# BA5UK05O – Managing Business Operations

Credits: 20

Level 4

Academic Year 2024-25

Academic Partner : UKCBC

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# 1 Team contact details

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# 2 Module overview

Operations management is about how organisations design, deliver, and improve services and products for their customers. The module covers operations strategy, process design, planning and control, supply chain management, and improving how the product/service is delivered. You will be exposed to operational business issues as well as build knowledge base for other modules in the business management field.

The aims of the module are to

- Allow students to demonstrate an understanding and a recognition of the key decision areas in operations management.
- Analyse business problems by selecting and using a range of operations management techniques and approaches.
- Be able to evaluate the relevance and significance of the results; explore assumptions, limitations and the wider implications and make recommendations as a basis for decision making, and
- Communicate effectively the context, analysis and findings in a variety of appropriate formats.

The module will help the students to understand how the firm achieve competitive success through improving the processes involved in delivering products and services, and reducing costs through increased efficiencies. This is applicable in manufacturing and all aspects of the service sector, from small retailers and professionals to banks and insurance companies, hospitals and utilities.

The learning sessions will be available on the blackboard under learning materials section.

Indicative contents are :

Topic 1: Introduction to operations management
Topic 2: Operations strategy and operations performance
Topic 3: Product design and process design
Topic 4 Location, layout and flow
Topic 5: Capacity management
Topic 6: Inventory management
Topic 7: Management of queues
Topic 8: Supply chain management

Topic 9: Quality management
Topic 10: Performance improvement

You are reminded to refer to your Course Handbook for a detailed outline of how this module forms part of their course.

**Expectations**
**Specific expectations students can have of tutors:**

- Provides support when needed
- Provides clear learning materials on time

**Specific expectations tutors will have of students:**

- Do a minimum of 161 hours of independent study
- Attends all classes and arrive at classes punctually
- Comes prepared to all the sessions and behave professionally
- Actively participates and engages in class activities
- Keeps up to date with online content
- Informs Tutor via email in advance when not able to attend any classes
- Follow assessment instructions

# 3 Preparing for your Assessment

A key part of your learning will be preparation for your formative and summative assessments. You will be provided feedback on your formative assessments, and this will help you to better understand what is required of you when you submit your summative assessment. Please see below guidance on your formative assessment and how to access your feedback.

**As an Apprentice, please note that different regulations may apply to assessments which form part of your End Point Assessment.** Please ensure you familiarise yourself with the regulations that apply to your Apprenticeship course in your Course Handbook.

**Assessment Support**

| Assessment (insert below type of assessment as per the table above) | Teaching Weeks in which Assessment Support Takes Place (enter each week no. in a new row) | Outline of Type and Form of Assessment Support to be Provided | Student Preparation Required Prior to or After the Support Session | How will the Support Session to be Delivered |
|---|---|---|---|---|
| A1<br>Written Assignment (In-class test) | Week 7 | Mock Test | Students practise the mock test | In-class discussion |
| A2<br>Written Assignment (Data analysis case study) | Week 12 – Week 13 | General in-class discussions | Students read the Case Study for any general queries. | In-class discussions |

**Note 1:** **It is important that you do the 161 hours independent study** (referring to the Reading List) on related and relevant topics, ***which may not be necessarily covered during the lessons***, but all will **still be assessed in the summative assessments**.

**Note 2:** The support session for A2 **cannot be used** to answer specific questions/answers on the assignment as it is a time-controlled assessment (aka take-home test). **No draft can be checked.**

# 4 Summative Assessments

## Summative Assessment 1 – In-class Test

| | |
|---|---|
| Assessment title | Written Assignment (In-class Test) |
| Submission date and time | Week 8 |
| Word Count (or equivalent) | 60 minutes |
| Where to submit | In-class Test (MCQ/Short Essay) – online or offline |
| Feedback date | Within 15 working days |
| Assessment Weighting | 40% |
| PSRB requirements (if applicable) | N/A |

