

Logistics Management

MARKET LEADER



Business English

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This unit considers how supply chains will need to change in the future as a result of higher energy prices and concerns about carbon emissions.

BEFORE YOU READ

Discuss these questions.

- 1 What are some traditional strategies and aims of running supply chains?
- 2 What new factors will companies have to take into account when designing their supply chains?
- 3 In what ways can a company reduce transport costs in its supply chain?
- 4 Think of as many ways as possible to reduce carbon emissions in freight transport.

READING**A Understanding the main points**

Read the article on the opposite page and answer these questions.

- 1 What examples are given of traditional strategies for the organisation of supply chains?
- 2 What is the likely future strategy for the organisation of supply chains?
- 3 What are the factors pushing this new strategy?

B Understanding details

Read the article again and say whether these statements are true (T), false (F) or there is not enough information (N). Give your reasons.

- 1 Traditional supply-chain strategies were not greatly concerned about transport costs or carbon emissions.
- 2 Many companies are now against building huge warehouses because they are damaging to the environment.
- 3 Just-in-time, lean manufacturing and low-cost country sourcing are part of the new supply-chain strategy.
- 4 Tipping-point analysis argues that goods should always be stored close to the customer.
- 5 Products such as soft drinks or paper will continue to be delivered on a just-in-time basis.
- 6 Kimberly-Clark is the leader in moving its distribution centres closer to customers.
- 7 It is more energy efficient to have big, centralised warehouses rather than small, local ones.
- 8 Most ways of reducing carbon emissions in freight transport come at the expense of higher costs.
- 9 Shared warehouses and shared deliveries will be the model for the future.
- 10 This new model will give improved on-shelf availability.

Finding better ways to deliver the goods



by Rod Newing

A Increased transport costs due to oil-price rises can change the economics on which supply chains were built.

B Traditional strategies were aimed at reducing the amount of money tied up in inventory and the number of warehouses. However, this was often at the expense of increased frequency of deliveries and longer transport distances, and therefore higher emissions.

C Strategies, such as just-in-time, lean manufacturing and even low-cost country sourcing, must be re-evaluated in the light of fuel prices. We have entered a new era where different supply-chain strategies are needed to produce high performance, says *Past the Tipping Point*, a recent report from Accenture and Ilog, a French business-software company.

D Jonathan Wright, a supply chain consultant at Accenture, explains that tipping-point analysis is an end-to-end assessment of the supply chain. The aim is to understand at what point inventory should be held further

forward in the supply chain to reduce transport costs.

E Moving inventory closer to demand lowers transport and emissions at the expense of higher inventory costs. 'The tipping point occurs at different fuel prices, depending on the type and nature of the product,' he says. 'The tipping point will be lower with a low-cost bulky product, such as soft drinks or paper. There will always be areas where just-in-time is the right thing to do and others where it is history.'

F Kimberly-Clark's *Network of the Future* places distribution centres closer to its key customers and markets, reducing the number of delivery trips. Its strategy aims for 70 per cent of products to be made and sold in the same country. In the US alone in 2007, it saved nearly 2.8m miles and 500,000 gallons of fuel.

G There is usually a carbon trade-off between more energy-efficient, centralised warehouses and transport costs, but, generally, cost and carbon reduction go together.

H Professor Alan McKinnon, Director

of the Logistics Research Centre at Scotland's Heriot-Watt University, has identified nine ways of reducing carbon in freight transport, most of which will also reduce costs. These are: switch from road and air to rail or water; reduce the number of links in supply chains; reduce average journey length; increase average vehicle loading; reduce empty running; increase vehicle capacity; reschedule deliveries to off-peak periods; use more fuel-efficient vehicles; and use lower carbon fuels.

I Sharing distribution centres and deliveries is a powerful way to reduce cost and carbon footprint. Judy Blackburn, Head of the UK Logistics team at consultancy Kurt Salmon Associates, says that when two competing companies have merged their logistics operations and vehicle deliveries, transport costs have fallen by 15 to 25 per cent, saving 300,000–400,000 tonnes of carbon dioxide.

