



The Auditor as an Obstacle to Quality

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Capability Maturity Model[®] Integration

This presentation seeks to illustrate how the CMMI can be used as a guideline in planning and implementing process improvements

As a consequence, this presentation contains references and extracts from the CMMI and associated material

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Director of Q:PIT Ltd

SCAMPI Lead Appraiser

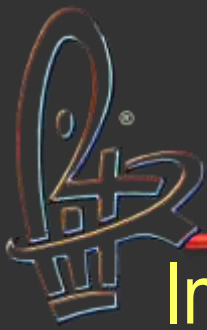
CMMI Instructor

SEI Visiting Scientist

35 years of software engineering

13 years as process improvement consultant

Process Improvement experience in Ireland, England, Netherlands, France, Belgium, Germany, Poland, Spain, Australia, P. R. China, India, Mexico



Q:PIT Ltd

International association of independent process improvement professionals

Q:PIT means...

- Reducing the cost of **Quality** through **Process** improvement, **Information** management and **Teamwork**



Starting with a Story

Many years ago, the company for which I worked had a Quality Assurance person...



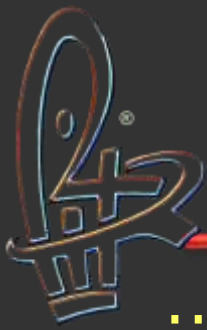
Lessons Learnt

Like so often, the result was a total waste of time

The term Quality Assurance was seen as negative

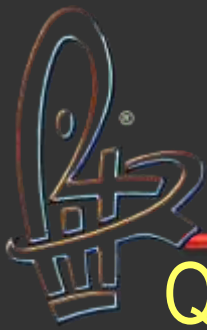
The word “Quality” was equated to “bureaucracy”

QA was seen as a place for people who could not do anything useful



Yes, but...

... does it matter?



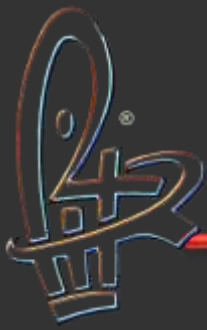
Focus on Quality

Quality is the key to improvement

Improvement (including process improvement) is about making sure that every time you do something, you do it a little bit better

“Doing it better” means improving quality

So, what is quality?