### Submitting, feedback & grades online using Blackboard

**Main objectives of the Assessment**

The in-class test will cover various aspects of business operations such as operation strategy, product design and process design. In addition to that, the test covers queue management, inventory management and capacity management.

| No. | Learning Outcome | Marking Criteria |
|---|---|---|
| 1 | Explain the nature of operations management within the organisation.<br>a. Explain the role and importance of effective operations management.<br>b. Evaluate the operations performance objectives of organisations. | See below |
| 2 | Manage the design of systems and operations in the organisation.<br>a. Design systems and operations to meet the objectives of the organisation.<br>b. Explain the impact of supply chain on systems and operations. | See below |

**Marking criteria:**

**Accuracy of Response (for MCQs/TrueFalse):** Demonstrates the ability to select the correct answer or identify true/false statements accurately related to the topics of operations management and systems and operations design.

**Coverage of Content:** Addresses the specific content areas comprehensively, including the nature and role of operations management, its importance, operations performance objectives, system and operations design, and the impact of the supply chain.

**Depth of Understanding (specifically for Short Answers):** Demonstrates depth in understanding the topics and provides comprehensive answers.

**Use of Relevant Terminology (specifically for Short Answers):** Utilizes appropriate and accurate terminology related to operations management, systems design, operations, and supply chain in responses.

**Clarity and Coherence (specifically for Short Answers):** Provides answers that are clear, well-structured, and coherent.

**Marking scheme:**

| 100-80% | 79-70% | 69-60% | 59-50% | 49-40% | 39-30% | 29-0% |
|---|---|---|---|---|---|---|
| The work produced is exceptional in most/all aspects, substantially exceeding expectations for this level. | The work produced is of excellent quality, exceeding expectations for this level in many aspects. | The work produced meets all of the intended learning outcomes and exceeds the threshold expectations for this level in several of them | The work produced meets all of the intended learning outcomes and exceeds the threshold expectations for this level in some of them. | The work produced meets all of the intended learning outcomes at, but rarely exceeding the threshold expectations for this level. | The work produced fails to meet all of the intended learning outcomes and is marginally inadequate for this level | The work produced fails to meet all of the intended learning outcomes and is inadequate for this level. |

## Employability Skills

This assessment covers the following employability skills, which you could demonstrate on your CV and at job interviews if you successfully pass the assessment:

- Communication
  - Writing
  - Comprehension
  - Presenting
- Problem solving
- Critical thinking
- Can work under pressure and to deadline
- Planning and organisation skills
- Numeracy
- Enterprising
- Industry/commercial aware
- Digitally literate
- Creativity/lateral thinking
- Time management
- Intellectual curiosity
- Leadership
- Perseverance
- Confidence
- Decision making

## Summative Assessment 2 - Data analysis case study

| | |
|---|---|
| Assessment title | Written Assignment (Data analysis case study) |
| Submission date and time | Week 13 |
| Word Count (or equivalent) | 500 words for ***each*** question |
| Where to submit | BlackBoard via TurnItIn |
| Feedback date | Within 15 working days |
| Assessment Weighting | 60% |
| PSRB requirements (if applicable) | N/A |

Submitting, feedback & grades online using Blackboard

**Main objectives of the Assessment**

Assignment 2 is a **time-controlled assignment** (aka test) focusing on a Data Analysis Case Study that covers a wide range of topics related to operations management, including the role of operations in overall business strategy, designing processes, quality management, and supply chain management, among others.

On ***Week 10***, the Case Study will be given. You will have **three weeks** to study the case study at home and submit it on **Week 13** on the Turnitin. For further information, please check details on BB.

| No. | Learning Outcome | Marking Criteria |
|---|---|---|
| 1 | Explain the nature of operations management within the organisation.<br>a. Explain the role and importance of effective operations management.<br>b. Evaluate the operations performance objectives of organisations. | See below |
| 2 | Manage the design of systems and operations in the organisation.<br>a. Design systems and operations to meet the objectives of the organisation.<br>b. Explain the impact of supply chain on systems and operations. | See below |
| 3 | Planning and control of the operations of the organisation<br>a. Explain the need for planning and control of operations.<br>b. Plan operations to meet the objectives of the organisation and the needs of customers. | See below |
| 4 | Improve performance within the organisation.<br>a. Establish suitable performance measures.<br>b. Monitor compliance with quality standards. | See below |

| | | |
|---|---|---|
| | c. Identify problems in operations and implement solutions. | |

