



BOTSWANA OPEN UNIVERSITY

**In collaboration with
THE COMMONWEALTH OF LEARNING**

**Commonwealth Executive Masters in Business Administration
Commonwealth Executive Masters in Public Administration**

**OPERATIONS MANAGEMENT
OM311**

Special Examination

Marks: 100

Time allowed: 3 hours

Instructions

1. This paper comprises of Part A and Part B. Answer **ALL** questions in Part A and any **THREE** (3) questions in Part B.
2. Answer questions according to instructions given in each section
3. Write answers in the answer booklet provided
4. Answer **ALL** questions, in grammatical **English**.



Part A

[40 marks]

Answer all questions

Case Study

Operations in practice *SAP in Financial Services.*

The SAP company is a world leader in the provision of ERP solutions to many industries ranging from manufacturing and logistics to retail and government services. The financial Services industry has long been a glaring exception to its industry verticals. This ended in recent years when SAP launched its SAP for banking solution set. Organizations ranging from Postbank AG and Nationwide in Europe to Standard Bank in South Africa became lead users in this industry as the solution set was developed.

A key approach adopted by SAP was to engage industry thought leaders from multiple banks in a range of users led sessions to scope and architect the entire solution environment. This led to the definition of key modules ranging from lending (both secured and unsecured) to transactional banking. This included the creation of payment engines as well as Customer Master Files in the form of SAP Business Partner.

A key innovation was the adoption of enterprise services architecture (ESA) which allowed the separation of the process down to common activities and the conversation of them into 'technical services'. A further innovation was a process of collaboration of banks in the definition of shared processes in areas that were non-competitive. This ranged from 'open account' and 'fetch balance' to 'find business partner'. These activities could then be strung together, or orchestrated, to create the desired process. All of this was made possible by the new Netweaver engine supplied by SAP combined with enterprise services bus ESB that linked the enterprise services repository (ESR) to the Process orchestrated engine. This abstraction of process in the IT environment allowed for 'standardization inside, differentiation outside' and truly allowed banks to become more 'industrialized'.

In the same way that Volkswagen was able to share chassis and components across models and ranges, so banks are able to share services and technology across products and segments. The net result is an agile, low cost scalable environment with reusable components and ease of adaption and maintenance.

Operations Management, Mike Pycraft, et al, 2nd Edition, pg. 408, 2010

- a) From the above case study, what is your understanding of ERP system?
(20 marks)
- b) From your studies, what is the difference between MRP and MRP II?
(10 marks)
- c) Despite them providing a competitive advantage, organization would not want to invest in MRP II. What would you say are the reasons for not investing in such systems?
(10 marks)



Part B

[60 marks]

Answer any THREE (3) of the following questions. Each question contributes 20 marks.

Question 1

(20 MARKS)

(a) With particular examples where necessary explain the following terms

- I. Core competences
- II. Competitive advantage
- III. Order Winners
- IV. Qualifiers

(20 marks)

Question 2

[20 MARKS]

a) Assume that your stock of sales merchandise is maintained based on the forecast demand. If the distributor's sales personnel call on the first day of each month, compute your forecast sales by each of the three methods requested here.

Month	Actual
June	140
July	180
August	170

- i. Using a simple three-month moving average, what is the forecast for September? (3 marks)
- ii. Using a weighted moving, what is the forecast for September? (3 marks)
- iii. Using single exponential smoothing and assuming that the forecast for June has been 130, Calculate the forecast for September with a smoothing constant of $\alpha = 0.30$.

(4 marks)

- b) The service-profit chain establishes a relationship between profits for the firm, customer loyalty and employee satisfaction. What do these links propose?

(10 marks)

Question 3

(20 MARKS)

- a) There are five stages in structured product design. Discuss the referred-to five stages.
- b) As an MBA graduate, share your knowledge about Sales and Operation Planning (S&OP) with your friend who does not know about it.

(10 marks)

(10 marks)

Question 4

[20 MARKS]

You are invited for an interview for the post of project manager. During the interview you are asked to explain your understanding of typical problems and behaviors under the critical chain as introduced by Eliyahu Goldratt (1997) in his book, *Critical Chain*.

(20 marks)

End of Exam.