J 'Current supply-chain designs are primarily aimed at improving on-shelf availability, reducing cost and supporting sound financial figures,' according to *The 2016 Future Supply Chain: Serving Consumers in a Sustainable Way*, a report by the Global Commerce Initiative of manufacturers and retailers and Capgemini, the consultancy firm. 'In future, the industry must design for additional parameters, such as reduction in CO₂ emissions, reduced energy consumption, and reduced traffic congestion.'

K The report forecasts that finished products will be shipped to shared warehouses in which multiple manufacturers store their products. Shared transport will deliver to city hubs and regional consolidation centres. Final distribution to stores, pick-up points and homes will use consolidated deliveries.

FT

VOCABULARY

A Definitions

Find words or phrases in the article which match these meanings.

- 1 locked away (so that it can't be used for anything else) (paragraph B)
- 2 considering (paragraph C)
- 3 from start to finish (paragraph D)
- 4 the moment when one particular result of a process becomes the most likely one, after a period when the result was not sure (paragraph E)
- 5 taking up a lot of space (paragraph E)
- 6 an acceptable balance between two very different things (paragraph G)
- 7 the extent to which a truck has a full load (paragraph H)
- 8 when trucks travel without carrying goods (paragraph H)
- 9 less busy times of day for travelling (paragraph H)
- 10 the amount of carbon emissions an activity produces (paragraph I)
- 11 joined part of their operations together (paragraph I)
- 12 factors, limits on how much should be allowed (paragraph J)
- 13 when several deliveries are combined together (paragraph K)

B Sentence completion

Use the words and phrases from Exercise A to complete these sentences.

- 1 It is expensive to store products in a warehouse, as they take up a lot of space.
- 2 For environmental reasons, most transport companies are trying to reduce their
- 3 One way to reduce carbon emissions is to deliver in-..... periods, when there is less traffic.
- 4 Another way is to avoid, when trucks return to a warehouse with no goods.
- 5 A third way is to increase averageby making sure that trucks have as full a load as possible.
- 6 The traditional strategy of supply chains was to avoid having too much capitalin inventory.
- 7 Supply chains in the future will have to take newinto account, such as carbon emissions and road congestion.
- 8 In the planning of distribution systems, it is often necessary to make a-..... between inventory costs and transport costs.
- 9 In the future, deliveries from different suppliers will beso that trucks can carry full loads.
- 10 Some companies havetheir logistics operations in order to reduce transport costs.
- 11 Theof when it is cheaper to store goods closer to the customer rather than using just-in-time delivery depends on the transport cost and the type of product.
- 12 The company had to rethink its supply chain strategynew developments in just-in-time management.
- 13 The consultant carried out an-.....assessment of the supply chain to understand more clearly the impact of holding inventory.

C Prepositions

Complete the phrases from the article using the prepositions in the box.

at at between by from in in of of on on to to to to

- 1 the economics which supply chains were built.
- 2 the amount of money tied up inventory
- 3 the expense increased transport frequencies
- 4 the light fuel prices.
- 5 to understand what point inventory should be held further forward in the supply chain
- 6 depending the type and nature of the product
- 7 places distribution centres closer its key customers
- 8 a trade-off more energy-efficient, centralised warehouses and transport costs
- 9 switch road and air rail or water
- 10 reschedule deliveries off-peak periods
- 11 transport costs have fallen 15 to 20 per cent
- 12 final distribution stores, pick-up points and homes will use consolidated deliveries.

D Definitions

1 Match the sentence halves to form definitions.

- | | |
|---|--|
| 1 A method of production that aims to cut costs by producing ... | a) ... from areas of the world where manufacturing costs are lower. |
| 2 The activity of finding and buying materials, parts or products ... | b) ... where things are done, supplied or made only when they are needed. |
| 3 A system, especially for manufacturing, ... | c) ... only the quantity of goods that has been ordered and by reducing the amount of time and space that the production process uses. |

2 Match each definition from Exercise 1 with the strategy for reducing the costs of production that it describes.

- i) just-in-time
- ii) lean manufacturing
- iii) low-cost country sourcing

OVER TO YOU

- 1 Look at the nine ways of reducing carbon emissions in freight transport mentioned by Professor McKinnon in the article. Pick the three which you think will be most effective and give your reasons.
- 2 To what extent do you agree with the findings of the report *The 2016 Future Supply Chain* that, in future, companies will use shared warehouses close to customers and deliveries will be consolidated? Give your reasons.