

# Quality Management

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## Agenda

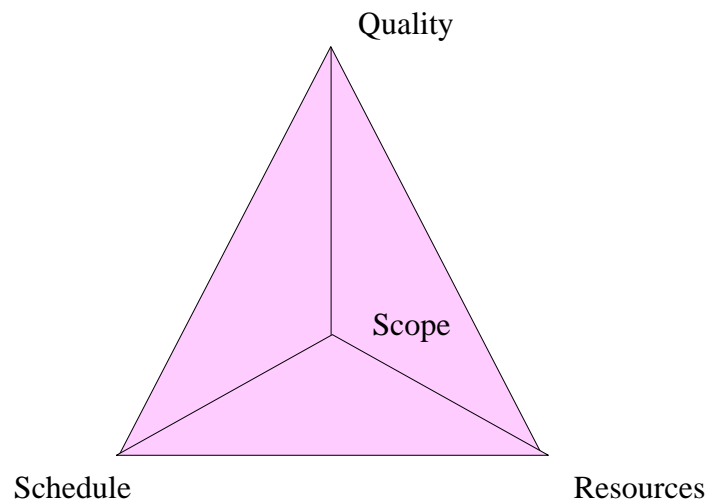
- Quality concepts
- Quality Control Vs Quality Assurance
- Quality Management
- QAI-Recommended Quality practices

# Quality Concepts

## Definition

- **Meeting Requirements**
  - Producer's view
  - Requirements must be defined in a measurable format
- **Fit for use**
  - Customer's view
  - More important definition

## Project variables



## Some facts

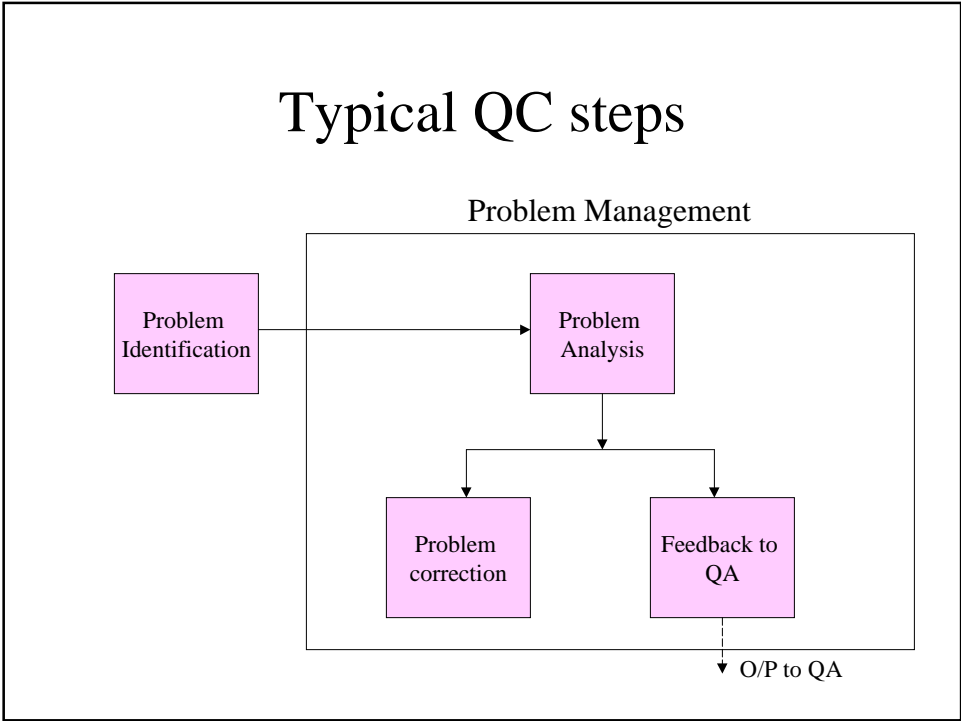
- Quality costs.....And it pays
- Quality is an on-going process
  - Good
  - Best
  - Better
- For Quality to happen, commitment from senior management & everyone's 'buy in' is a must.

