

FUNDAMENTAL OF INDUSTRIAL MANAGEMENT

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| Unit -1 Concept of Quality | <ul style="list-style-type: none">• Quality: Definition, History, Importance• Introduction to Quality Control. |
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DEFINITION OF QUALITY:

Quality has different connotations to different people at different time. People expect some performance from a product or service. When the performance meets the expectation, people feel they have achieved quality. Higher end car buyers are looking for much more luxury and control than the lower end car buyer whose main requirement could be mobility, negotiability, less initial cost and fuel efficiency. Through the features are different, both cars are of good quality.

Quality is fitness for use or purpose. - Joseph M Juran

Quality is conformance to requirement- Philip B. Crosby

A predictable degree of uniformity and dependability at the low cost and suited – W. Edwards Deming

But Clark has differentiated the definition of Quality in two contexts: product development and manufacturing:

- a) Quality for product Development is “Fitness for Use”
- b) Quality for Manufacturing “Conformance to Specification

In other words, Quality can be understood by the below Formula

$$Q = P/E$$

Where P is Actual Performance and E is Expectation of the Customer

A Futuristic Definition:

"Quality is a state in which value entitlement is realized for the customer and provider in every aspect of the business relationship without adversely affecting the environment and society".

IMPORTANCE OF QUALITY

- Lower costs (less labor, rework, scrap)
- Motivated employees
- Market Share
- Reputation
- International competitiveness
- Revenues generation increased

Attributes of quality

Quality means the product has, preferably, all or most of the undermentioned characteristics as detailed below:

- ◆ It has the right quality.
- ◆ Is safe, reliable, and long lasting.
- ◆ It's economical to the customer to use it till it lasts.
- ◆ It's delivered on time.
- ◆ Its price is right.
- ◆ Its customer support is good, polite, quick and responsive.
- ◆ Its after-sales service is polite and competent with availability of genuine spare-parts and repair cost is affordable.
- ◆ Disposal of product/service presents no problem and is environmentally friendly.
- ◆ 'Buy-back' schemes of used items for new are user-friendly.
- ◆ The total life-cycle cost to the customer (the 'cradle-to-grave' cost) is optimum.
- ◆ Conforms to norms of ethics and does not infringe on any trademark or patent laws and is genuine. Its potential for pollution is within acceptable limits.
- ◆ No unethical practices like underhand dealings, employment of child labour, exploiting the employees/workers are used as business practices.

APPROACHES TO DEFINE QUALITY

Transcendent Approach

- Quality is absolute and universally recognisable.
- It is common notion used by laymen
- There is no subjective judgement and is estimated by looking at the product

Product Based Approach

- Attributes of a particular product in a specific category
- These attributes are accepted as bench of quality by the industry
- Others in the same industry try to produce close to this quality

User Based Approach

- Defined as "Fitness for use"
- Viewed from user's perspective and is dependent on how well does the product meet needs of the consumer.
- Also known as Customer Oriented Approach

Production Based Approach

- An outcome of engineering or operational excellence and is measured in terms of quality of conformance
- The producer has specifications and produces the product as per the specifications

Value Based Approach

- Quality is viewed in context of price
- Quality is satisfactory, if it provides desired performance at an acceptable price
- Customer looks at the total value proposition and not the price alone
- Value = Benefits/ Price

QUALITY CONTROL

Quality Control (QC) - “the operational techniques and activities that are used to fulfill requirements for quality”.

- The purpose of quality control is to uncover defects and have them corrected so that defect-free products will be produced.
- Quality control is limited to looking at products.
- Quality control is testing the final product against product quality standards.
- Quality control is operational techniques that are used to fulfill requirements for product quality.

Quality Control

It is that part of Quality Management focused on fulfilling requirements of the Customers for the quality products.

A Simplest Form of Quality Control is: -

