier that offers different specialised products or services the buyer needs.

• The quality of different services may fluctuate significantly.
• Big vendors keep focusing on one direction – often the most profitable one at the moment.
• Less power to negotiate a better deal. Most vendors offer “fixed-price” bundles for the offered services. At some point, you may find yourself locked in a deal that is no longer the best on the market or doesn't match your current business needs.
• Less room for innovation. Larger suppliers are less agile and may not be capable to catch up with the latest technological trends and best practices.

Students may justify their answers with practical examples to demonstrate their understanding.