What is this module about?

Role of systems and operations management and its integration into efficient and effective running of business.

- Process analysis; improvement and quality management
- The soft systems approach of SSM to systems development will be used to analyse and define business requirements.
- People and management issues will be reviewed with emphasis on communication, teamwork and effective leadership.
Module Learning Outcomes

1. Assess the role of systems and operations management in an organisation and its integration within the business;

2. Examine the main issues involved in quality management and business excellence;

3. Analyse the people and management issues in organisations;

4. Evaluate the role of Soft Systems Methodology (SSM) in analysing and defining business requirements.
Assessment – Atokowa case study

- Starting on page 8 of your module guide
- Atokowa case study
- You will analyse the problems they have had with their systems and operations management
Assessment – 3000 word assignment (pg 7-8)

1. Apply appropriate models to the organisation to critically analyse how systems and operations are currently managed.  
   25%

2. Apply the techniques of soft systems methodology to analyse the current issues in the organisation. Through this analysis summarise the main business requirements of the organisation.  
   25%

3. Explain how the organisation can improve quality management; business improvement and excellence in their systems and operations.  
   25%

4. Identify the relevant people and management issues that may arise in implementing your quality management; business improvement and excellence recommendations (in 3).  
   15%

5. Report Style and Academic Rigour Your report should be written in good business English and be well structured and presented.  
   10%
Introduction: Learning Outcomes

1. Define Operations Management and Systems Management;
2. Understand how Operations and Systems work together;
3. Apply the input-process-output model from an operations and systems perspective;
4. Know the 4 V’s typology of operations: volume; variety; variation of demand and visibility.
Definitions of Systems and Operations

- “Operations management is the activity of managing the resources which are devoted to the production and delivery of products and services.” (Slack et al, 2011)

- Information Systems is a “set of interrelated components that collect (or retrieve), process, store, and distribute information to support decision making and control in an organization.” (Laudon and Laudon, 2010)
**Why is Operations Management so important?**

*The consultancy services market – % of world revenues of 40 largest consultancy firms*

- Operations and process management: 31%
- Corporate strategy: 17%
- IT strategy: 17%
- Benefits/Actuarial: 16%
- Organizational design: 11%
- Financial: 6%
- Marketing/sales: 2%
Transformation Process in Operations

Transformed resources
- Materials
- Information
- Customers

Inputs resources

Transforming resources
- Facilities
- Staff

Transformation process

Outputs
- Products
- Services

Customers

Outputs are products and services that add value for customers
Input-Processing-Output Model

Laudon and Laudon (2007) Figure 1.2, page 12  and Bocij et al (2006)
Example: Prêt a Manger

Input-Process - Output

**Inputs**
- Transformed resources
  - Ingredients
  - Packaging
  - Customers
- Transforming Resources
  - Equipment
  - Fittings
  - Staff

**Outputs**
- Fresh foods
- Satisfied customers
Example: Prêt à Manger info system

Data
Each customer transaction that is processed – i.e. the till
Delivery arrival of new stock (ingredients etc.)
Temperature levels

Process

Information
Stock level information
Sales reports
Peak times reports

Inputs

Outputs
Operations management is concerned with the flow of transformed resources between operations, processes, where

External operations interact with internal processes to form the external supply network

Processes form an internal ‘supply network’ and become each others customers and suppliers
A typology of operations and processes

The 4 Vs

- Low Volume High
- High Variety Low
- High Variation in demand Low
- High Visibility Low
Implications of the operations typology

**Low repetition**
- Each staff member performs more of each task
- Less systemization
- High unit costs

**High repeatability**
- Specialization
- Capital intensive
- Low unit costs

**Flexible**
- Complex
- Match customer needs
- High unit costs

**Well defined**
- Routine
- Standardized
- Regular
- Low unit costs

**Volume**
- Low
- High

**Variety**
- High
- Low
Implications of the operations typology

- **Typology of Ops**

  - **High** Variation in demand
  - **High** Visibility
  - **High** Stability
  - **High** Time lag between production and consumption
  - **High** Standardization
  - **High** Low unit costs

- **Low** Variation in demand
- **Low** Visibility
- **Low** Stability
- **Low** Time lag between production and consumption
- **Low** Standardization
- **Low** High unit costs

- **Typology of Ops**

  - **Changing** capacity
  - **Anticipation**
  - **Flexibility**
  - **In touch with demand**
  - **High unit costs**

  - **Stable**
  - **Routine**
  - **Predictable**
  - **High utilization**
  - **Low unit costs**

- **Typology of Ops**

  - **Short waiting tolerance**
  - **Satisfaction by customer perception**
  - **Customer contact skills needed**
  - **Received variety is high**
  - **High unit costs**

  - **Time lag between production and consumption**
  - **Standardization**
  - **Low contact skills**
  - **High staff utilization**
  - **Centralization**
  - **Low unit costs**
Self-managed learning

- Complete the workshop task
- Read Chapter 1 – Operations Management
Questions