

MANUFACTURING MODELS

Manufacturing systems can be characterised by a number of factors: the number of resources or machines, their characteristics and configuration, the level of automation, the type of material handling system, etc.

In a manufacturing model, a resource is often referred to as a "machine"; a task to be performed on a machine is often referred to as a "job". In a production process, a job can be a single operation or a set of operations to be performed on several different machines.

At present, we can cite the common use of 5+1 manufacturing models:

Repetitive manufacturing	Discreet manufacture	Shop fabrication
Process manufacturing (continuous)	Process manufacturing (discontinuous)	3D printing



Indicators Operational Performance

According to Verne Harnish(<https://www.growthinstitute.com/es/faculty/verne-harnish/>): "The only way to grow and to know if you have a healthy company is to have the Key Performance Indicators or KPIs at hand".

At shop floor level we need to understand the interactions between indicators in the main plant:

Count of goods/actual production	Availability (%)	Performance Teams (%)
Quality (%)	Overall Equipment Effectiveness (OEE)	Delay on Planning (%)
Lead time	Throughput	Stopped