

IBM Global Services

Quality Assurance in IBM Global Services

A Customer Overview

Quality Assurance Methodology*

Objectives of this presentation

- **Position** it relative to...
 - ▶ Project Quality Management
 - ▶ Organizational Quality Assurance

- Describe the **value** and **importance** to our customers

- Provide an **overview**

**This presentation is designed for external use. However, please note that IBM considers its QA Process, QA Procedures, and QA Tools to be proprietary. A patent related to IBM's QA Process has issued; another related patent is pending.*

Questions should be directed to Bob KosterJr/Southbury/IBM@IBMUS

Agenda

- Position the standard industry definitions of "quality"
- Define what is "Quality Assurance" in IBM Global Services
- Provide an overview of IBM Global Services Quality Assurance Methodology
- Describe the value of IBM Global Services Quality Assurance to IBM and to our customers
- Demonstrate just what types of Lessons have been Learned



"Project" Quality Management as defined by PMI*

Standard Industry Definitions

**Project Management Institute in Project Management Body of Knowledge (PMBOK), chapter 8*

- PMI Quality Management includes the processes required to ensure that the project will satisfy the needs for which it was undertaken. It addresses quality from the perspective of both the management of the project and the products and services that are to be produced. It includes.....
 - ▶ **Quality Planning**
 - Identifying which quality standards are relevant to the project and then determining how to satisfy them
 - ▶ **Quality Assurance**
 - Evaluating performance on a regular basis in order to provide confidence that the project will satisfy relevant standards
 - A technique for quality assurance includes a **Quality Audit**. This is "a structured review of other quality management activities. The objective of a quality audit is to identify lessons learned that can improve performance of this project or of other projects within the performing organization."
 - This is a reactive process i.e. audit driven ("after the fact")
 - ▶ **Quality Control**
 - Monitoring specific results to determine if they comply with relevant quality standards and identifying ways to eliminate causes of unsatisfactory performance.

"Project" Quality Management as defined by PMI*

Key Points

*Project
Management
Institute in
Project
Management
Body of
Knowledge
(PMBOK),
chapter 8

Ongoing and continuous improvement is not the focus of Project Management. This is because projects are temporary in nature. Responsibility for continuous improvement, therefore, must rest with the larger "organization" itself.

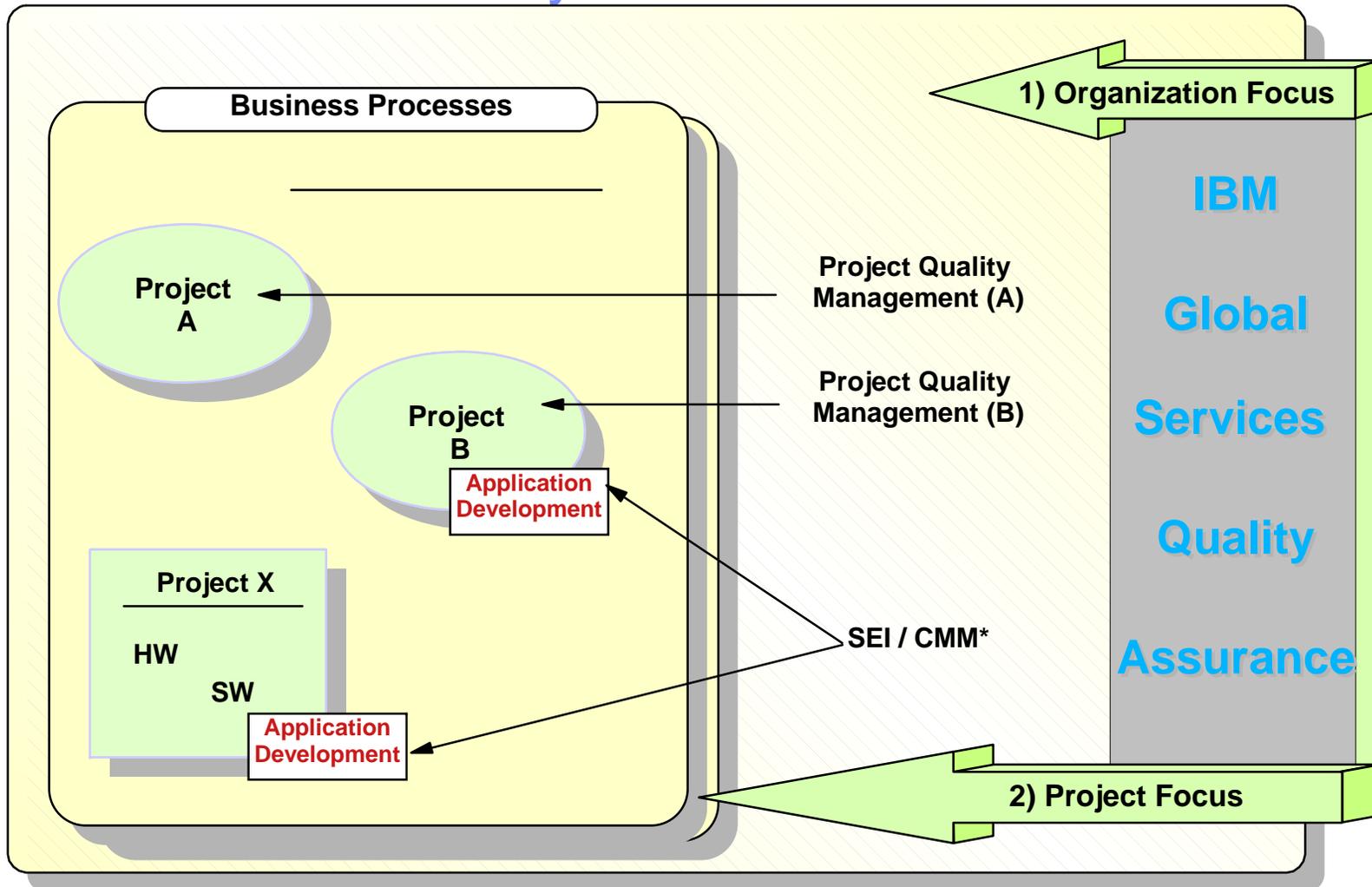
Organizational level" quality improvement initiatives are needed to improve project management process / methods, the business processes, and overall quality of the products or services.

