

Model of measuring Capacity

A Capacity model is used to estimate the numbers of products that we can produce in a given factory when we know how many machines we have of each machine type. Another way to use a capacity model is when we want to build a factory and don't know how many machines we need of any machine type.

Productivity Measurement

i) Total Productivity Measure (TPM)

It is based on all the inputs

Total productivity = Total tangible output + Total input

Total tangible output \Rightarrow value of finished goods produced + value of partial units produced + Dividends from securities + Interest + other income.

Total tangible input \Rightarrow Value of (human + material + capital + energy + other inputs)

used. The word tangible here refers to measurable.

2 Partial Productivity Measures (PPM)

Depending upon the individual input partial productivity measures are expressed as

Partial Productivity = Total output $\%$ individual input

Labour Productivity = Total output $\%$ Labour input
(in term of man hours)

Capital Productivity = Total output $\%$ Capital input

Material Productivity = Total output $\%$ Material input

Energy Productivity \Rightarrow Total output $\%$ Energy input

1(a) Production management

Production management are aimed at satisfying the needs of the customers through offering organization product/ services.

The scope of production management can be considered from the point of view of both strategic decision influencing the production system and at the operation level.

- Design of the product.
- Design of the production system.
- Selection of location.
- Plant Buildings
- Layout of plant
- Installation of Machinery.
- Capacity planning.
- Production control.
- Quality Control.

