

Project Quality Management

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Project Quality Management

Definition:

Creating and following policies and procedures in order to ensure that a project meets the defined needs it was intended to meet.

(Completing the project with no deviations from the project requirements.)



Quality Management Processes

- ◆ Quality planning – identifying which quality standards apply and how to satisfy them.



Quality Management Processes (cont'd)

- ◆ Perform quality **assurance** – applying the planned, systematic quality activities to ensure all processes needed to meet requirements are employed.



Quality Management Processes (cont'd)

- ◆ Perform quality **control** – monitoring specific project results to determine whether they comply with applied quality standards, and; identifying ways to eliminate causes of unsatisfactory performance.



Project Quality Management Must:

- ◆ **Manage the project:**
 - Applies to all aspects of the project, regardless of the product
- ◆ **Manage the product:**
 - Product quality measures and techniques are specific to the particular type of product produced by the project



Quality & Grade

◆ Quality

- The degree to which a set of inherent characteristics fulfill requirements
- Stated and implied needs are the inputs to developing project requirements
- Turn stakeholder needs, wants, and expectations into requirements (stakeholder analysis – project scope management)



Quality & Grade (cont'd)

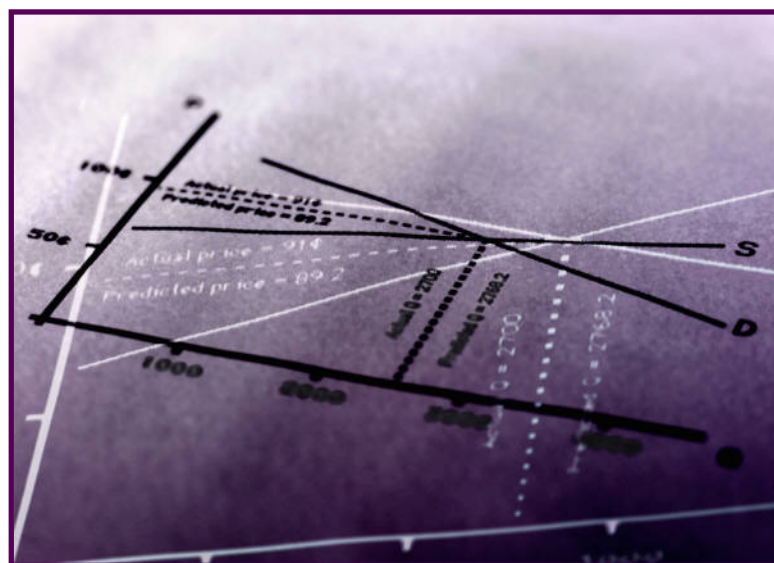
◆ Grade

- A category assigned to products or services having the same functional use by different technical characteristics
(low quality is always a problem, low grade may not be)



Precision & Accuracy

- ◆ Precision – consistency that the value of repeated measurements are clustered with little scatter
- ◆ Accuracy – correctness that the measured value is very close to the true value.



Quality Management Complements Project Management

QM & PM both recognize the importance of four (4) basic principles:

- ◆ Customer satisfaction
- ◆ Prevention over inspection
- ◆ Management responsibility
- ◆ Continuous improvement



Customer Satisfaction

Understanding, evaluating, defining, and managing expectations so that customer requirements are met:

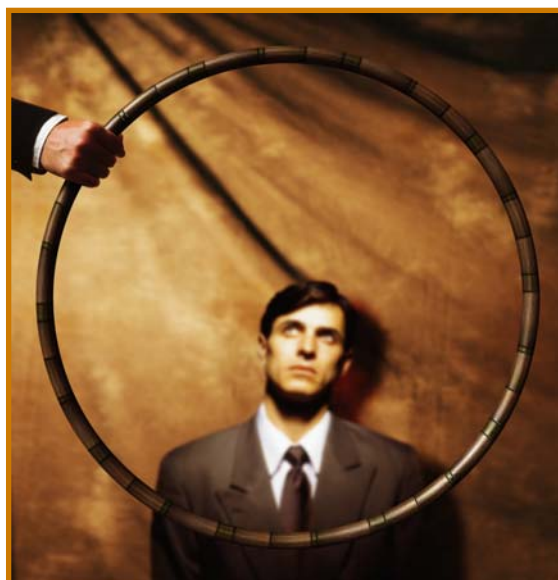
- ◆ Conformance to requirements
- ◆ Fitness for use



Prevention over Inspection

The cost of preventing mistakes is generally much less than the cost of correcting them, as revealed by inspection/assessment

Build quality in vs. Inspect quality in



Management Responsibility

- ◆ Success requires the participation of all members of the team, but management is responsible to provide the resources to succeed.



