

bottleneck

an aspect of the transformation process that slows down the overall processing speed or creates a backlog of incompletely processed products

capital-labour substitution

when machinery and technology displace people by doing the work instead

computer-aided design (CAD)

a computerised design tool that allows businesses to create product possibilities from a series of input parameters

computer-aided manufacturing (CAM)

software that controls the manufacturing processes

control

when key performance indicators are assessed against predetermined targets and corrective action is taken if required

critical path analysis
(CPA)

a scheduling method that shows what tasks need to be done, how long they take and what order is necessary to complete those tasks

customer
relationship
management (CRM)

the systems that a
business uses to
maintain customer
contact

customer service

how well a business meets
and exceeds the expectations
of customers in all aspects of
its operations

facilities

the plant (factory or
office) and machinery
used in the operations
processes

fixed position layout

an operational
arrangement in which
employees and equipment
come to the product

Gantt chart

a type of bar chart that shows both the scheduled and completed work over a period of time, used for planning and tracking a project

improvement

the systematic reduction of inefficiencies and wastage, poor work processes and the elimination of bottlenecks

information

the knowledge gained from research, investigation and instruction, which results in an increase in understanding

inputs

the resources used in the transformation (production) process

intermediate goods

goods manufactured and used in further manufacturing or processing

key performance indicators (KPIs)	specific criteria used to measure the efficiency and effectiveness of the performance of the business
lead time	the time it takes for an order to be fulfilled from the moment it is placed
materials	the basic elements used in the production process, consisting of two types: raw materials and intermediate goods
mix flexibility	the variety of products made, or services delivered through the information process
monitoring	the process of measuring actual performance against planned performance

outputs

the end result of business efforts - the good or service that is provided or delivered to the customer

plant layout

the arrangement of equipment, machinery and staff within a facility

process layout

the arrangement of machines such that the machines and equipment is grouped together according to the function they perform

process production

production characterised by high-variety, low-volume jobs

product layout

where the equipment arrangement is based on the sequence of tasks performed in manufacturing a product

product production (mass production)	production characterised by the manufacturing of a high volume of constant quality goods
project production	deals with the layout requirements for large- scale activities such as construction of bridges etc.
raw materials	essential substances in their unprocessed state
robotics	highly specialised technology, capable of complex tasks, programmable for assembly lines etc.
scheduling	the length of time activities take within the operations process

sequencing

the order in which
activities in the
operations process
occur

skills audit

a formal process used to
determine the present level of
skills and any skill shortfalls that
need to be made up through
recruitment or training

task design

classifying job activities in
ways that make it easy for an
employee to successfully
perform and complete the
task

telecommute

to travel to work
electronically, allowing work to
be done via email or internet
from home or another
location

transformation

the conversion of inputs
(resources) into outputs
(goods and services)

transformed
resources

those inputs that are
changed or converted in
the operations process

transforming
resources

those inputs that carry
out the transformation
process

volume

how much of a
product is made

warranty

a promise made by a business
that they will correct any
defects in the goods that they
produce or in the sales that
they deliver

workstations

desk areas for office workers,
usually fitted with a
computer, telephone, storage
and access to a printer