**Marking criteria:**

**Depth and Relevance:** The extent to which the student provides comprehensive, relevant, and practical insights, measures, strategies, or solutions. (20 marks)

**Use of Case Study:** The ability to integrate and apply information from the case study to support their answers. (20 marks)

**Critical Analysis of AI's Perspective:** The ability to critically analyse and evaluate the AI's perspective based on the case study. (20 marks)

**Practical Application:** The feasibility, effectiveness, and real-world applicability of the proposed measures, strategies, or solutions. (20 marks)

**Operational Understanding:** Demonstrates a clear understanding of the nature, design, planning, control, and improvement of operations within the organization. (20 marks)

**Marking scheme:**

| 100-80% | 79-70% | 69-60% | 59-50% | 49-40% | 39-30% | 29-0% |
|---|---|---|---|---|---|---|
| The work produced is exceptional in most/all aspects, substantially exceeding expectations for this level. | The work produced is of excellent quality, exceeding expectations for this level in many aspects. | The work produced meets all of the intended learning outcomes and exceeds the threshold expectations for this level in several of them | The work produced meets all of the intended learning outcomes and exceeds the threshold expectations for this level in some of them. | The work produced meets all of the intended learning outcomes at, but rarely exceeding the threshold expectations for this level. | The work produced fails to meet all of the intended learning outcomes and is marginally inadequate for this level | The work produced fails to meet all of the intended learning outcomes and is inadequate for this level. |

## Employability Skills

This assessment covers the following employability skills, which you could demonstrate on your CV and at job interviews if you successfully pass the assessment:

- Communication
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- Problem solving
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- Planning and organisation skills
- Numeracy
- Enterprising
- Creativity/lateral thinking
- Time management
- Project management
- Intellectual curiosity
- Global/cultural awareness

Decision making

# 5 Learning materials

The reading list for this module is available on Blackboard in the module area and online by searching reading lists. This shows real-time availability of books in the library and provides direct links to digital items, recommended by your lecturer.

**Remember to log into Blackboard daily to receive all the latest news and support available at your module information sites!**

Subject guides are also available to help you find relevant information for assignments, with contact details of the Librarian for your School.

**Essential Reading**

- Slack, N., Brandon-Jones, A. and Burgess, N. (2022). *Operations Management*. 10th edn. London: Pearson.

**Further Reading**

- Jones, P & Robinson, P (2020). *Operations Management* 2nd edn. Oxford : Oxford University Press

**Recommended Reading**

- Slack, N & Brandon-Jones, A (2008) *Quantitative Analysis in Operations Management* London : Pearson
- Burtenshaw-Gunn, S (2010) *Essential Tools for Operations Management*. London: Wiley
- Slack, N., Brandon-Jones, A. and Johnston, R. (2011). Essentials of Operations Management, London: FT Prentice Hall.
- Schroeder, R. G., (2008) *Operations Management*, 4th edition. London: McGraw Hill.

# 6 Maintaining Academic Honesty and Integrity

Academic Integrity means avoiding plagiarism and cheating and owning your own work, the use of essay mills and AI content is also considered academic misconduct. This is when you submit a piece of work which is not completely your own, but which you are presenting as your own without acknowledging the author or properly referencing the original source. All your work must demonstrate Academic Integrity; it must be an honest and fair submission, complying with all the requirements of the assessment. Failure to meet these standards of behaviour and practice is academic misconduct, which can result in penalties being applied under the Academic Offences Regulations. You can get support with your academic writing by contacting us through https://evision.ukcbc.ac.uk/urd/sits.urd/run/siw_lgn page.