Continuous Improvement

The “plan-do-check-act” cycle is the basis for quality improvement.

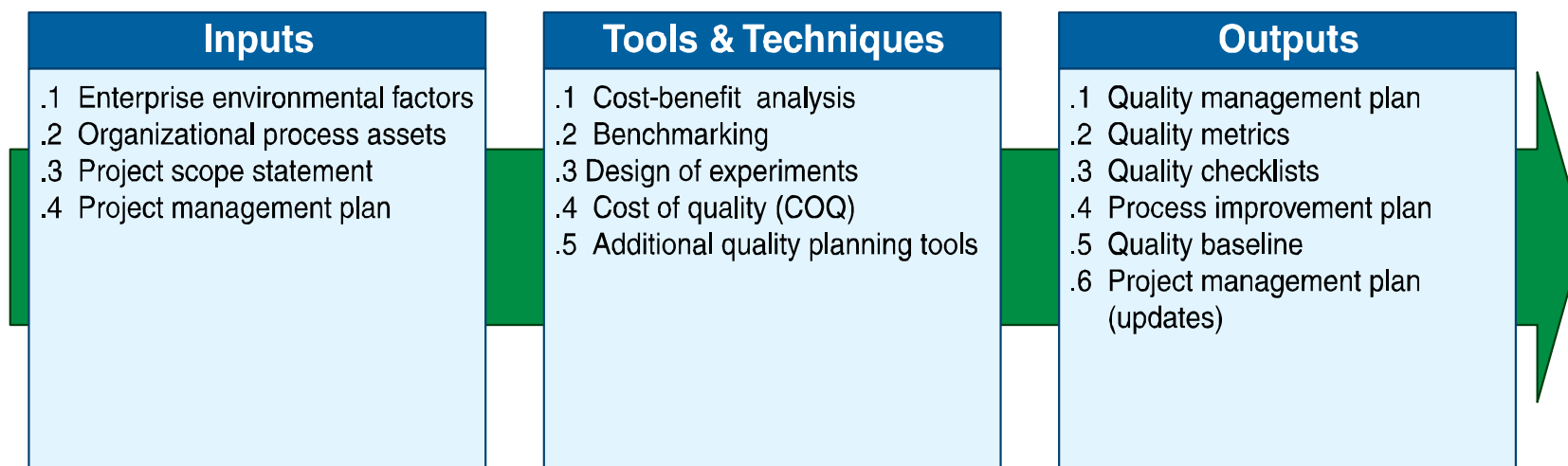
Quality improvement initiatives can improve the quality of project management as well as the quality of the product.



