



MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

FIRST YEAR FIRST SEMESTER EXAMINATION FOR

DIPLOMA IN PROCUREMENT AND SUPPLY CHAIN

DPS 109: SUPPLY LOGISTICS

DATE: 4/12/2019

TIME: 2.00-4.00 PM

INSTRUCTIONS:

Answer Question ONE and any other TWO Questions.

QUESTION ONE (30 MARKS)

Avaya

Avaya is a global force in business collaboration and communications technology, and not so many years ago, was operating what, by its own executives' admission, and was a worst-in-class supply chain. That situation arose as the result of multiple corporate acquisitions over a short space of time. The company was suffering from a range of supply chain maladies, including a long cash-to-cash cycle, an imbalance in supplier terms and conditions, excess inventory, and supply chain processes that were inefficient and wholly manual.

The Supply Chain Cost Reduction Challenge: After Avaya purchased Nortel Enterprise Solutions in 2009, the freshly merged company found itself but loosely in control of an unstable and ineffective supply chain operation. Aside from having too many disparate and redundant processes, the company had multiple IT solutions, none of which provided a holistic view of the supply chain or supported focused analysis.

The Path to Cost Reduction: Avaya's senior management team realized that its technology solutions, which varied from being inadequate to inappropriate, were causing many of its problems. The various acquisitions and mergers had transformed Avaya into a different kind of enterprise, and

what it needed, rather than a replacement for all the discrete systems, was one solution to tie them all together.

To that end, the company put its trust in cloud technology, which was relatively immature at the time, and migrated all processes onto one platform, which was designed to automate non-value-added activities and integrate those critical to proactive supply chain management, namely:

- Point of sale analysis
- Procurement analysis
- Supplier communication
- Supply and demand planning
- Inventory planning
- Inbound and outbound logistics planning

Of course, the technology was merely an enabler, and to transform its supply chain operation, Avaya embarked on a long-term, phased program to standardize processes, initiate a culture change, invest in top talent, and implement a system of rigorous benchmarking and KPI tracking.

Supply Chain Cost Management Results: Avaya's program of transformation took place over a period of three to four years, between 2010 and 2014. The path to cost reduction was a long one, but ultimately successful.

By making a conscious effort to lead the enterprise into a new way of thinking, change business culture, and unify technology under a single platform, Avaya has improved inventory turns by more than 200%, reduced cash tied-up in stock by 94%, and cut its overall supply chain expenditure in half. This dramatic turnaround also required the company to switch from a preoccupation with improving what it was doing, to a process of *questioning* what it was doing and why.

- a) Outline the benefits that may accrue to Avaya from proactively planning for inbound and outbound logistics (6 marks)
- b) State the challenges that Avaya may be facing in its endeavor to keep abreast of the technology (6 marks)
- c) Discuss The Supply Chain Cost Reduction Challenge Avaya is facing (6 marks)
- d) Analyse the disadvantages that could have been associated with excessive inventory at Avaya. (6 marks)
- e) State the strategies that Avaya may employ to move from the current level of success to a better one. (6 marks)

QUESTION TWO (20 MARKS)

- a) Explain five challenges which a logistics manager may face while planning for scheduling of deliveries to customers. (10 marks)
- b) Explain the factors that a logistics manager may consider when determining the best Route for organisational deliveries (10 marks)

QUESTION THREE (20 MARKS)

- a) Discuss the factors that make the decision to acquire vehicles for use in logistical operations complex (10 marks)
- b) Explain the types of costs that a logistical firm may avoid due to regular maintenance of its vehicles (10 marks)

QUESTION FOUR (20 MARKS)

- a) Describe the procedure that a logistics manager may follow when carrying out a load planning exercise. (10 marks)
- b) Explain the methods of disposing vehicles that you would recommend to a logistical company (10 marks)

QUESTION FIVE (20 MARKS)

- a) Distinguish packaging for Logistical purposes with packaging for marketing purpose. (10 marks)
- b) Explain the ways in which material handling costs can be reduced in an organization (10 marks)