# 7 Meeting Deadlines

You should always try your best to submit your work on time. If your circumstances mean that you are not able to submit on time or are unable to attend an in-person assessment like an exam or in-class test, then you can request **Exceptional circumstances** for the assessment. An **extension** allows you to submit coursework up to 10 calendar days late without penalty, (calendar days include all weekends and bank holidays where the University is open). Without an extension, the maximum mark you will be able to get for that work will be the pass mark. If you require an extension go to https://evision.ukcbc.ac.uk/urd/sits.urd/run/siw_lgn before the submission

deadline. **Mitigation** allows you a further attempt without penalty if you fail an assessment or do not submit. You can request mitigation through https://evision.ukcbc.ac.uk/urd/sits.urd/run/siw_lgn

You can apply for an extension or mitigation by self-certifying that you have exceptional circumstances which affected your ability to undertake the assessment. **Self-certifying** means that evidence does not have to be provided, although the University reserves the right to request evidence. All self-certified requests must be made before the deadline and detail the exceptional circumstances that have prevented you from submitting by the original submission deadline. **You can only self-certify three assessments per academic year.** If you have used all your self-certification opportunities, or requested mitigation after the deadline, you will need to provide evidence of your **exceptional circumstances** through https://evision.ukcbc.ac.uk/urd/sits.urd/run/siw_lgn for your request to be granted.

# 8 Getting Support

There may be times when you experience circumstances outside of your control and talking to your Module Leader and other support services available to you in the college will help keep you on track with your studies. You can access information on support services and further guidance at UKCBC through https://evision.ukcbc.ac.uk/urd/sits.urd/run/siw_lgn page. You can access support and guidance and confidential help at https://ulearn.ukcbc.ac.uk/course/view.php?id=2145

It is equally important to consider your safety and the safety of others around you, especially how to stay safe online and ensure your communications are secure and appropriate. You should also familiarise yourself with the UKCBC Safeguarding Policy, process, and procedure.

Your Student Representative can help you to obtain the right support.

# 9 Glossary and Acronyms

## Terms and definitions

Bill of Materials (BOM): A list of the raw materials, sub-assemblies, intermediate assemblies, sub-components, parts, and the quantities of each needed to manufacture an end product.

Black Swan Events: An unpredictable event that is beyond what is normally expected and has potentially severe consequences.

Bottleneck: A point of congestion in a production system that occurs when workloads arrive too quickly for the production process to handle.

BPR: Business Process Reengineering - The practice of rethinking and redesigning the way work is done to better support an organization's mission and reduce costs.

Break-even Analysis: A calculation of the approximate sales volume required to just cover costs, below which production would be unprofitable and above which it would be profitable.

Buffer Stock: A supply of inputs held as a reserve to safeguard against unforeseen shortages or demands.

Capacity Management: Ensures that IT resources are right-sized to meet current and future business requirements in a cost-effective manner.

Control Charts: A statistical tool used to distinguish between process variation resulting from common causes and variation resulting from special causes.

Corporate Social Responsibility (CSR): A self-regulating business model that helps a company be socially accountable—to itself, its stakeholders, and the public.

Crisis Management: The process by which an organization deals with a disruptive and unexpected event that threatens to harm the organization or its stakeholders.

Demand Forecasting: The process of predicting future sales to optimize supply decisions.

Economic Order Quantity (EOQ) - The ideal order quantity a company should purchase to minimize its inventory costs such as holding costs, shortage costs, and order costs.

Enterprise Resource Planning (ERP) - A suite of integrated applications that an organization can use to collect, store, manage, and interpret data from many business activities.

Forecasting: The use of historical data to determine the direction of future trends. It's used to predict future events and are a key part of planning and strategy.

Inventory Management: Supervising the flow of items into and out of your stock. It's a balance of having just enough products in the warehouse.

Job Design: The process of putting together a range of tasks to be performed to satisfy a given job requirement or role.

Just-In-Time (JIT): An inventory strategy companies employ to increase efficiency and decrease waste by receiving goods only as they are needed in the production process, thereby reducing inventory costs.

Kanban: A scheduling system used in lean and just-in-time (JIT) production.

