

Unit 25: Principles of Operations Management

Unit code H/508/0539

Unit level 5

Credit value 30

Introduction

The aim of this unit is to introduce students to the role of the operations in an organisation and how it contributes to sustained competitive advantage. Students will understand the purpose and importance of operations and resource planning on an organisation's efficiency and effectiveness and its impact on organisational strategy.

By the end of this unit students will be able to analyse and evaluate an operations environment and implement a strategic plan that allocates resources in terms of materials, labour and equipment.

Learning Outcomes

By the end of this unit a student will be able to:

- 1 Demonstrate understanding of the impact of the business environment on operations.
- 2 Demonstrate understanding of the purpose of operations in support of organisational strategy.
- 3 Determine the appropriate allocation of resources for operations management.
- 4 Conduct a strategic risk analysis (SRA) on the operations functions of an organisation.

Essential Content

LO1 **Demonstrate understanding of the impact of the business environment on operations**

Introduction to operations management:

What is operations management?

What are the benefits of operations management?

The role and activities of operations management (strategic, tactical and operational).

The business environment:

External influences on contemporary operations management.

Using PESTLE to analyse the external environment, how do broader factors such as culture, ethics and global relations impact on the business environment?

How does corporate social responsibility influence operations management and how can an operations manager respond?

Using SWOT to analyse the internal environment, consider the operational constraints placed on a business by strategy, budgets for physical resourcing, financial position and availability of human resources.

The impact of technology:

The impact of new technologies on operational management systems and processes, the benefits of technology for improving efficiency, management flows and sustainability.

The application of digital technology to the design, manufacturing, and distribution systems to produce products and services worldwide.

Consideration of software systems: Enterprise Resource Planning systems (ERP), Supply Chain Management (SCM), New-Product Development (NPD) and Customer Relationship Management (CRM).

Impact on operations of environmental factors:

How are internal and external environmental factors related?

How do these impact on operations depending on the context or situation?

Value creation:

What does this mean to different organisations in the public, private and not-for-profit sectors?

How do operations give added value considering the differences between services and goods?

LO2 **Demonstrate understanding of the purpose of operations in support of organisational strategy**

Operations as a function:

The key functions of operations and how these relate to other functions in a business.

Operations as a transformation process, operations performance and the context of operations strategy.

Transformation process:

The transformation model: input transformation, output process.

Operations performance:

Why is operational performance important?

Considering different performance variables, including quality, speed, dependability, cost and flexibility.

Developing performance measures and benchmarking.

Strategy:

The difference types of planning (operational, tactical and strategic) and how the operations function supports these.

The process of operational strategy.

The 'top down' and 'bottom up' perspectives and approaches.

Control systems:

The nature of planning and control.

What are control systems?

How do they link to the operations function?

Managing key operational variables: defining capacity and capability, reconciling demand and capacity, service quality.

Different types of control systems to include capacity planning and control, inventory planning and control and supply chain planning and control.

Supply chain:

How does the operations function interact with the supply chain?

How do the supply chain and operations impact on each other?

Types of relationships in the supply chain.

Quality systems:

What is quality and why is it important?

Selecting the most appropriate system such as TQM, Six Sigma or Lean.

Value chain:

Why should value be added at each stage of the operations function?

How operations enable businesses to effectively compete and deliver goods and services

Understanding and applying a value chain analysis.

LO3 Determine the appropriate allocation of resources for operations management

Resource management strategies:

Ensuring resources are in the right place, at the right time and in the right quantity.

Using different approaches such as the resource based view and resource planning and allocation.

Supplier management:

Selecting the most appropriate supplier to meet operational goals.

Considering make or buy decisions.

Reducing costs through the use of techniques such as Just in Time (JIT).

McKinsey's 7S model:

A holistic approach to effective co-ordination of activities to support operations.

Applying the model in context.

Cost-benefit analysis:

As a concept and using the technique in practice.

VRIO framework:

Capturing the value of an organisation.

Using the framework to develop a competitive advantage.

LO4 Conduct a strategic risk analysis (SRA) on the operations functions of an organisation

Risk analysis and management:

Conducting a risk analysis at the operational, tactical and strategic level.

Using risk management standards and benchmarks.

Managing uncertainties and potential threats:

Extending the use of PEST and SWOT to develop contingency plans and strategies to mitigate negative consequences.

Using risk identification and mapping to support risk assessment and the prioritisation of responses.

Stakeholder analysis and expectations:

The relationship between stakeholders and risk, particularly investors, suppliers and customers.

Learning Outcomes and Assessment Criteria

Pass	Merit	Distinction
<p>LO1 Demonstrate understanding of the impact of the business environment on operations</p>		<p>LO1 and LO2</p> <p>D1 Critically evaluate the application of appropriate operations management tools to inform justified recommendations in response to organisational environmental analysis.</p>
<p>P1 Explain how external and internal factors of the business environment impact upon operations.</p> <p>P2 Consider how operations are influenced by corporate responsibility and how operations managers respond.</p> <p>P3 Conduct a valid external and internal environmental analysis of the business environment for an organisation.</p>	<p>M1 Produce a critical analysis of external and internal factors that affect the performance of an organisation.</p>	
<p>LO2 Demonstrate understanding of the purpose of operations in support of organisational strategy.</p>		
<p>P4 Explain how operation functions support organisational strategy and decision-making.</p> <p>P5 Explain different types of control and planning methods in application to different organisational examples.</p> <p>P6 Evaluate quality systems and how operations management can add value throughout the supply chain.</p>	<p>M2 Critically evaluate the efficiency of different operations management methods used to support organisational strategy.</p>	

Pass	Merit	Distinction
L03 Determine the appropriate allocation of resources for operations management.		
P7 Prepare a resource allocation plan to meet specific operational requirements for an organisation.	M3 Assess and apply the most appropriate strategies in support of the resource allocation plan.	D2 Examine the advantages and disadvantages of different resource management strategies in terms of improving work flow and outputs.
L04 Conduct a strategic risk analysis (SRA) on the operations functions of an organisation.		
P8 Devise and carry out an SRA of an organisation using risk identification and mapping.	M4 Develop contingency plans and strategies to minimise the risks highlighted in the SRA.	D3 Provide valid justifications for recommended strategies at an operational, tactical and strategic level.

Recommended Resources

Textbooks

BROWN, S., BESSANT, J. and LAMMING, R. (2013) *Strategic Operations Management*. 3rd Ed. London: Routledge.

JONES, P. and ROBINSON, P. (2012) *Operations Management*. Oxford: Oxford University Press.

JOHNSON, G., WHITTINGTON R., SCHOLES., S., ANGWIN, D. and REGNER, P. (2014) *Exploring Strategy Text and Cases*. Harlow: Pearson.

SLACK, N., BRANDON-JONES, A. and JOHNSTON, R (2013) *Operations Management*. 7th Ed. Harlow: Pearson.

Journals

International Journal of Operations and Production Management

Journal of Operations Management

Links

This unit links to the following related units:

Unit 1: Business and the Business Environment

Unit 4: Management and Operations

Unit 26: Supply Chain Management

Unit 31: Statistics for Management

Unit 33: Business Information Technology Systems

Unit 34: Business Systems