



**O2-L3**

**Inventory**

**Standards**



**The Chartered  
Institute of Logistics  
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# O2-L3

## Inventory

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# O2-L3

## Inventory

### Unit purpose and aim

This Unit is designed to provide students with the knowledge and understanding of Inventory Management and the techniques involved in balancing trade-offs to deliver optimum supply chain performance. It will show that inventory management is a key contributor to competitive advantage in the sector and can lead to improvements in customer service, operational efficiency and company asset utilization.

### Elements

- O2-1** Managing Inventory
- O2-2** Controlling Stock
- O2-3** Managing Performance of Inventory

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# Element 02-1

## Managing Inventory

Learning Outcomes The learner will:		Assessment Criteria The learner can:	
01.01.	Understand the purpose of holding inventory	01.01.1.	Describe the drivers of supply and demand and how their relative balance underpins inventory
		01.01.2.	Summarise the alternatives to holding inventory
01.02.	Know the components of stock	01.02.1.	Summarise the different components of stock
		01.02.2.	Explain how the balance of these components may affect the level of investment in stock
01.03.	Describe the trade-offs between cost and service level	01.03.1.	Explain the factors that may arise that may require trade offs to take place
		01.03.2.	Explain how trade-offs are made
01.04.	Understand that the value of inventory may change over time	01.04.1.	Explain the difference between cost and value, and how this impacts on inventory levels and how inventory is managed
01.05.	Know how forecasting can assist the process of inventory management	01.05.1.	Explain how a forecast is made, and the factors that drive it
		01.05.2.	Describe simple forecasting techniques and how they differ
01.06.	Understand simple inventory systems	01.06.1.	Clarify the common inventory systems that are used in business, and discuss their relative merits

## Indicative Content

Purpose of holding inventory and the drivers behind it

Demand & Supply balance, anticipation inventory

actors behind why inventory is held across the organisation and how the relative balance is maintained

Transportation and insurance inventory, purchasing and production policies, supply chain planning

Different types of inventory and the 'real' costs of holding stock

Raw materials- goods for sale types  
Holding costs, acquisition costs, opportunity cost, stock valuation and pricing

Trade offs between stock and availability and how this drives service levels

Holding costs vs cost of delay

Describe the impact on inventory of demand lead times

Drivers of inventory levels, supply chain length  
delivery lead times  
Demand lead times

# Element 02-2

## Controlling Stock

<b>Learning Outcomes</b> The learner will:		<b>Assessment Criteria</b> The learner can:	
02.01.	Understand the appropriate techniques that can be used to plan inventory levels	02.01.1.	Summarise the factors which determine re-order levels
		02.01.2.	Review simple techniques for planning inventory
02.02.	Understand the impact of different variables on stock levels	02.02.1.	Explain how these variables impact stock
02.03.	Know the different types of traditional inventory models for different types of operations	02.03.1.	Distinguish the different types of inventory models
		02.03.2.	Explain why different types of organisations need different models
02.04.	Understand how reverse logistics impacts inventory and inventory systems	02.04.1.	Interpret reverse logistics
		02.04.2.	Estimate the impact of reverse logistics on inventory levels and inventory systems
02.05.	Know how modern inventory systems can improve the control of stock	02.05.1.	Evaluate modern inventory systems and how they can improve the control of stock

## Indicative Content

Need to balance stockholding against lead times	Stockholding to support required service level balanced against demand variations and supply lead times
Considers the risks behind why inventory is held	Obsolescence, shelf life, changes in demand
Explains reorder points and stock levels	Max /min stock levels. Bin stocks, red line, replacement order. Forecast driven
Describes Reverse Logistics and the important impacts of it on inventory systems and controlling stock	Returns, inspection, records, re- packaging Disposal, recycling
Explains different stock holding models and the drivers behind them	Kanban, JIT, VMI, historical demand MRPII
Describe the impact of obsolescence and surplus stocks	Reasons for surplus and obsolescent stock, identification, methods of reducing surplus stocks

# Element 02-3

## Managing Performance of Inventory

Learning Outcomes The learner will:		Assessment Criteria The learner can:	
03.01.	Know the appropriate techniques for recording stock	03.01.1.	Summarise inputs, outputs and adjustments
03.02.	Understand the need for auditing of stocks and reconciliation of differences in stock levels	03.02.1.	Explain how stock is typically audited
		03.02.2.	Clarify how differences arise
		03.02.3.	Demonstrate how adjustments are made
03.03.	Know suitable Key Performance Indicators that are used to measure the performance of inventory management	03.03.1.	Summarise suitable measures of Stock turn, service levels, accuracy, surplus and obsolescence
		03.03.2.	Explain how different KPIs may be set for different organisations and business objectives
03.04.	Know the different types of reporting systems that are used to inform the management of inventory	03.04.1.	Explain the purpose of the reports
		03.04.2.	Summarise the possible actions that management might take in response to the reports

## Indicative Content

Explains the need to accurately record stocks	Recording inputs and outputs, accurately
Considers how stock can be audited and the action to be taken if discrepancies are identified	Perpetual Inventory, stocktaking Updating and correcting discrepancies
Explains actions that management should take when discrepancies have been identified	Investigation of variances, identifying causes, correcting stock records
Describes Examples of Key performance indicators that can be used to measure inventory performance	Stock Turnover, Pareto analysis OEI rates
Describes the types and content of typical reports and reporting systems that are commonly used to measure performance of inventory	Customer service levels, stock investment efficiency, reporting stock turnover data, Cost of holding inventory