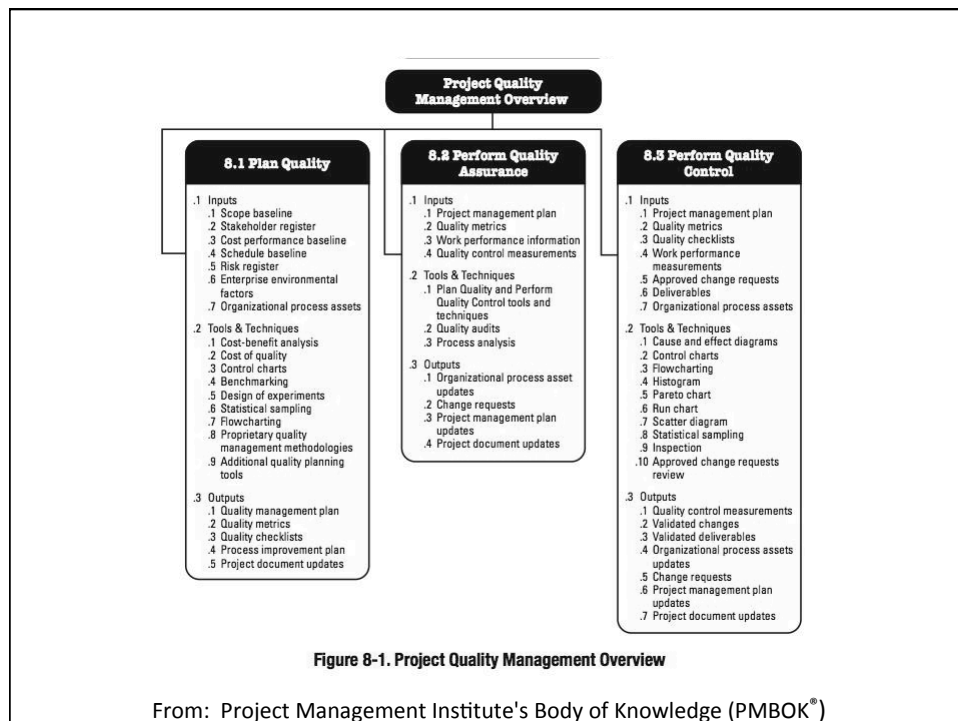# Quality Management Planning

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What is a Quality Management Plan?
Why Should You Care?

- The Project Management Institute's Body of Knowledge (PMBOK®) calls for a Quality Management Plan as part of the Competency Maturity Model Level 3. It describes the process framework (e.g., Agile or Lean) for your project and specifies the methodologies, plans and control activities associated with the approach chosen. Be proactive and anticipate your PM's need for such a document. At least be party to its creation, refinement and implementation. Spell out all standards, regulations and laws that may affect your quality efforts. Learn how Quality Management fits in with complementary parts of the PMBOK, such as Configuration Management, Risk Management and Communication Management. Use this plan to get buy-in from management for the approach you wish to use. Act sooner, rather than later or risk having your hands tied by the time your project gets under way.

Quality in the PMBOK®

- Quality Processes
  - Quality Planning
  - Quality Assurance
  - Quality Control
- Other PM Processes that are tangential to Quality
  - Change Management
  - Risk Management
  - Requirements Management
  - Configuration Management
  - Release Management
  - Vendor Management

Figure 8-1. Project Quality Management Overview

From: Project Management Institute's Body of Knowledge (PMBOK®)

Quality Planning

- Quality Definition
- Quality Scope
- Customer Focus
- Responsibilities
- Planning and Measurement
- Design Control??
- Quality Audits
- Document and Record Management
- Resource Management
- Quality Process Control
- Quality System Improvement
- External Certification (ISO 9001, CMMI, Six Sigma, etc.)

Laws and Regulations

- HIPAA - For health-related demographic information
- FERPA - Privacy for demographic information
- Data Retention (GL 504) - How long to preserve data
- OSHA - Occupational Safety and Health
- Accessibility - can those with disabilities use your product?

Quality Frameworks

- Unified Process
- CMMI - Capability Maturity Model International
- Agile
  - Scrum Methodology
  - Xtreme Programming Methodology
  - Test-Driven Development
- Lean Approaches
  - Kaizen / Kanban
  - Six Sigma (DMAIC)
  - Quality Function Deployment
- Total Quality Management

Standards

- IEEE Software Engineering Process, etc.

- Military Standards

- FAA Standards

- Accessibility Standards

- Useability Standards

- Coding Standards

Quality Assurance

- Quality Audits
- Process Analysis – using the tools mentioned in Quality Planning
- Cause and Effect Analysis
- Inspection

Quality Control

- Peer Reviews
- Quality Audits- In-Process Project Reviews
- Configuration Integrity
- Regulatory and Legal Compliance
- Standards Compliance
- Contractual Obligations
- Change Control

Laws, Policies, Directives:

- http://www.malegislature.gov/Laws/GeneralLaws/PartI/TitleXV/Chapter93H/Section3

- MA Security Policies and Standards:
  http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/

- MA ID theft/ EO 504: http://www.mass.gov/ocabr/docs/idtheft/eo504.pdf

- MA ITD Messaging Security Policy:
  http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/
  electronic-messaging-policy.html

- MA Accessibility Policy:
  http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/it-policies-standards-and-procedures/
  ent-pols-and-stnds/accessibility-standards/

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- MA Exec Order 412 re: privacy of data: http://www.lawlib.state.ma.us/source/mass/eo/eotext/EO412.txt

- MA Public Records Law guide: http://www.sec.state.ma.us/pre/prepdf/guide.pdf

- Education Laws (MA): http://www.doe.mass.edu/lawsregs/603cmr23.html

- MA FIPA: http://www.mass.gov/ago/government-resources/ags-regulations/940-cmr-1100.html

- FERPA:
  http://www.gpo.gov/fdsys/pkg/USCODE-2009-title20/pdf/USCODE-2009-title20-chap31-subchapIII-part4-sec1232g.pdf

Organizational Standards and Templates:

- EOE Business Processes (contractor/work orders)

- EOE Procurement Policies

- EOE Unified Process Overview and Templates

- EOE Technical Standards for External Vendors

- EOE Business Analysis Standards

- EOE Quality Assurance Standards and Templates

Guidelines, References

- EOE Project Manager Training
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- EOE Software Quality Assurance Weekly Metrics
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- Build Security In Federal site: https://buildsecurityin.us-cert.gov/bsi/home.html
-
- Mitre Top 25 Security Issues: http://cwe.mitre.org/top25/#Listing
-
- NIST Quality Portal: http://www.nist.gov/quality-portal.cfm
-
- NIST Quality Stds: http://www.nist.gov/director/quality_standards.cfm
-
- Federal Office of Civil Rights: http://uwctds.washington.edu/ocr_slides/index.htm

- Project Management Institute: http://www.pmi.org