

SUPPLY CHAIN MANAGEMENT

NQF Level 2

Overview of content

Introduction to Supply Chain Management (60 hours)



A short description: This course is intended to sharpen the learner's knowledge of Supply Chain Management. It will use practical examples to demonstrate the different entities in the Supply Chain and the relationship between them.

Course outline

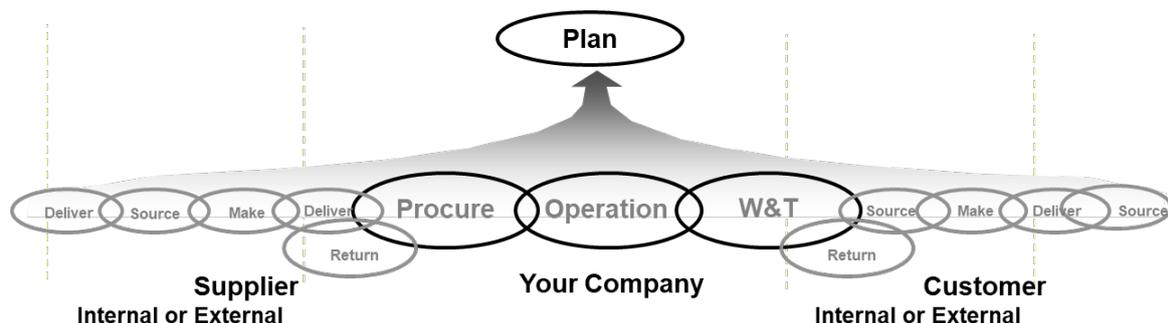
Module 1: Introduction to Supply Chain Management (SCM)

DURATION

10 Days / 60 Hours

We will use a can of soft drink to provide an overview of the Supply Chain. You will be able to identify the different entities in the supply chain and how they interact with each other.

You will also be able to identify the six SCM activities.



Introduction to:

- Planning
- Procure
- Operation

- Warehousing & Transportation
- Return
- Enable

Practical activities/ Assessment:

- Complete a quiz about the content of the lesson. The format will be a multiple-choice questions.
- Make an electronic poster of a supply chain using a common household item, mapping the entire flow of goods (not a soft drink!)

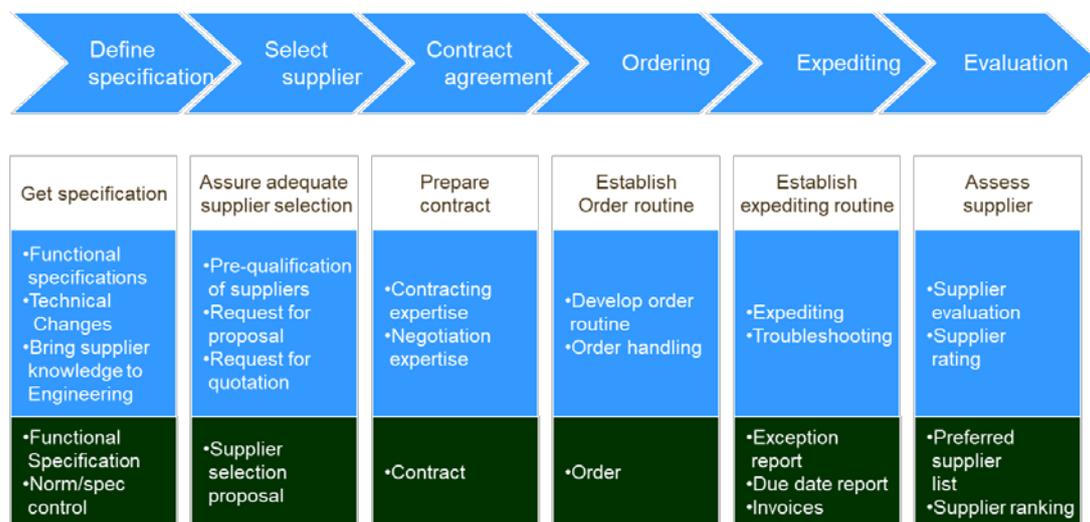
Module 2: Procurement

DURATION

10 Days / 60 Hours

Procurement can add significant value to an organisation. It must be an agile, sleek process to deliver the required goods and services. This module provides an overview of the procurement process to enable the learner to understand how it functions so that he can add value to the process.