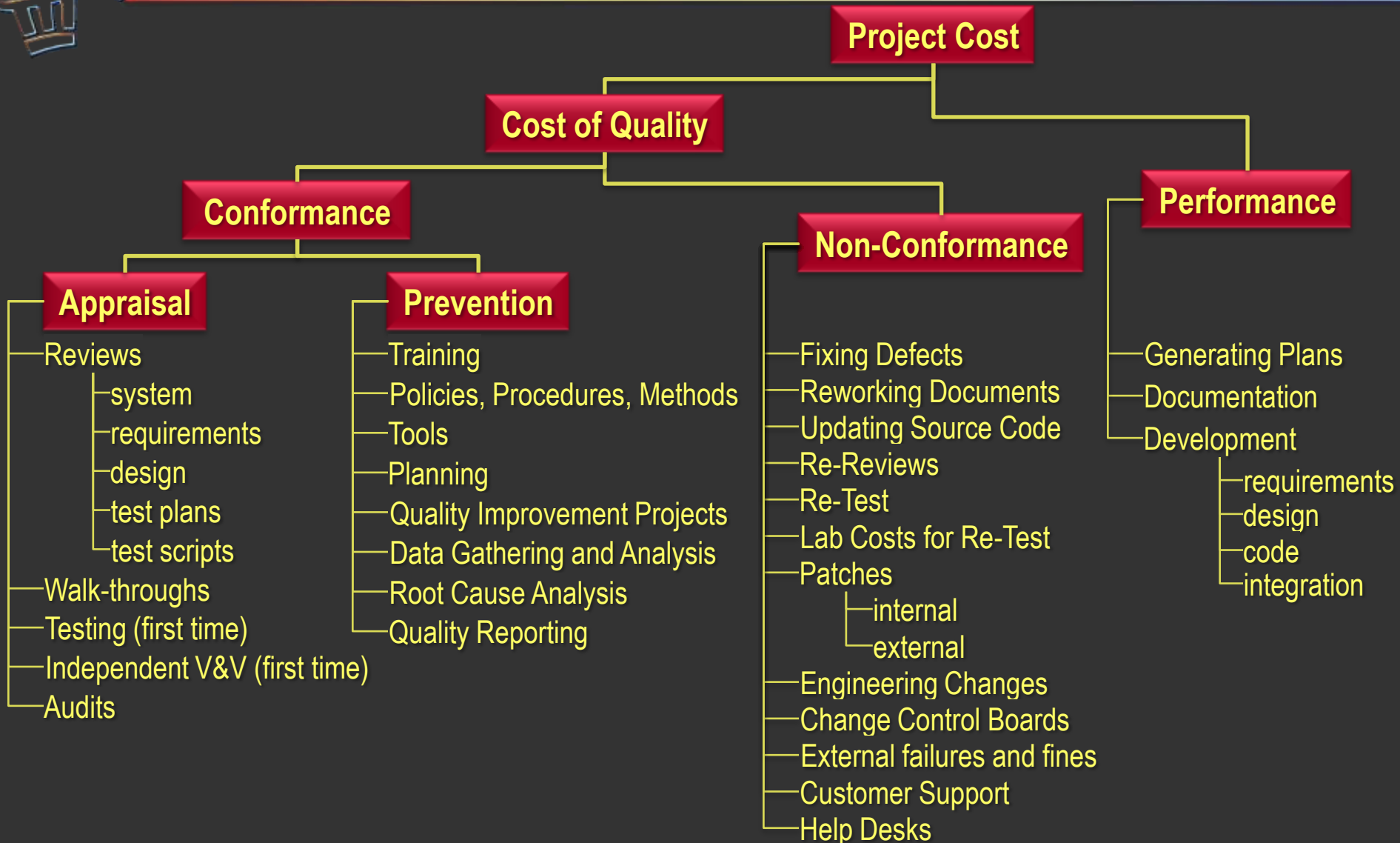


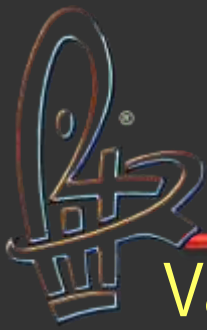
What Is Quality?





