Unit 16: Operations and Project Management

Unit code T/508/0528

Unit level 5

Credit value 15

Introduction

The aim of this unit is to develop students' understanding of contemporary operations theory as a function of a modern organisation. Students explore key benchmarks and processes which will enable effective critique of an operation function. Students will also consider the fundamentals of project management utilising the prescribed, but well established, project life cycle.

On successful completion of this unit students will have developed sufficient knowledge and understanding of operations and project management to make an effective and immediate contribution to the way in which an organisation conducts its business. Students will also be in a strong position to contribute to, as well as lead, small-scale projects.

Underpinning all aspects of the content for this unit will be the consideration of the strategic role of operations management and planning and control of resources, and project management theories and the project life cycle.

Learning Outcomes

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

1 Review and critique the effectiveness of operations management principles.

2 Apply the concept of continuous improvement in an operational context.

3 Apply the project life cycle (PLC) to a given context.

4 Review and critique the application of the PLC used in a given project.

Essential Content

LO1 **Review and critique the effectiveness of operations management principles**

Operations vs operations management:

Operations as a concept and as a function vs management as strategic oversight

Operations as a concept:

Different approaches to operations management, Taylor's theory of Scientific Management, flexible specialisation, lean production, mass customisation and agile manufacturing.

The operation process in a service sector and manufacturing sector organisation.

The relationship between operations and other business functions.

Operations management:

Overseeing the design, implementation and effectiveness of an operations function.

Utilising control systems and contingencies to ensure efficiency.

The use of Six Sigma and Lean principles to improve efficiency and effectiveness.

LO2 **Apply the concept of continuous improvement in an operational context**

Improving the effectiveness and efficiency of the operations function:

Policies and processes including cost reduction and quality improvement.

Continuous improvement as a philosophy and approach using the application of Lean principles within a cycle of continuous improvement.

Operations as a cross-organisation activity and not simply an independent function.

The significant impact that technology has had upon operational functions and information flows.

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

Improving quality:

Reducing defects through Total Quality Management, the concept of Kaizen and process re-engineering.

LO3 **Apply the Project Life Cycle (PLC) to a given context**

The Project Life Cycle (PLC):

The phases and activities of the PLC: initiation, planning, execution and closure.

Developing the business case for a project and undertaking feasibility study.

The theories and practice of project management:

To include agile methodologies, project management tools and project leadership within the PLC.

Project documentation:

To include the project initiation document, project plan, cost benefit analysis and work breakdown structure.

Directing projects:

Differentiating between large and small-scale projects and those used in the public, private or not-for-profit sectors.

LO4 **Review and critique the application of the PLC used in a given project**

Holistic and focused critiques:

The broader influence/impacts of a project alongside a detailed analysis of the application of the PLC.

Performance measurement:

To include milestones, targets, deliverables, benchmarks (internal and external) and key performance indicators.

The review and critique process:

Using project monitoring to inform an evaluation.

The importance of reliability and validity in evaluation.

Programme theory and logic models to support a review.

Learning Outcomes and Assessment Criteria

<table>
<tr><th>Pass</th><th>Merit</th><th>Distinction</th></tr>
<tr><td colspan="2">LO1 Review and critique the effectiveness of operations management principles</td><td rowspan="4">LO1 & 2
D1 Apply appropriate theories, concepts and/or models to justify strategies of a continuous improvement plan for achieving improved efficiency.</td></tr>
<tr><td>P1 Conduct a review and critique of the implementation of operations management principles within an organisational context.</td><td>M1 Review and critique the implementation of operations management in relation to Six Sigma methodology and Lean principles</td></tr>
<tr><td colspan="2">LO2 Apply the concept of continuous improvement in an operational context</td></tr>
<tr><td>P2 Prepare a continuous improvement plan based on the review and critique of operations management principles within an organisational context.</td><td>M2 Analyse the effectiveness of a continuous improvement plan using appropriate theories, concepts and/or models.</td></tr>
<tr><td colspan="2">LO3 Apply the Project Life Cycle (PLC) to a given context</td><td rowspan="5">LO3 & 4
D2 Critically evaluate the PLC through a practical and theoretical exploration of its effectiveness.</td></tr>
<tr><td>P3 Apply each stage of the PLC to a given project, producing necessary supporting documentation for completing the project e.g. a business case, project plan, work breakdown structure.</td><td>M3 Analyse the rationale for the project methodologies, tools and leadership within the PLC for the given project.</td></tr>
<tr><td colspan="2">LO4 Review and critique the application of the PLC used in a given project</td></tr>
<tr><td>P4 Review and critique the effectiveness of the PLC in application to the chosen project using appropriate theories, concepts and models.</td><td>M4 Critically analyse how the use of appropriate theories, concepts and models in the PLC will differentiate between large and small-scale projects.</td></tr>
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Recommended Resources

ANDERSON, M., A., ANDERSON, E. and PARKER, G. (2013) *Operations Management for Dummies*. New Jersey: John Wiley and Sons.

PENDLETON, D. and FURNHAM, A. (2012) *Leadership: All You Need to Know.* London: Palgrave Macmillan.

REIS, G. (2007) *Project Management Demystified*. 3rd Ed. London: Taylor and Francis.

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

Journals

International Journal of Project Management

Journal of Change Management

Journal of Operations Management

Links

This unit links to the following related units:

Unit 4: Management and Operations

Unit 6: Managing a Successful Business Project

Unit 25: Principles of Operations Management

Unit 26: Supply Chain Management