For the purposes of this course, we will focus on the purchasing process and all the steps required.



Documents are linked to every step of the process; the learner must be able to identify and describe the use of each document as well as the sequence they are used.

An important skill in purchasing is negotiation. You will learn the basics strategies to use when setting up a negotiation.

Practical activities/ Assessment:

- Complete a quiz about the content of the lesson.
- Make poster of the purchasing process, you can use samples from an organisation.
- Or make a poster of the negotiation process between a supplier and your organisation depicting the conflict situation and then how you are going to resolve the conflict.

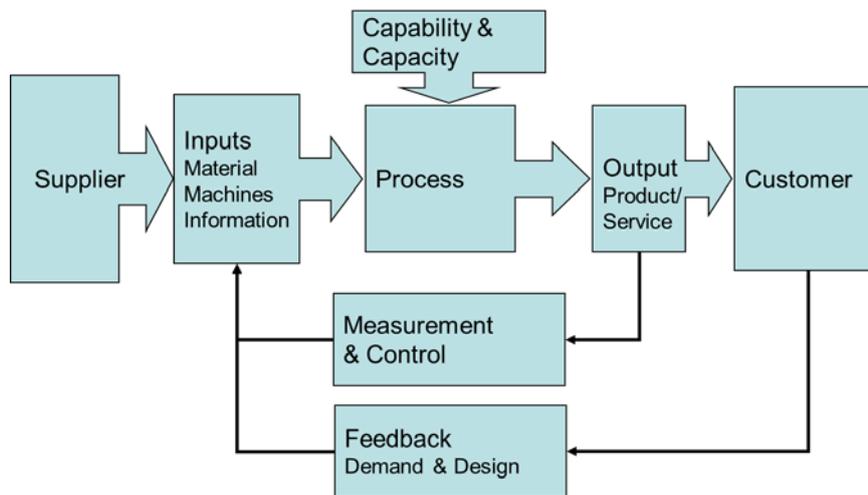
Module 3: Operations Management

DURATION

15 Days / 90 Hours

Operations Management is concerned with the creation of value in the organisation. This must be done in such a way that the objectives of the company are met. Companies can gain a significant competitive advantage by conducting their operations in an efficient and effective manner.

This course is to introduce candidates to the concepts of Operations Management. It will follow a top-down approach: from deciding how the organisation is going to compete right down to taking corrective action when things don't work as planned.



Facilities layout

The design of a facility sometimes leaves much to be desired. This leads to unnecessary movement and crossflows. The learner will look at alternative designs and methods to improve the flow of material.

Planning

Planning forms the backbone of Operations Management. In this module, we will look at:

Aggregate planning

This is done to determine the overall load on the facility to create a smooth flow and therefore stability in the operation.

Rough Cut Capacity Planning

The purpose is to determine the overall load. It also serves as an early warning system of impending bottlenecks.

Priority Control

Priority control determines the sequence in which jobs will be processed. The simplest one is First-Come-First-Served (FCFS) but there are many others as well.

Scheduling

Scheduling determines the route that the job will travel through the facility; when a job at a particular operation will start and when it will end.

Quality Management

It does not help to produce something, but the quality is wrong. We will discuss some quality management techniques that can be applied. It will start with some of the most popular philosophies and will include some basic statistical techniques.

Lean Operations

This is where we will eliminate muda (Japanese: waste). This will include using unnecessary material, handling operations and unnecessary inventory.

Practical activities/ Assessment:

- Complete a quiz about the content of the lesson.
- A presentation to demonstrate that you understand how the operations environment operates.

Module 4: Warehousing & Transportation

DURATION

15 Days / 90 Hours

Warehousing

This forms the link between the operation and customers. Warehousing consists of the following operations:

- Receiving
- Storage
- Picking
- Issuing

The warehouse must be in the most favourable position, which could be close to the market or the raw materials. Other considerations such as availability of labour and infrastructure, and services will play a role.

This module will also focus on stock control and stocktaking methods like cycle counting and some issues pertaining to inventory management.

It is also important to consider warehouse layout, racking and storage methods as well as material handling solutions.

Inventory Management

Inventory forms a major part of a company's working capital. It must be managed to the benefit of the company and its stakeholders.

