

A Quick Guide to The Process Model

When running an improvement activity it is vital to understand the process that is being analysed, before being able to improve it. Any process, whether manufacturing or non manufacturing, can be represented using the process model as shown in Figure 1.

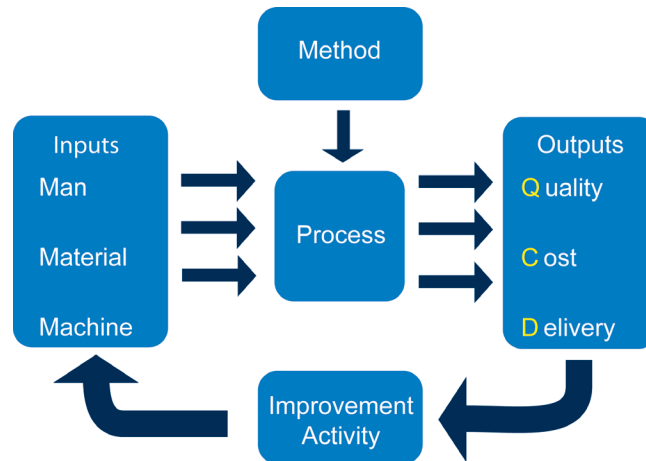


Figure 1: The process model

A process is defined as a set of interrelated activities which transform process inputs into outputs.

To make a process happen specific inputs need to be combined in the correct way to produce the desired output. To control the combination of the inputs some form of method is required, similar to a recipe. The method defines what is done, where, when, how and by whom.

The inputs fall into three categories; man (manpower, labour), material (raw materials, bought out components, information, data), and machine (tools, computers, photocopiers).

The output from any process is a product, which may be a physical item or a service. The customer expects that product to meet certain quality, cost and delivery criteria. If the customer in the chain pays for the product then the cost criteria is replaced with price.

By collecting key data, calculating the actual quality, cost and delivery performance and then comparing it to the required targets, the performance of the process can be ascertained. If performance falls below target, further analysis of the data will prioritise where improvement is required.

The correct improvement tool(s) can then be selected and implemented. Implementation always acts to alter the inputs in some way. It is too late to alter the previous product quality, cost and delivery as it has already been made, the emphasis is to change the inputs so that they can be combined to give the required output next time round. The method would also need to be updated in order to reflect the altered inputs.