IBM Global Services Quality Assurance

- Includes both the organization focus (continuous process improvement) and the project focus (management of the project and the products and services that are produced). It extends beyond Project Management and individual projects
- Includes business, project, and technical quality reviews
 - ▶ Independent project level reviews ("quality audits") are only a part of the total picture
- Focuses on
 - ▶ Risk Management
 - Our ability to deliver the requested service / solution to the customer
 - ▶ Continuous Improvement
 - Improve methods, processes and quality of services / solutions
- Is integrated with IBM's overall Customer Relationship Management (CRM*) business process
- Is integrated with the Project Management processes prescribed by IBM's Worldwide Project Management Method (WWPMM)
- Is a proactive process (not reactive)



IBM Global Services Quality Assurance



* Software Engineering Institute (SEI) Capability Maturity Model (CMM)* is a standard used by many companies to determine the level of maturity of their software organizations. The QA model has different criteria for obtaining each level but the key elements relative to definition and execution of the process are similar.

Why is IBM Global Services Quality Assurance methodology important to you?

1. Complex projects or "first of a kind" are inherently risky
 - ▶ Projects are "unique undertakings"
 - i.e. different customer, project team, business problem being addressed, environment, dealing with global markets, new world of e-business on-demand
 - ▶ Projects need to use **experience** and **lessons learned** to capitalize on similarities
 - use of common methods, process that can be applied to each unique situation
 - risks can be better contained / mitigated to avoid making the same mistakes
2. Quality Assurance continues throughout life of engagement
 - ▶ Starts when our **solution is first proposed**...
 - Our goal is to assess the business value to you and to IBM and use experience to define a solution to your business problem. Project baselines will be set and agreements enacted so we are able to work together better with a common set of expectations
 - ▶ **Continues through delivery** of the service..
 - Our goal is to deliver within budget, schedule, and a solution meets agreed to expectations/ function



How do we do it?

- Who?
 - ▶ Quality Assurance is performed by an independent professional team
 - An Accreditation Program requires experience in Project Management and general business acumen
 - Many are certified both by PMI and by the IBM Professional Program
 - Delegated by IBM Management
 - "Technical" Quality Assurance is performed by designated Subject Matter Experts
 - ▶ Training programs for all team members
- What?
 - ▶ Standard Quality Assurance process, methods, and tools for IBM Global Services worldwide
- How?
 - ▶ Quality built into our business processes
 - ▶ Closed loop process - lessons learned used to change business process
- When?
 - ▶ Quality Assurance is required for all services contracts
 - ▶ Throughout life of the engagement