Cost of Quality





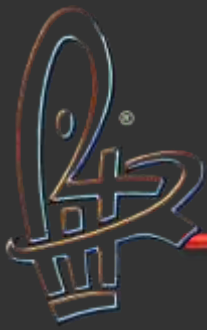
They Key to Improvement

Variety is necessary to
understand what works

Compliance is death

Learning = listening



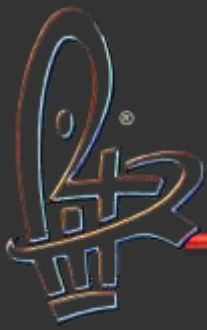


Main reason for failure

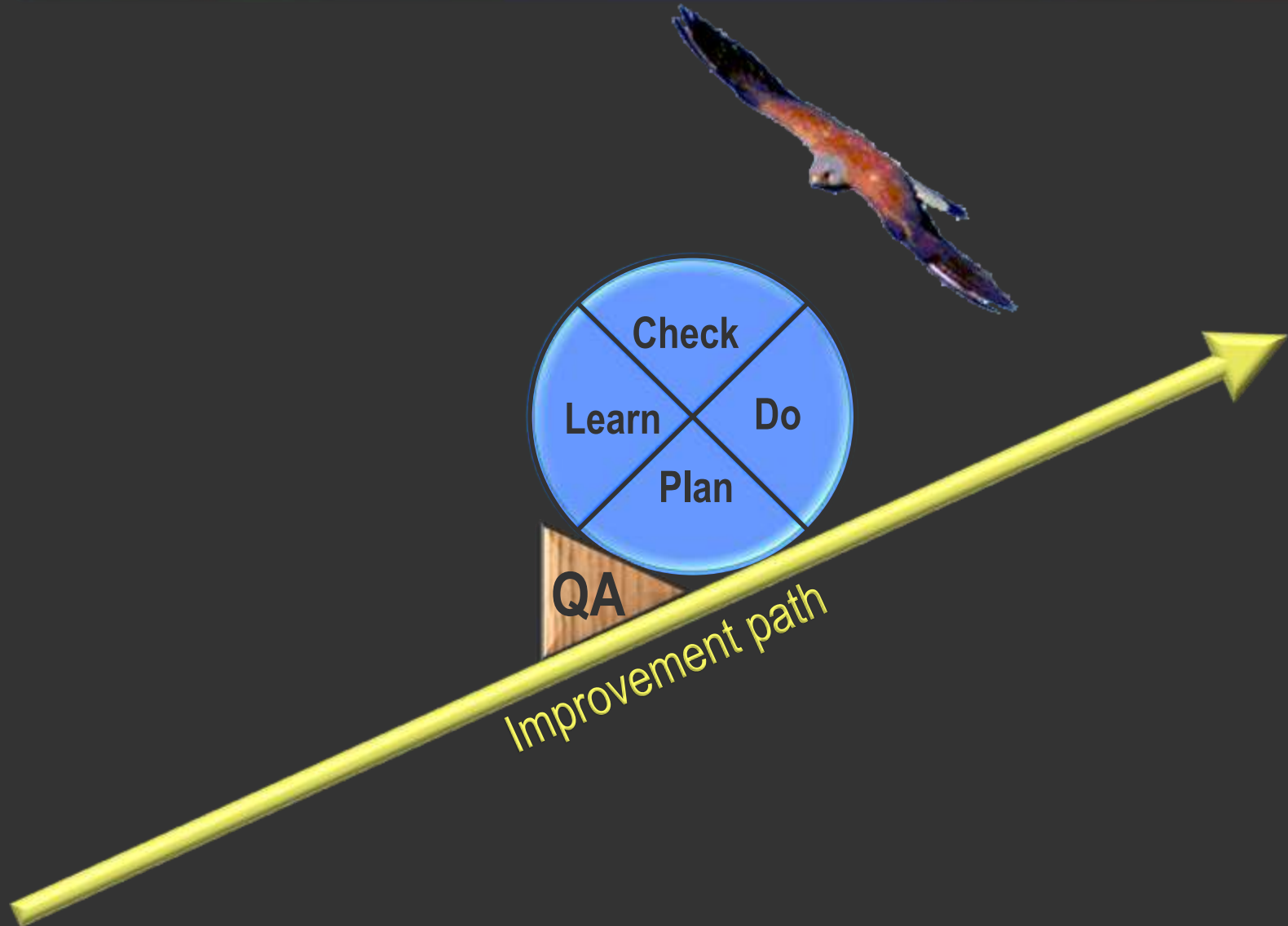


“The Ultimate Solution” is implemented before the problem is understood

