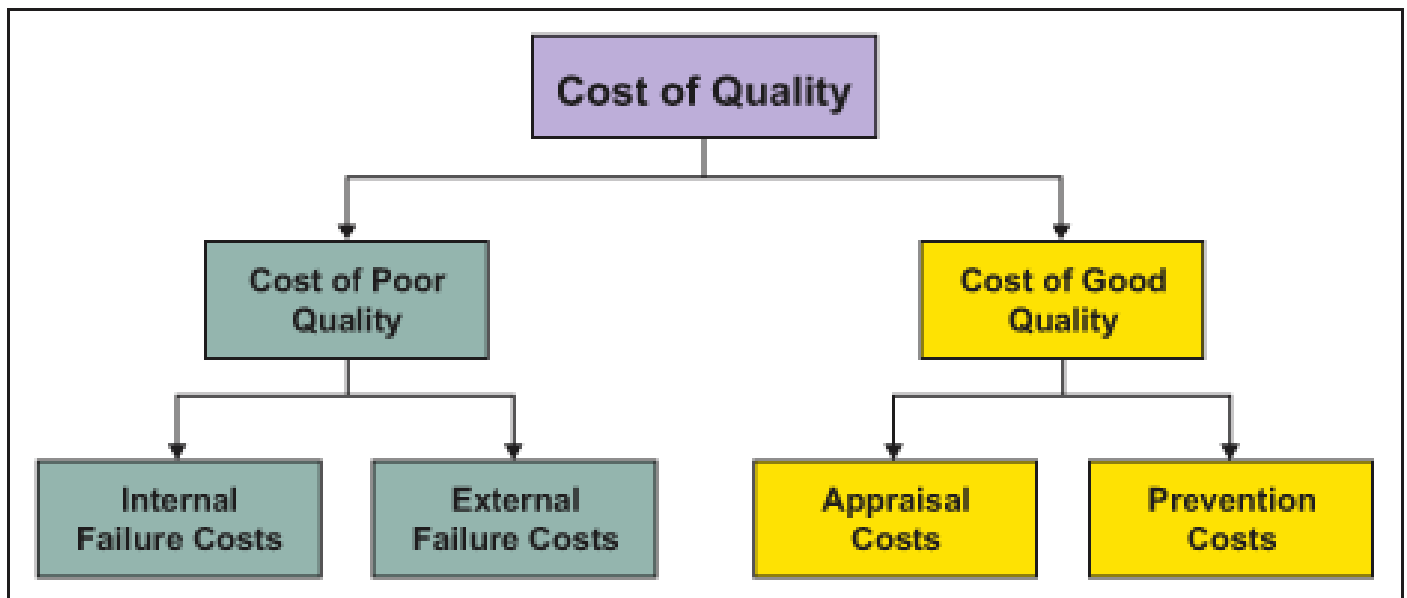


Quality Cost Analysis in Manufacturing

Because the main language of [corporate management] was money, there emerged the concept of studying quality-related costs as a means of communication between the quality staff departments and the company managers.” (Gryna, F. M. “Quality Costs” in Juran, J.M. & Gryna).

Quality costs are the costs associated with preventing, finding, and correcting defective work. These costs are huge, often running at 20% - 40% of sales. Many of these costs can be significantly reduced or completely avoided. One of the key functions of Quality Engineering is the reduction of the total cost of quality associated with a product.

- Presentation of Quality Cost Analysis theory.
 - Introduction to the theory of Quality Cost Analysis.
 - Linking Quality Costs to the seven wastes.
 - Review of Prevention and Appraisal by manufacturing process (including hidden costs).
 - Review of current process and data collection.
- Effective Data collection system:
 - Review which of the current QCA tools are utilised in plant.
 - Determination of which tools, hardware or methodology may be required for effective QCA.
 - Pareto Analysis of data by fault type, process time, and cost.
 - Develop a process to review the current quality costs assigned to prevention and appraisal.



Cost of Poor Quality can be defined as those costs which would disappear if system, process and product were perfect. These costs are reactive, as they are a symptom of a lack of planning or process control.

Cost of Good Quality can be defined as those costs which, when planned, should reduce or eliminate the causes of poor quality. These costs are proactive as they should directly reduce or eliminate the cost of poor quality, and provide information on the process which can lead to improvement.