

Value Chain Analysis

Example (1)

- The carpet manufacturing industry involves six stages each of which is undertaken by a different company. Process, cost and revenue data for each stage is detailed below.
 - **Oil extraction:** Conversion costs (labour and overheads) of £0.25 per kilogramme (kilo) of crude oil produced are incurred. The oil is sold at £0.63 per kilo. There are no purchases of raw materials as the company owns the mineral extraction rights.
 - **Oil refining:** Crude oil is purchased from the extraction company and refined into fine oil with a yield of 75%. Conversion costs of £0.84 per kilo of fine oil are incurred and the fine oil is sold at £2.85 per kilo.
 - **Plastic powder manufacture:** Fine oil is purchased from the refiners and processed into plastic powder with a yield of 95%. This process involves conversion costs of £0.88 per kilo of powder which is sold at £4.42 per kilo.

Value Chain Analysis

Example (2)

- **Component manufacture:** Plastic powder is purchased and manufactured into carpet components with a yield of 93%. The conversion cost is £2.09 per kilo of component which is sold at £7.60 per kilo.
- **Carpet manufacture:** Carpets components are purchased and assembled into carpet with a yield of 95%. The carpet weighs one kilo per square metre. Conversion costs of £3.20 per square metre are incurred and the carpet is sold at £14.00 per square metre.
- **Distribution:** The retailer purchases the carpet for resale without loss of input. Costs of £4.00 per square metre are incurred and the carpet is sold at £20.00 per square metre.
- Prepare an analysis of the industry's value chain to assist the management of the component manufacturing company with their strategic planning.

Value chain illustration, per unit of final product

	Output	Purchase cost	Conversion cost	Total cost	Selling value	Added value	Value conversion
Oil extraction							
Oil refining							
Plastic powder mfg							
Component mfg							
Carpet mfg	1 sq. m.						
Distribution	1 sq. m.						