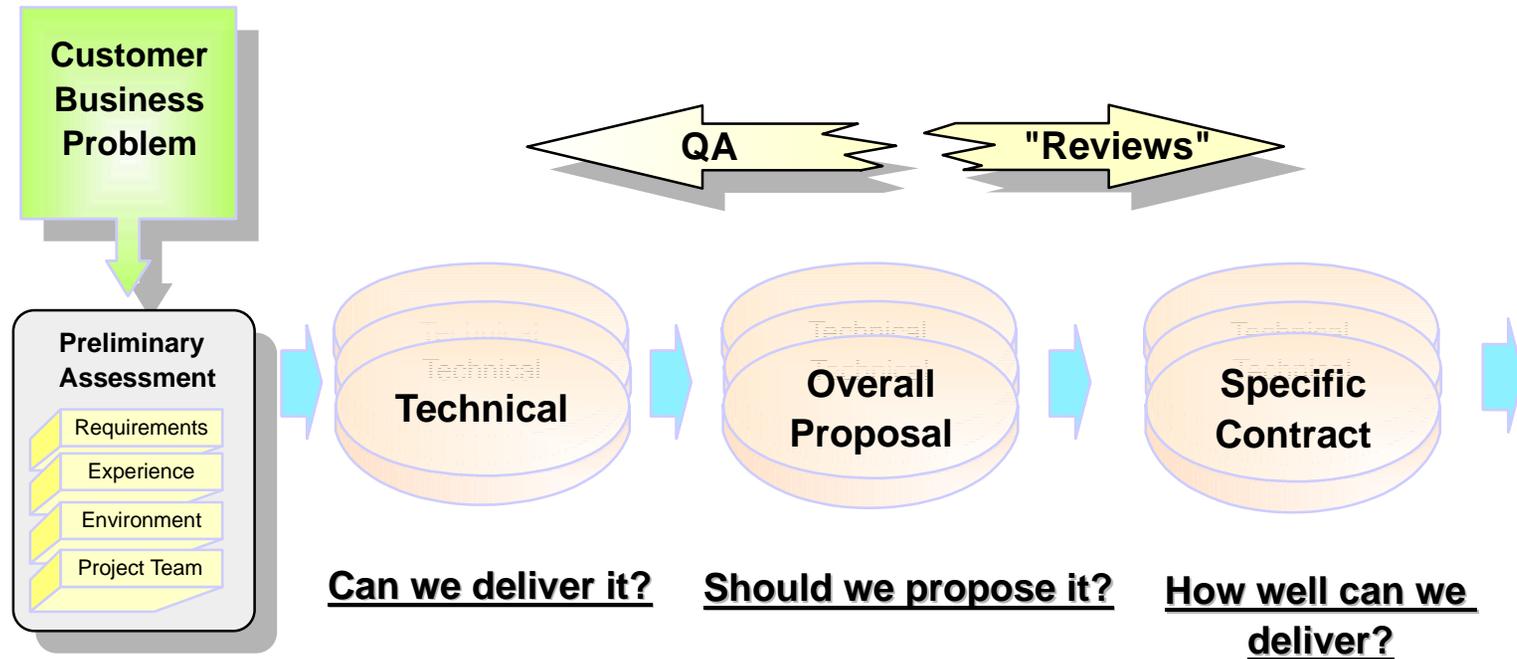
Overview of the Methodology

- Begins with a proposed solution to your business problem
 - ▶ Objective:
 - Assess risks, develop risk plans, use lessons learned to define and refine our solution
 - Deliver a quality proposal that leads to a mutual agreement (contract)
 - ▶ Types of Reviews
 - Technical
 - Overall Proposal
 - Specific Contract
- For complex solutions, reviews are repeated as necessary

Overview of the Methodology (continued)

- During the project / contract execution:
 - ▶ Types of Reviews
 - Project Management Reviews
 - ▶ Overall Objective:
 - Assess risks, review overall project management practices, project status against plan
 - Provide advice and counsel to our project teams
- Reviews are repeated as defined in the Quality Plan and methodologies

IBM Global Services Quality Assurance during Proposal Development



A series of evaluations by experienced and accredited individuals who are independent of the proposal team. Their objective is to assess that which is being proposed is viable, has reasonable schedules, and known risks are contained.

IBM Global Services Quality Assurance during Proposal Development (continued)

