

Quality Management and the Project Manager

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Quality Management

- What is Quality & Quality Management
- Application to software projects
- Q & A

What is “Quality”?

- Defined by the project client or sponsor
 - Not the PM or the project team
- Meeting/exceeding the customer’s expectations...cost, schedule, product
- What does Quality mean to you??????
- Bottom line: We focus on quality in every project we manage, we just may not realize it.....

Quality Management

PMBOK Definition

“**Processes** and **activities** (required) so that the project will satisfy the needs for which it was undertaken” (PMBOK– Fourth Edition)

Three components:

- Quality Planning
- Quality Assurance
- Quality Control

Bottom line: PMs are responsible for scope, cost, communications, risk, and time management. Quality management is also our responsibility.

Quality Management

Quality Planning

- Identifying which quality standards are relevant to the project and how they will be complied with
 - Should address both management of the project and project deliverables (products)
 - Purpose: defect prevention, adherence to standards/procedures, and to identify effective correction action
- Usually documented in a Quality Management Plan
 - Inputs: policy, standards, regulations, project scope (wbs, schedule, budget, risk)
 - Addresses: quality assurance, control, R&R, tools, problem reporting
 - Format: formal or informal, detailed or high level (depends on the project)
- Other documentation produced when doing quality management planning:
 - Checklists
 - Metrics
 - Process/Product improvement plan
- Who is responsible to do all this???? (you get one guess)

Quality Management

Quality Assurance

- Focuses on adherence to the processes, standards, and procedures being used to:
 - Deliver the project
 - Produce the deliverables
- Typically consists of audits to ensure compliance with standards/procedures and to document best practices, shortcomings, and lessons learned
 - Development/quality plans
 - Design reviews/code inspections
 - Software specs and requirements traceability
 - Test plans & results
 - Configuration management plans
 - Project reviews
- Usually accomplished by an organization outside the project– QA function does not report to the PM

Quality Management

Quality Control

- Focuses on the quality of the products being developed and project management results
- Conducted throughout the life of the project
 - QC is a PM responsibility
 - Executed by project team members
- Examples of Quality Control activities:
 - Design or peer reviews
 - Code inspections
 - Testing
 - Readiness assessments
 - Changes/waivers
 - Deliverable approvals/signoffs
 - Cost/Schedule performance (earned value) analysis

Quality Management

Other Thoughts

- All projects should address quality management, but help your PMs by building it into your project management methodology
 - Activities such as design reviews, code inspections, testing, project reviews, etc
 - Test planning guidance (integration, user acceptance, security, performance, etc)
 - Change management procedures
- Why a QM plan is important (especially for larger projects)
 - Communicates the quality approach to the project team
 - Formalizes/resources the QM effort
- QM plan should be developed by the PM with input from those who will execute the activities. But remember:
 - QA is not the responsibility of the PM
 - QC is the responsibility of the PM
- Important to:
 - Identify QM activities in the project schedule
 - Establish entry and exit criteria for QM activities
 - Track results of QM activities

Quality Management

Questions????