



# SNS COLLEGE OF TECHNOLOGY

Coimbatore-35

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



## DEPARTMENT OF MECHANICAL ENGINEERING

### 19MEE304 – TOTAL QUALITY MANAGEMENT

#### III YEAR - V SEM

#### UNIT 1 – Introduction

#### TOPIC – Juran Trilogy



# Introduction

The Juran Trilogy:

Three basic processes that are essential for managing to improve quality.

Quality  
Planning



Quality  
Improvement

Quality  
Control

# Quality Planning

It all begins with quality planning.

The purpose of quality is to provide the operating forces with the means of producing products that can meet the customer's needs.

Once planning is completed, the plan is turned over to the operating forces.

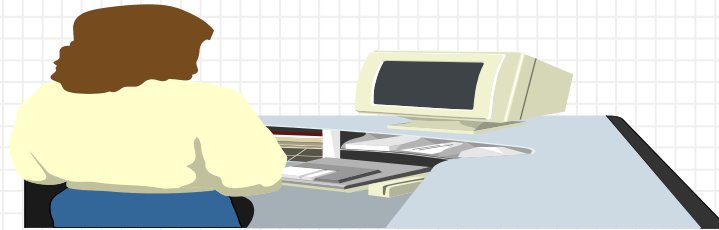
We see that the process is deficient: 20% of the operating force is wasted, as the work must be redone due to quality deficiencies.



# Quality Control

The waste then becomes chronic because of quality deficiencies.

What they do instead is carry out quality control to prevent things from getting worse.



# Quality Control

The waste then becomes chronic because of quality deficiencies.

What they do instead is carry out quality control to prevent things from getting worse.

## Control versus Breakthrough

Breakthrough improvement implies that the process has been studied and that some major improvement has resulted in large, nonrandom improvement to the process.

It is important to understand that control and breakthrough-related activities should occur simultaneously.

The optimal set of improvement activities probably involves some mix continuous improvement and breakthrough improvement activities.

# Quality Improvement

## Project-by-Project Improvement

Juran teaches that improvement in organizations is accomplished on a project-by-project basis “and in no other way.”

The project-by-project approach advocated by Juran is a planning-based approach to quality improvement.



# Quality Improvement

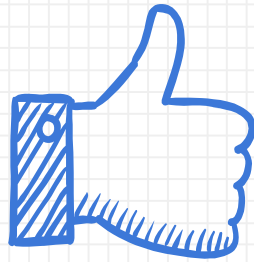
## Pareto Analysis

Joseph Juran identified an economic concept that he applied to quality problems.

The economic concept is called Pareto's law or the 80/20 rule.

Using Pareto's law, we see that the majority of quality problems are caused by relatively few causes.

Juran dichotomizes the population of causes of quality problems as the vital few and the trivial, but useful, many ( see chapter 10).



# THANKS!