Key Performance Indicator (KPI)- A measurable value that demonstrates how effectively a company is achieving key business objectives.

Layout and Flow: Refers to the arrangement of production processes in a facility. The layout determines the way in which materials and workers move through the production process.

Lead Time: The time between the initiation and completion of a production process.

Lean Manufacturing: A systematic method for waste minimization within a manufacturing system without sacrificing productivity.

Lean Synchronization: Aims to make the operation as efficient and effective as possible, producing only what is needed, when it's needed, and with a minimum of materials, equipment, labor, and space.

Master Production Schedule (MPS): A plan for individual commodities to be produced in each time period such as production, staffing, inventory, etc.

Materials Requirements Planning (MRP)- A production planning, scheduling, and inventory control system used to manage manufacturing processes.

Netting Process: In the context of Materials Requirements Planning (MRP), it refers to the process of adjusting the gross requirements for an item by the amount of inventory on hand and the quantity of the item already on order.

Operations Management (OM): The administration of business practices to create the highest level of efficiency possible within an organization. It involves converting materials and labor into goods and services as efficiently as possible to maximize profits.

Operations Performance: The degree to which operations meet the requirements of customers and the objectives of the wider organization.

Operations Strategy: The total pattern of decisions that shape the long-term capabilities of any type of operation and their contribution to the strategy of the wider organization.

Organizational Design: The process of structuring an organization through roles, responsibilities, and relationships.

Performance Objectives: The goals that an organization strives to achieve, often related to quality, speed, dependability, flexibility, and cost.

Process Design: The ensemble of operations leading from the design geometry to the dieface.

Process Hierarchy: The arrangement of processes in a hierarchical manner, showing which processes are sub-processes of others.

Process Technology: The machinery, methods, and systems used to produce goods and deliver services.

Project Management: The application of processes, methods, skills, knowledge, and experience to achieve specific project objectives.

Quality Management System (QMS) - A collection of business processes focused on consistently meeting customer requirements and enhancing their satisfaction.

Quality Management: Act of overseeing all activities and tasks needed to maintain a desired level of excellence.

Queuing System: A model used to represent systems that allow customers or entities to wait in line to receive some service.

Risk Management: The forecasting and evaluation of financial risks together with the identification of procedures to avoid or minimize their impact.

Safety Stock: Extra inventory that's kept on hand to prevent stockouts.

Service Level Agreement (SLA) - A commitment between a service provider and a client that specifies the level of service expected during the term of the agreement.

Single-sourcing vs. Multi-sourcing: Single-sourcing means buying a component from one supplier whereas multi-sourcing means buying a component from several suppliers.

Six Sigma: A set of techniques and tools

Statistical Process Control (SPC): A method of quality control which employs statistical methods to monitor and control a process.

Stock Keeping Unit (SKU)- A unique identifier for each distinct product and service that can be purchased.

Stockout: A situation in which an item is out of stock.

Supply Chain Impact: The influence that changes or disruptions in one part of the supply chain have on other parts of the chain.

Supply Chain Management (SCM) - The oversight of materials, information, and finances as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer.

Supply Chain Management (SCM): The oversight of materials, information, and finances as they move in a process from supplier to manufacturer to wholesaler to retailer to consumer.

Supply Chain: The network of all the individuals, organizations, resources, activities, and technology involved in the creation and sale of a product.

Supply Network: A pattern of temporary exchanges among discrete, autonomous actors which can include individuals, groups, and organizations.

Total Quality Management (TQM): A management approach to long-term success through customer satisfaction. It involves all members of an organization participating in improving processes, products, services, and the culture they work in.

Trade-offs: Situations where the achievement of one objective may be at the expense of another.

Value Chain: A series of activities that businesses go through to bring a product or service to their customers. It's the process by which businesses receive raw materials, add value to the raw materials through various processes, and then sell finished products to customers.

Value Stream Mapping: A lean-management method for analysing the current state and designing a future state for the series of events that take a product or service from its beginning through to the customer.

Work In Progress (WIP) : A company's partially finished goods waiting for completion and eventual sale or the value of these items.