# Quality Control Vs Quality Assurance

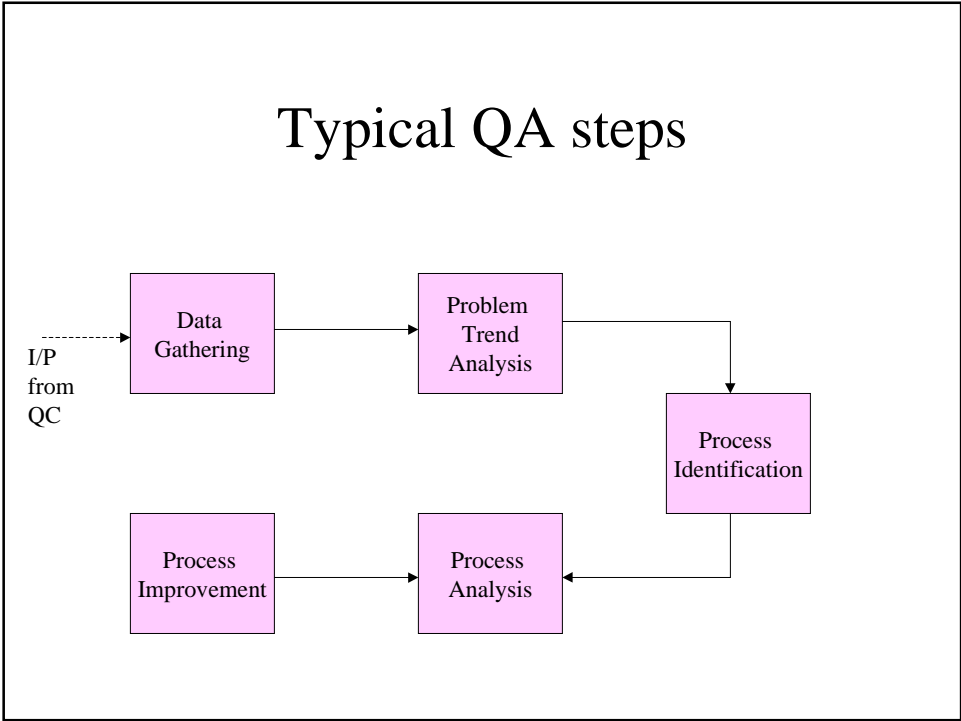
## ISO 9000 Definitions

- Quality Control
  - The operational techniques and activities that are used to fulfill requirements for quality
- Quality Assurance
  - All those planned and systematic activities implemented to provide adequate confidence that an entity will fulfill requirements for quality

# Typical QC steps



# Typical QA steps



## QC Vs QA

### QC

Product  
Reactive  
Line function  
Find defects

### QA

Process  
Proactive  
Staff function  
Prevent defects

## QC Vs QA - Examples

### QC

Walkthrough  
Testing  
Inspection  
Checkpoint review

### QA

Quality Audit  
Defining Process  
Selection of tools  
Training

# Quality Management

## Definitions

- **Quality Policy**
  - The statement of the enterprise's commitment to Quality.
- **Quality Charter**
  - The statement of the responsibilities & authorities of all Quality function performers.
- **Selling Quality**
  - Educating all members in the value of quality & their responsibility for it.

## Controlling Organizational climate

Organizational climate is the employees' attitude towards their organization.

The climate is crucial in creating & maintaining an effective organization.

## Steps to assess Organizational climate

- Look at the organization
- Examine jobs within the organization
- Assess Employee's performance
- Evaluate how the employees feel about their leader
- Create a dialog with the members of the group
- Rate organizational climate (1-5)



## Suggestions on how to change the Organizational climate (if required)

- Develop within the group a vision of what needs to be changed
- Change group procedures
- Develop a plan to accomplish the group mission
- Reassign tasks
- Develop new methods of rewarding people

## Don't re-invent the wheel

- Identify Effective quality practices through visits to other companies
  - Specific information
  - General information

## Visit other companies

- Identify discussion areas
- Identify target companies
- Schedule the visit
- Conduct the visit
- Put new practices into use

## Vision/Goal/Principle/Values

- Vision
  - Is a clear definition of the result you are trying to achieve.
  - Established by Senior management
- Goals
  - Explain how the vision will be achieved.
  - Established by Operational management

## Vision/Goal/Principle/Values<sub>(contd..)</sub>

- Principles
  - Can be defined as procedures
  - Established by Senior/Operational Management
- Values
  - Can be defined as standards
  - Established by Senior Management

## QAI-Recommended Quality practices

- Meet Customer's True Quality Needs
  - Uniqueness of information technology
  - Requirements documents are defect prone
  - Identify customer's true needs and update the requirements document, if needed.
  
- Produce products and services on-time at the lowest possible cost
  - Quality at any cost, delivered at any time, will not satisfy customers

- Create enthusiasm and cooperation between management and staff for quality
  - Everybody's responsibility
  - Everyone must 'buy in' into the quality principles & methods
  
- Make work fun
  - Jobs that are rich in types of job tasks that make work rewarding
  - Continual non-monetary reward program

- Reduce product inspections and testing by building processes that produce defect-free products
- IT policies, standards and procedures must be developed, well documented, continually updated and followed

- Quality must be defined quantitatively
  - Quality is a binary state
  - If Quality is not measured, it can not be controlled
- The goal of IT management and staff must be to produce defect-free products & services

- Non-conformance must be detected as early as possible, recorded and measured
  - economic issue
  - Helps in improving processes
- IT management must accept the responsibility for nonconformance
  - 80% of all defects are directly attributable to ineffective processes

- The customer's view of Quality is the correct view of Quality
  - Customer is always right
  - Cannot survive without customers
- Your customer's problems should be your problems

- Quality work must be rewarded
  - People tend to act in accordance to the rewards they get
- The topics of standards and nonconformance should be discussed at every management meeting

- Everyone should be involved in Quality improvement programs
  - Quality is a line responsibility
- The primary role of supervision is to make subordinates successful
  - Teach subordinates
  - Evaluate performance
  - Assist & support them

- Workers should be involved in establishing their own work standards and procedures
  - No one knows how to do a job better than the person doing that job
- Close cooperation with vendor should exist to ensure a steady supply of the right defect-free products

Thank You  
for  
your time