

22729C

Strategic Supply Chain Management and Logistics

Unit code: D/602/2357

QCF Level 7: BTEC Professional

Credit value: 15

Guided learning hours: 45

Unit aim

This unit provides the learner with the understanding and skills to plan strategies to improve an organisation's supply chain.

Unit introduction

This unit focuses on how the concept of supply chain management and logistics is based on the idea that every product that reaches an end user represents the combined effort of multiple organisations which make up the supply chain and that until recently, most organisations paid attention to only what was happening within their own business. Few organisations understood, much less managed, the entire chain of activities that ultimately delivered products to the final customer. This resulted in ineffective supply chains.

In this unit, learners will develop the knowledge that, today, many organisations realise that effective management of supply chain activities can lead to increased customer value and achieve sustainable competitive advantage. Supply chain activities cover everything from product development, sourcing, production and logistics, to the information systems needed to coordinate these activities.

Learners will discover that the organisations that make up the supply chain are 'linked' through physical and information flows. Physical flows involve the transformation, movement and storage of goods and materials and are the most visible piece of the supply chain. Of equal importance are information flows as they allow the various supply chain partners to coordinate their long-term plans and control the day-to-day flow of goods and materials up and down the supply chain.

This unit will give learners an understanding of the key drivers in the creation of an integrated supply chain – the principal aim of many organisations.

Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

On completion of this unit a learner should:

Learning outcomes	Assessment criteria
1 Understand the relationship between supply chain management (SCM) and organisational business objectives	<p>1.1 explain the importance of effective supply chain management in achieving organisational objectives</p> <p>1.2 explain the link between supply chain management and business functions in an organisation</p> <p>1.3 discuss the key drivers for achieving an integrated supply chain strategy in an organisation</p>
2 Be able to use information technology to optimise supplier relationships in an organisation	<p>2.1 evaluate the effectiveness of strategies used by an organisation to maintain supplier relationships</p> <p>2.2 use information technology to create strategies to develop an organisation's relationship with its suppliers</p> <p>2.3 develop systems to maintain an organisation's relationship with its suppliers</p>
3 Understand the role of information technology in supply chain management	<p>3.1 assess how information technology could assist integration of different parts of the supply chain of an organisation</p> <p>3.2 evaluate how information technology has contributed to the management of the supply chain of an organisation</p> <p>3.3 assess the effectiveness of information technology in managing the supply chain of an organisation</p>

Learning outcomes	Assessment criteria
<p>4 Understand the role of logistics and procurement in supply chain management</p>	<p>4.1 explain the role of logistics in supply chain management in an organisation</p> <p>4.2 evaluate procurement practices in an organisation</p> <p>4.3 discuss the factors that must be considered when improving logistics and procurement practices in an organisation</p>
<p>5 Be able to plan a strategy to improve an organisation's supply chain</p>	<p>5.1 plan a strategy to improve an organisation's supply chain</p> <p>5.2 assess how a supply chain improvement strategy will benefit overall business performance in an organisation</p> <p>5.3 explain how barriers will be overcome in an organisation when implementing a supply chain improvement strategy</p>

Unit content

1 **Understand the relationship between supply chain management (SCM) and organisational business objectives**

Concepts: demand and supply management; push and pull models; enterprise resource planning (ERP); vendor managed inventory (VMI); efficient consumer response (ECR); value chains; lean supply; global SCM; contribution to business objectives

Development: physical distribution management; materials management; logistics management and SCM (upstream and downstream)

Organisational objectives and business functions: financial, marketing, sales, operational, manufacturing, human resource

Key drivers: facilities; inventory; transportation; information; sourcing; pricing; globalisation; technology; customer expectation

Integrated supply chain: strategic goals; culture change; roles and responsibilities of staff; organisational rationalisation; higher volume and speed of transactions; enhanced market position; reduced supply chain complexity; potential for smooth process operations following complex initial set-up; enhanced, lean and agile systems

2 **Be able to use information technology to optimise supplier relationships in an organisation**

Different types of relationship: alliances eg adversarial, developmental, collaborative, strategic; supplier development; e-tailing; business to business, business to consumer; intermediation and disintermediation; networks; supplier associations; supplier tiering; organisational networks; personal networks; auctions

Use of information systems: intranets; extranets and virtual private networks (VPNs) for supply chain integration; operational issues eg eliminating 'media breaks' to exchange supply information on a common digital platform; opportunity to use sales service staff in call centres dealing with supply exceptions; order processing, web-based EDI, tracking systems

Individual elements: the use of intranets and extranets in building value chains for organisations linked in the supply chain, order processing, web-based electronic data interchange (EDI), tracking systems

Differing applications for cost reductions and customer service: time compression, demand fulfilment, total cost of ownership reduction

3 Understand the role of information technology in supply chain management

Role of information technology: the internet; online communication systems; online business communities; decrease in transaction costs; closer buyer supplier relationships; improved purchasing, order processing, EDI, inventory management, production scheduling; Just in Time (JIT) programmes; tracking shipments; reducing lead times; information sharing; lean organisations

4 Understand the role of logistics and procurement in supply chain management

Procurement: supplier selection; optimal procurement policies; reliability; quality

Logistics: role within supply chain management; planning; implementation and control of the movement and storage of goods; management of raw materials; link between the marketplace and operating activity of the organisation; customer satisfaction; coordination of materials and information flows; point of origin to point of consumption

5 Be able to plan a strategy to improve an organisation's supply chain

Benefits: reduced stock holding; elimination of waste; improved customer service; reduced labour costs; improved manufacturing planning; Just in Time (JIT)

Barriers: inappropriate distribution networks; ineffective distribution strategies; trade-offs in logistical activity eg a full truckload of a product is ordered to reduce transportation costs resulting in increased inventory holding costs; inability to integrate processes through the supply chain to share information; poor inventory management; cash flow problems

Essential resources

There are no essential resources required for this unit.

Indicative resource materials

Textbooks

Chopra S and Meindl P – *Supply Chain Management: Strategy, Planning and Operation, 4th Edition* (Pearson Education, 2009) ISBN 0136094511

Christopher M – *Logistics and Supply Chain Management, 4th Edition* (Financial Times/Prentice Hall, 2010) ISBN 0273731122

Stadtler, H and Kilger C - *Supply Chain Management and Advanced Planning: Concepts, Models, Software and Case Studies, 4th Edition* (Springer, 2007) ISBN 3540745114

Chaffey D – *E-Business and E-Commerce Management: Strategy, Implementation and Practice, 4th Edition* (Financial Times/Prentice Hall, 2009) ISBN 0273719602

Harvard Business Review on Managing the Value Chain (Harvard Business School Press, 2000) ISBN 1578512344

Harvard Business Review on Supply Chain Management (Harvard Business School Press, 2006) ISBN 1422102793

Turban T, Lee J K, King D, Liang T P and Turban D – *Electronic Commerce 2010: A Managerial Perspective, 6th Edition* (Pearson Education, 2009) ISBN 0137034652

Journals

European Journal of Purchasing and Supply Management (Elsevier)

The Journal of Supply Chain Management (Institute for Supply Management)

Supply Chain Management (Emerald)

Websites

www.cips.org Chartered Institute of Purchasing and Supply

www.emeraldinsight.com/journals.htm *Supply Chain Management: An International Journal*

www.iwvaluechain.com *Industry Week's The Value Chain*

www.logistics.about.com/mbody News about logistics and the supply chain