- Purpose of inventory
- Types of inventory
- ABC Classification
- Location of inventory
- Concept of postponement

Part Numbers, Part Descriptions and Commodity Coding

- Significant vs. insignificant part numbers
- Part descriptions
- Commodity coding

Security and loss control

- Access control
- SHE

Transportation



- Objectives of transport
- Modes of transport
- Responsibilities of transport
- Transportation agencies, 3PL, 5PL
- Scheduling & routing
- Principle of Hub & Spoke
- Costing and pricing in transport
- Government and transport
- Transport performance

Practical work:

- Complete a quiz about the content of the lesson.
- A presentation to demonstrate that you understand warehousing and the basic principles of inventory management.
- A presentation to demonstrate that you understand warehousing and the basic principles of transportation.

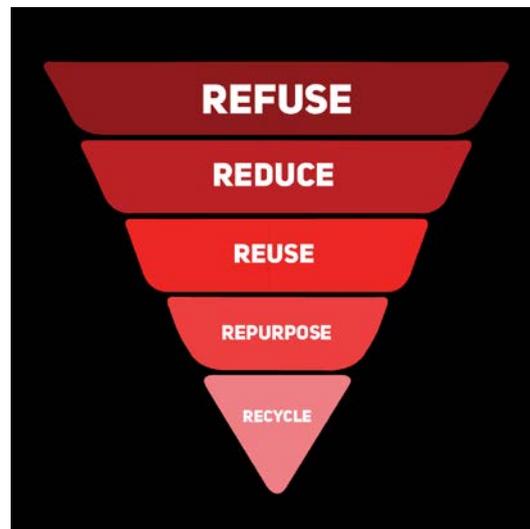
Module 5: Return

DURATION

5 Days / 30 Hours

It sometimes happens that we must return something to its source. Reasons for this could be:

- Poor quality or damaged goods
- Unwanted goods for credit
- Goods delivered in the wrong location
- Recycled material or containers for credit
- Expired goods



The return of goods is often a sticky situation as it requires “out of normal course” actions. However, it is an essential part; specially recycling. We want to refuse, reduce, reuse, repurpose and finally, recycle.

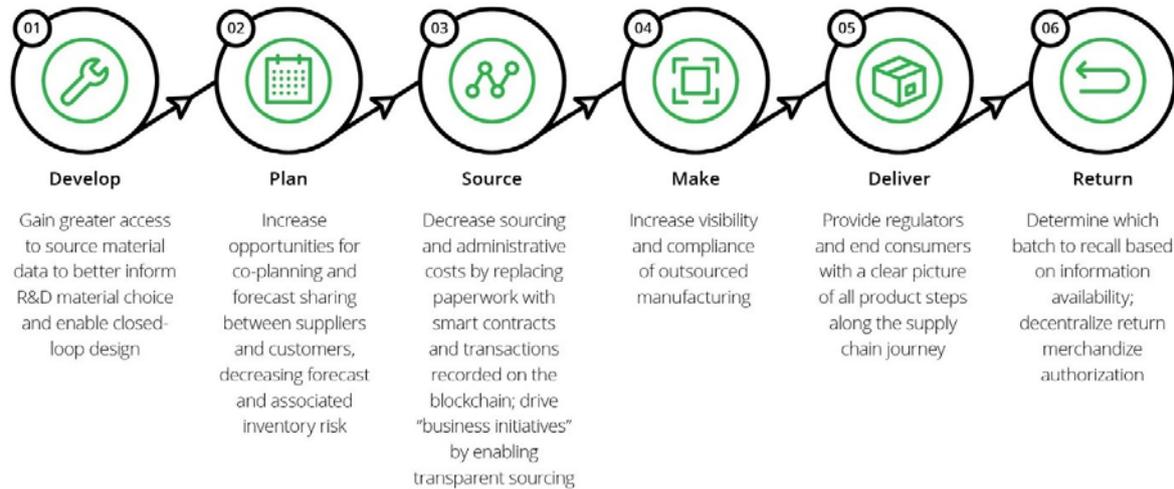
Practical work:

- Complete a quiz about the content of the lesson.
- A presentation to demonstrate that you understand the return function.
- A presentation to demonstrate that you understand recycling in supply chains.

Module 5: Enable

DURATION

5 Days / 30 Hours



Enable is the processes involved in optimising the supply chain. We will look at how the 4th Industrial Revolution will change the landscape for supply chains.

Practical work:

- Complete a quiz about the content of the lesson.
- A presentation to demonstrate that you understand what technologies are available in SCM.