Rules are rules



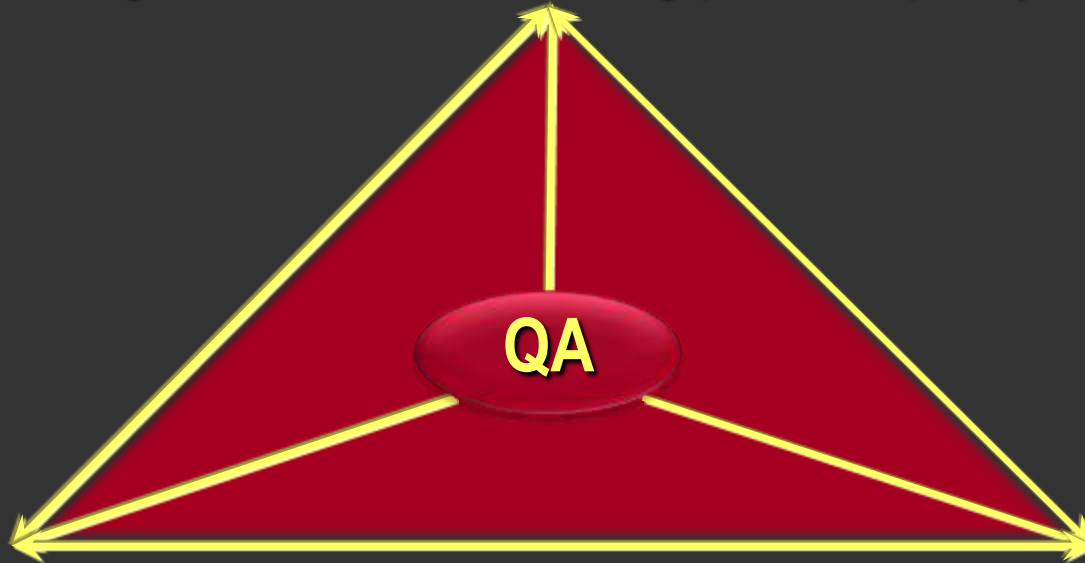
The Role of Quality Assurance





QA: Process Improvement Agent

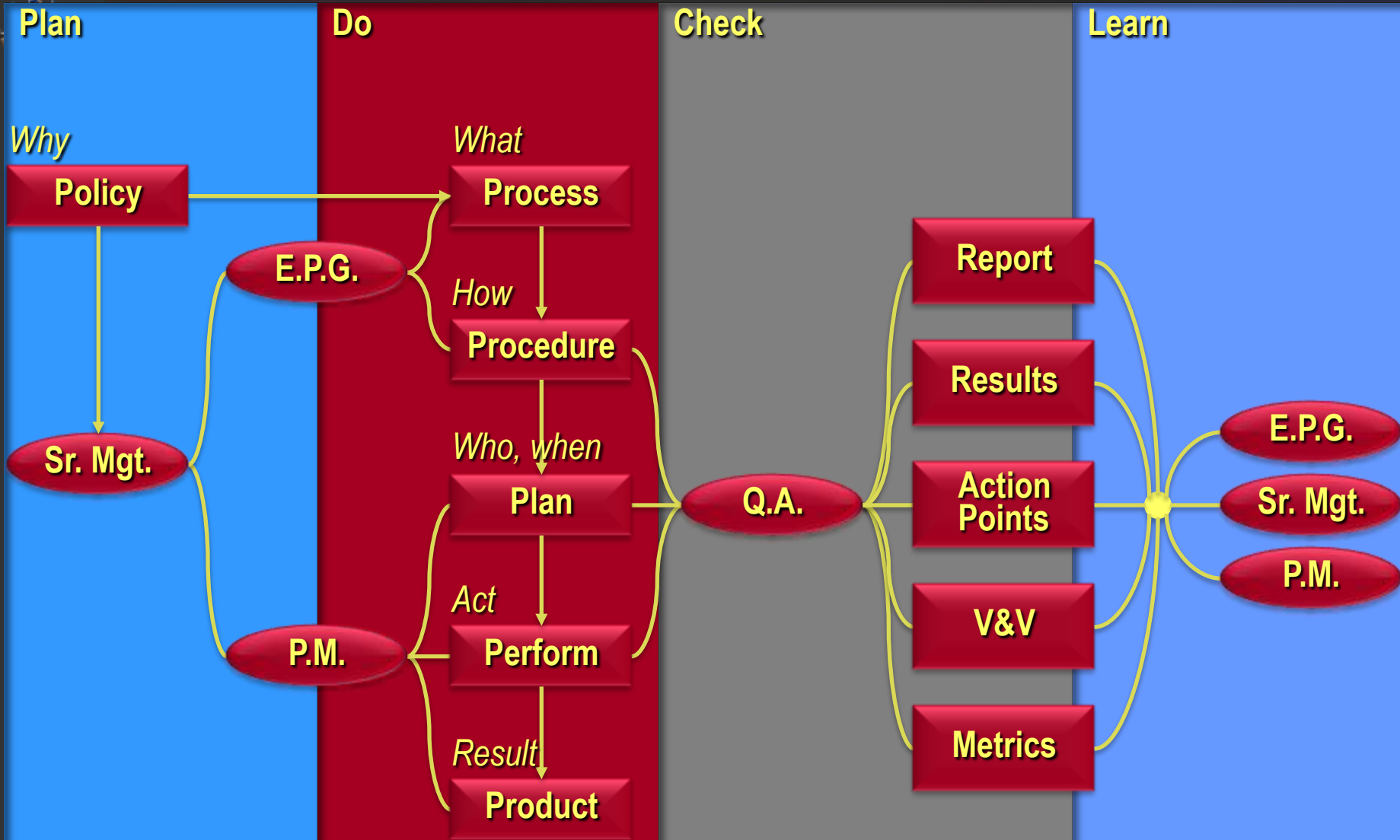
Management: Provide visibility into the effectiveness and efficiency of the processes being used and the resulting product quality

