

29 Supply chain management

A Manufacturing

Here are some frequent combinations with 'manufacturing':

manufacturing	sector	the sector that makes things, rather than other sectors of the economy
	plant	a factory
	jobs	work making things, rather than in other sectors
	productivity	the amount produced by each worker, or group of workers – their output
	capacity	the amount that can be made at a particular plant, or at plants as a whole
	operations	activities related to making things
	process	all the stages involved in making something

Manufacturing plant sounds more modern than **factory** or **works**. **Fab plant** is used to talk about one where hi-tech manufacturing of **silicon chips** – the main components of computers – takes place. An **assembly plant** is one where products such as cars are put together on **assembly lines**.

A new plant is built and production is **ramped up** – progressively increased. Perhaps the plant will **operate at full capacity** – produce as much as it is able to – or **below capacity**. A plant that is not operating at all is **idle**.



Manufacturing plant

Manufacturing operations depend on networks of **suppliers** of raw materials, components, etc. that have to be ordered and delivered at the right time. These suppliers make up the **supply chain**, and organizing and managing it efficiently is **supply chain management** (see Unit 30).

B Vertical integration

When Ford started making cars, it raised its own sheep to provide wool for the seat covers! This is an example of **vertical integration** – when a company produces everything internally that it needs, owning all the stages of the supply chain itself.

Many organizations **outsource** some of their requirements and buy them in from outside (see Unit 31). The buying-in process is known formally as **procurement**.

In advanced manufacturing, suppliers are **integrated into** a manufacturer's information systems. They often deliver required parts **just-in-time**, eliminating the need for **warehousing** – **handling** and **storage** in expensive **warehouses**. Managers from the manufacturer often supervise the supplier's own **production lines**. This leads to **clusters** – groups – of suppliers located very near the manufacturer, their main or only customer. Plants such as these that provide components to only one nearby manufacturer are **captive plants**.

C Retailing

Services such as **retail** that involve the movement of physical goods also depend, of course, on managing the supply chain efficiently. The efficient **transport** or **distribution** of goods, and their storage, especially in **automated warehouses** managed by sophisticated computer programs, is known as **logistics** (see Unit 30).

29.1 Match the two parts of these sentences containing expressions from A opposite.

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|--|---|
| 1 The \$40 million perfume bottle manufacturing | a led by Eric Steenburgh, our Chief Operating Officer. |
| 2 Our improved financial results are due to better manufacturing productivity, | b jobs during the year, continuing a decade-long decline. |
| 3 North Kentucky has lost about 1,700 manufacturing | c plant in Covington, Georgia is the only one that French glass manufacturing giant Saint-Gobain operates in North America. |
| 4 Many Hong Kong manufacturers have adopted advanced technology and machinery in the manufacturing | d sector, electronics has become a major export activity. |
| 5 In the manufacturing | e capacity as is needed; the North Canton plant has 900,000 square feet of unused space. |
| 6 Hoover has twice as much manufacturing | f operations on five continents, and its products are sold in more than 50 countries. |
| 7 Gruma, with 2006 revenue of \$2.8 billion, has manufacturing | g process to improve efficiency and product quality. |

29.2 Complete the article with these expressions from A and B opposite. Use one expression twice.

captive plants integrated just-in-time process suppliers warehouse

When Western businesspeople went to Japan, they discovered the interlocking relationships between companies and their (1) _____, often funded or owned by a common umbrella organization, the Keiretsu.

These company partnerships were quite natural, and as the geniuses at Toyota carried out decades of warfare on waste in every part and (2) _____ of their business, what could be more wasteful than supplies on (3) _____ shelves for eventual use? Out of Japan came (4) _____ supplies, nerve-racking for traditional Western factory managers. It is still exciting to see less than an hour's supply of car seats stored in a Japanese auto plant, already stacked to match the colour of the cars that are on the production line.

Behind the handshake between need and supply was something more than (5) _____ computer systems. When Japanese auto companies started manufacturing in Britain, they trained some local UK suppliers to their rigorous needs. But the vital components were made in new (6) _____ built by their usual Japanese (7) _____ close to the British plant.

29.3 Complete the table containing expressions from B and C opposite.

Verb	Noun(s)
retail	_____, retailing
warehouse	_____, warehousing
transport	_____, transportation
distribute	_____
	outsourcing

Over to you



Think of a manufacturer in your country and describe its probable supply chain.