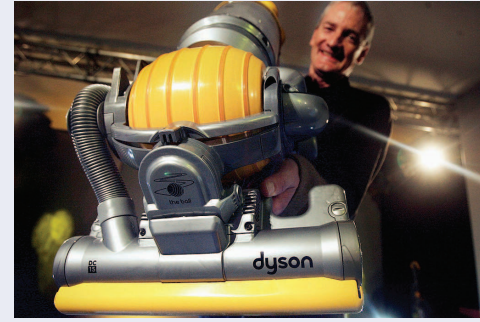
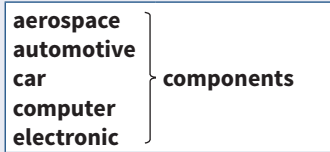


A

Inputs

Dyson makes vacuum cleaners. It takes **raw materials** like steel and plastic, and makes some of the **components** – or **parts** – used in its products. (Other components are made by other companies.)

Here are some typical combinations:



Materials and parts are just some of the **inputs**. The others are **labour** – workers and managers – and **capital** – money. **Knowledge** is also important because Dyson is a leader in vacuum technology.

Vacuum cleaners that are in the course of being made are **work-in-progress**. At any one time, Dyson has **goods** (see Unit 16) worth millions of dollars in its factories and warehouses; these are both the materials and components used to make its products, and its **finished goods** – the products that have been made.

Quantities of raw materials, components, work-in-progress and finished goods in a particular place are **stocks**.

Note

BrE: **work-in-progress**; AmE: **work-in-process**

BrE: **stocks**; AmE: **inventories**

Goods is rarely used in the singular, except in specialized economics contexts.

B

Suppliers and outsourcing

Dyson has its own **manufacturing operation**, but it works with its **suppliers** – companies that provide materials and components. Some companies refer to their suppliers as **partners**.

The company uses **subcontracting** – which means using **outside suppliers** to provide components and services. In other words, it uses **outsourcing** rather than doing these activities **in-house** – within the company.

Note

Outside is the most frequently occurring adjective in front of **suppliers**.



C

Just-in-time

It costs money to keep components and goods available for customers to buy **in stock**. Stocks have to be **financed** – paid for. They also have to be **stored** – kept in special buildings called **warehouses** – and **handled** – moved from one place to another. So Dyson is asking its suppliers to provide components **just-in-time** – when they are needed.

This is part of **lean production** or **lean manufacturing**, in which products are made in the most **efficient** way – doing things as quickly and cheaply as possible, without waste.



A warehouse

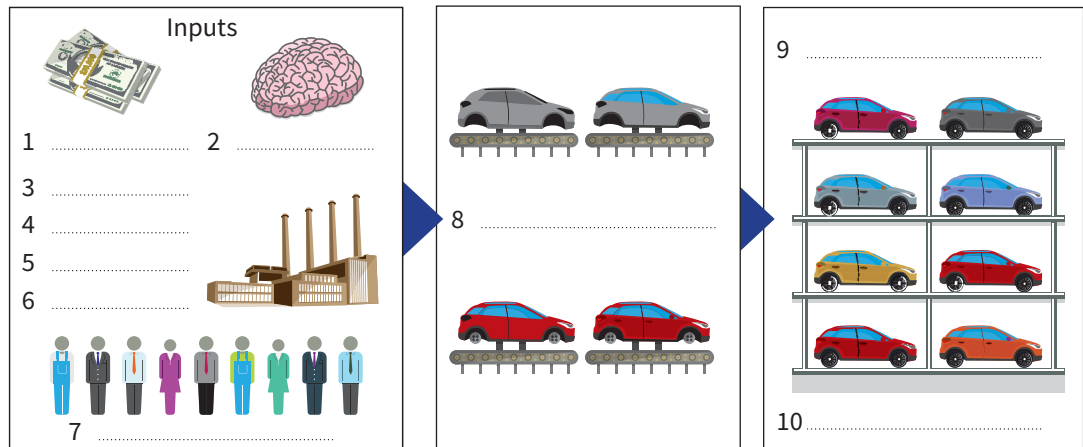
Note

Lean production is about as frequent as **lean manufacturing**.



Exercises

17.1 Use words from A opposite to label the diagram.



17.2 Match the sentence beginnings (1–6) with the correct endings (a–f) containing expressions from B opposite.

- | | | |
|--|--------------------------|--|
| 1 The computer manufacturer is cutting back on in- | <input type="checkbox"/> | a maintenance is worrying train operating companies. |
| 2 The poor standard of some subcontractors' | <input type="checkbox"/> | b spent \$157 million on the Cymbalta advertising campaign. |
| 3 Retail giants Sharks Ltd have decided to | <input type="checkbox"/> | c house production work in a bid to reduce costs and increase efficiency. |
| 4 Late deliveries from outside | <input type="checkbox"/> | d outsource canteen and cleaning services, to focus better on its buying and selling activities. |
| 5 Gruma has manufacturing | <input type="checkbox"/> | e suppliers are causing delays in production, the Azco group claims. |
| 6 Lilly and its partners | <input type="checkbox"/> | f operations on five continents, and its products are sold in more than 50 countries. |

17.3 Replace the words in *italics* with the correct forms of words from C opposite.

- 1 Let's get the materials *only when we need them* to keep costs down.
- 2 It's difficult to find the right *special buildings* to put our finished goods in.
- 3 You have to decide well in advance how to *pay for* all this.
- 4 It's very important that we *keep* these components at the right temperature.
- 5 The company found that using couriers on bicycles was a very *quick and effective* way to deliver documents in big cities.
- 6 They want to introduce a system of *making things efficiently without waste*.

Over to you

What are the advantages and disadvantages of the following?

- outsourcing
- asking for components 'just-in-time'