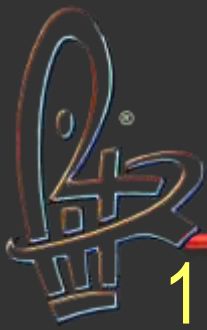


Engineering: Provide feedback to the individual projects on the efficiency and effectiveness of the processes that they are following so they can be improved at the project level

EPG: Provides feedback on the organizational processes they have standardized or facilitated in developing so they can be improved at the organizational level

Roles and Responsibilities





Keys to PI

1. Understand the objectives of what you are being asked to do
2. Apply common sense to the approach: necessary and sufficient
3. Seek for ways of improving this approach: correct and useful



Process and Product Quality Assurance

Purpose

- Provide staff and management with objective insight into processes and associated work products

Goals

- Adherence of the performed process and associated work products and services to applicable process descriptions, standards, and procedures is objectively evaluated
- Non-compliance issues are objectively tracked and communicated, and resolution is ensured

GP 2.9

- Objectively evaluate adherence of the process against its process description, standards, and procedures, and address noncompliance



What gets Missed ^{1/3}

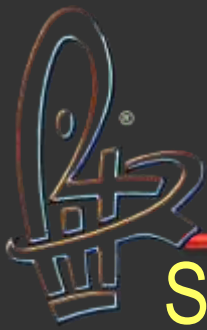
PPQA = Assure the Quality of the Process and related products



What Gets Missed ^{2/3}

Notes

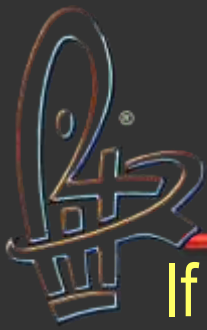
- The practices in the PPQA process area ensure that planned processes are implemented, while the practices in the Verification process area ensure that the specified requirements are satisfied. These two process areas may on occasion address the same work product but from different perspectives
- Quality assurance should begin in the early phases of a project to establish plans, processes, standards, and procedures that will add value to the project and satisfy the requirements of the project and the organizational policies



What Gets Missed ^{3/3}

Sub-practices

- Promote an environment that encourages employee participation in identifying and reporting quality issues
- Establish and maintain clearly stated criteria for the evaluations – The intent of this sub-practice is to provide criteria, *based on business needs*
- Identify lessons learned that could improve processes for future products and services



The Auditor as an Obstacle to Quality

If the auditor uses the checklist approach, the improvement process will be stopped

Quality Assurance must **never** be confused with *Compliance Assurance*





The Auditor's Role

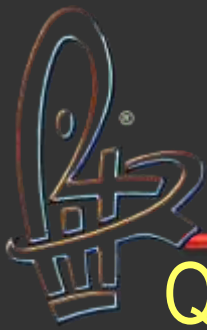
Don't tell people what to do, support them

Enquire:

- Why did you not do this?
- Why did this not work for you?
- Why was this more successful?
- How would you suggest improving this?
- How can we help you?

Communicate

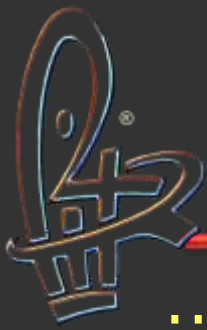
- An other team did this...
- There is a risk in this approach...



Understand Quality

Quality needs to be defined at the beginning of a project or task according to the main stakeholders:

- Organisation
- Management
- Product
- Project
- Process
- People



Quality Assurance

... and Quality Assurance assures that quality is understood and implemented



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