Project Quality Management Overview

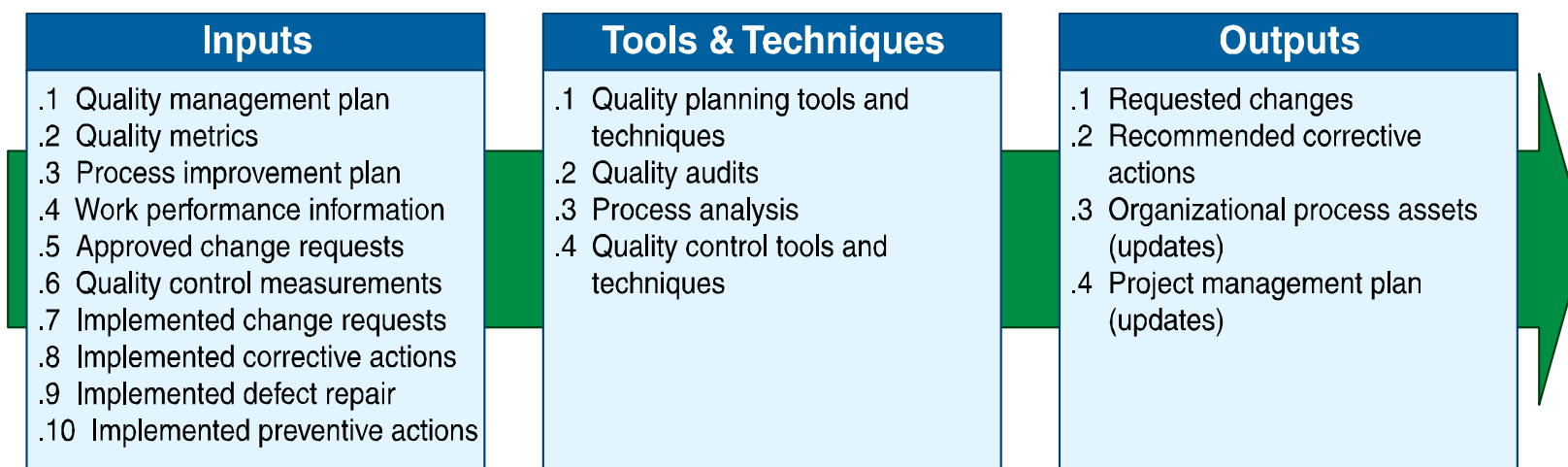


Quality Planning



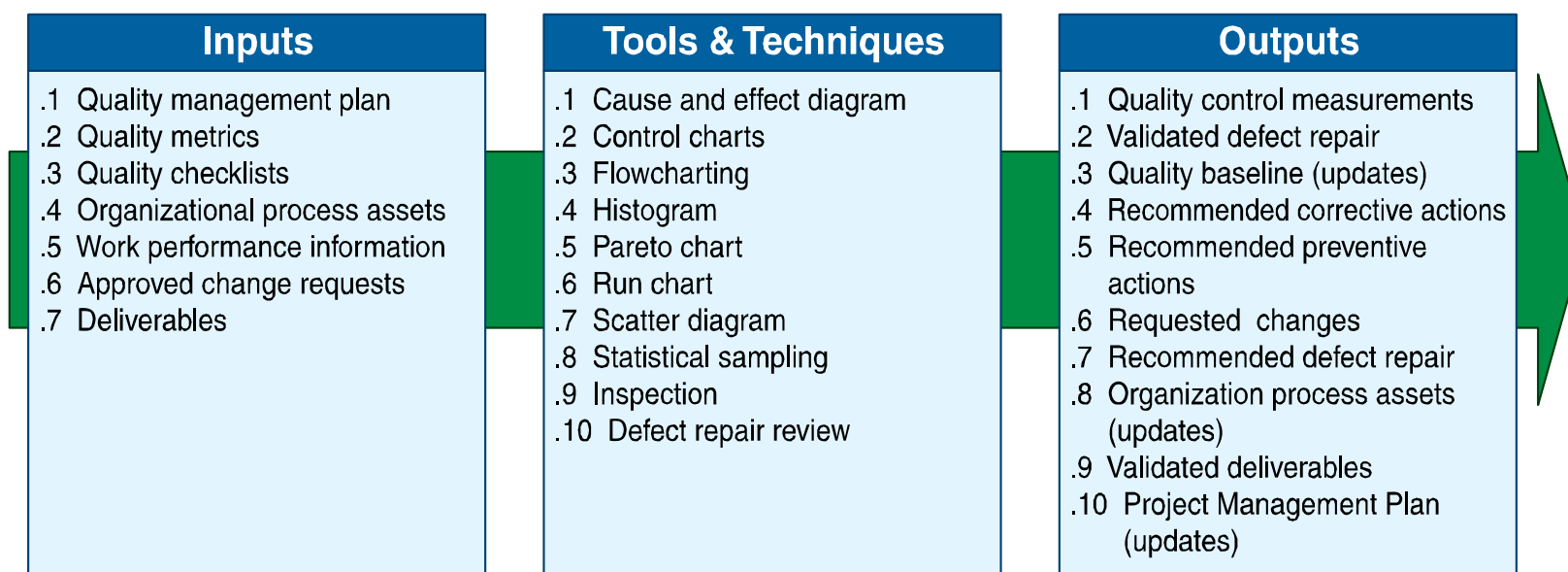
Quality Planning: Inputs, Tools & Techniques, and Outputs

Perform Quality Assurance



Perform Quality Assurance: Inputs, Tools & Techniques, and Outputs

Perform Quality Control



Perform Quality Control: Inputs, Tools & Techniques, and Outputs

Project Quality Management Example

The Utility Operations organization received a new emergency generator. It is the latest technology and will replace its twenty five (25) year old model. It uses computerized controls vs manual in the old system. There has been very little turnover in the utility staff over the last 30 year and most operators are not familiar with computerized applications.

Managements expectations are that the new system will be more efficient, come on line quicker than the old system and last longer.

The team has been asked to write a procedure and develop training to ensure the expectations are met.

Question: How would you apply the three steps of quality management?

- Quality Planning
- Perform Quality Assurance
- Perform Quality Control

Procedure / Training Analysis