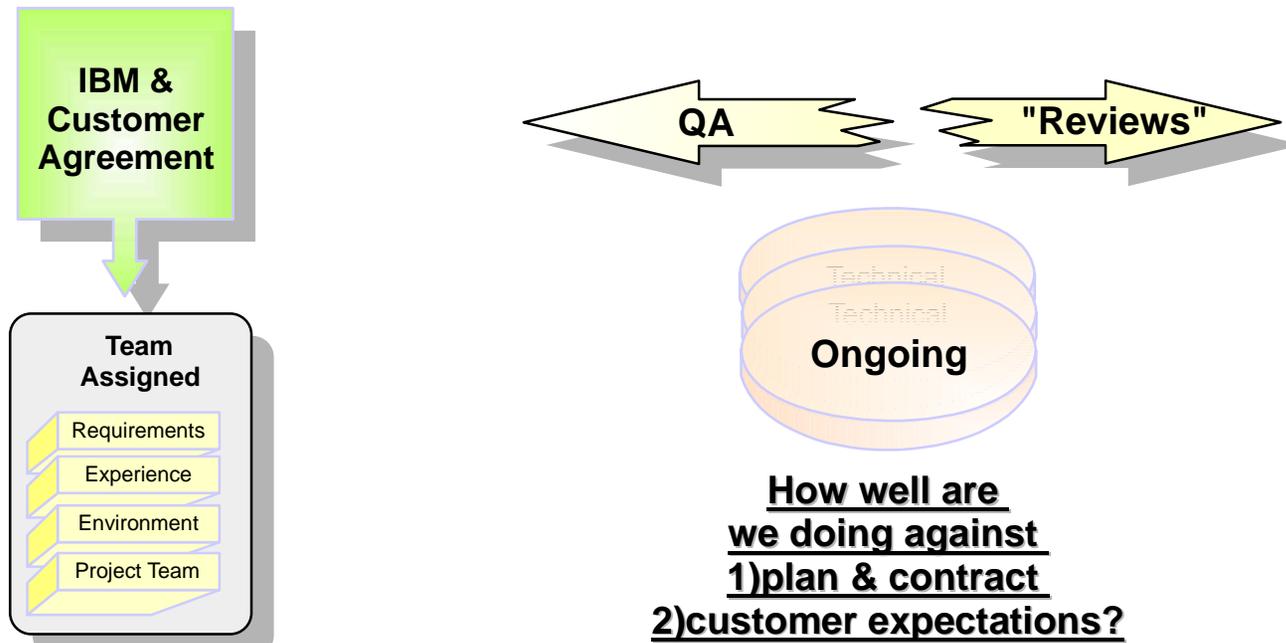
- Technical Review
 - ▶ Provides a technical review of the solution to verify that...
 - what is proposed will fulfill customer requirements with a technically viable solution that IBM is capable of providing
 - the estimates and schedules are complete and reasonable; and
 - the technical risks are identified, assessed, and containment plans are in place.
 - ➔ **Key Question:** Can we deliver the proposed solution?
- Overall Proposal
 - ▶ Provides a review of the solution to verify that...
 - the estimates and schedules are complete and reasonable
 - the cost case is complete, with contingencies identified, and
 - the solution will satisfy both IBM and customer business objectives.
 - if it is international in scope, that any special requirements & risks are identified.
 - ➔ **Key Question:** Should we propose the solution?

IBM Global Services Quality Assurance during Proposal Development (continued)

- Specific Contract
 - ▶ Provide a final review of the solution and the proposal to verify that...
 - what is proposed will fulfill customer requirements with a technically viable solution
 - the final estimates and schedules are complete and reasonable; and
 - the technical and business risks are identified, assessed, and containment plans are in place.
 - ➔ **Key Question:** How well can we deliver the solution?

Throughout all QA reviews, the QA team provides advice and counsel, by using experience & lessons learned to assist proposal team in "refining" the solution / proposal.

Quality Assurance during Project Delivery



A series of evaluations by experienced and accredited individuals who are independent of the proposal team. Their objective is to assess if the services project is provided on-time, within budget, and meeting customer requirements.

Quality Assurance during Project Delivery (continued)

- Project Management Reviews
 - ▶ Project Management Reviews provide an independent ongoing assessment of the status of the project in order to verify that the project is...
 - being managed in accordance with the contractual commitment
 - satisfying the customer's requirements.
- ➔ **Key Question:** How well are we doing against the contract, plans, and customer expectations?

Throughout all reviews, QA team is using their experience to provide advice and counsel to the project team and to make recommendations to address issues / risks.

IBM Global Services QA supports Total Quality Management

- Lessons learned are used to:
 - ▶ Improve our business process
 - ▶ Enhance the QA methodology
- A defined measurement system..
 - ▶ Assesses commitment and level of deployment
 - ▶ Relates itself to IBM Business measurements
 - Customer Satisfaction
 - Profitability

**All of this serves to tell us how well we are doing,
which in turn...improves our ability to deliver successful
solutions to our customers**

Summary

- Quality Assurance viewed as Value Add not an "Audit "
 - ▶ Provide advice and counsel to our teams on mitigating / containing risks or dealing with issues and fixing problem
 - ▶ Using lessons learned to improve on each project/solution we deliver
 - ▶ Using lessons learned to improve our own business process
- Our goal:
 - ▶ Overall Risk Management - "informed risks"
 - ▶ Meet customer expectations (deliver on our commitments to you)
 - ▶ Solutions have mutual business value to IBM and Customer (win-win)

