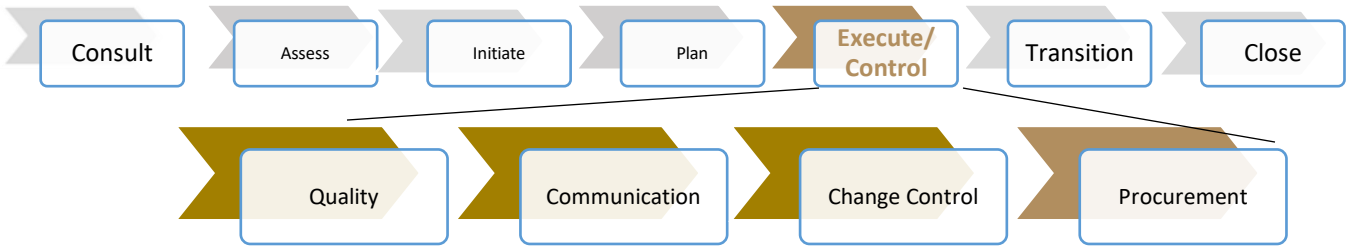
PM Methodology Overview – Execute/Control Phase



Goal	• **Assure quality is achieved through successful testing to the requirements**	• **Ensure information is distributed to appropriate stakeholders through the designated avenues** • **Manage stakeholder expectations** • **Transfer knowledge and develop team** • **Clear definition of roles and responsibilities for support and maintenance of system after project close.**	• **An agreeable process for managing change to any part of the project, for example scope, schedule, resources, etc. Anything that impacts the original project as described in the Charter.** • **Clear understanding of how to process any changes to requirements, design and development after sign off has been received on requirement.**	• **Establish a plan for contracting** • **Determine source selection criteria** • **Procure sources**
Key End of Phase Deliverable	• **Test Plan** • **Requirements Traceability Matrix**	• **Communication Plan** • **Training Plan** • **Post Project Roles & Responsibilities**	• **Change Management Plan** • **Requirements Management Plan**	• **Source Contracts**

Phase Overview

Execute:

Executing consists of processes used to complete work defined in the project plan to accomplish the project's requirements. Execution process involves coordinating people and resources, as well as integrating and performing the activities of the project in accordance with the project management plan. The deliverables are produced as outputs from the processes performed as defined in the project management plan and other frameworks that might be applicable to the type of project at hand.

Executing process includes:

- Direct and manage project execution

- Quality assurance of deliverables
- Acquire, develop and manage project team
- Distribute information
- Manage stakeholder expectations
- Conduct procurement
- Test deliverables against requirements and initial design.

Quality:

Quality control describes the direct use of testing to measure the achievement of specified requirements. Quality is not just simply testing. It is taking it to the next level of measuring the success or failure of testing. It is setting limits that say, in effect, if this particular part is broken, then whatever is tested fails. The test plan will drive how you test and will indicate the quality factors for measuring success. Of course, the higher the risk in the project, the more rigor is put into quality management.

A *test plan*, that should have been created in the Assess phase, is simply a high-level summary of the areas (functionality, elements, regions, etc.) you will test, how frequently you will test them, and where in the development or publication process you will test them. A test plan also needs an estimate of the duration of testing, and statement of any required resources.

A *Requirements Traceability Matrix* a document that matches high level requirements that define the scope of the project or system to detailed requirements and matches those detailed requirements to the test cases. It ensures all requirements are being tested and provides the ability to measure success of testing. It is important that this document be adjusted any time there is a scope change that causes additional or changed requirements.

Monitor & Control:

Monitoring and controlling consists of those processes performed to observe project execution so that potential problems can be identified in a timely manner and corrective action can be taken, when necessary, to control the execution of the project. The key benefit is that project performance is observed and measured regularly to identify variances from the project management plan.

Monitoring and controlling includes:

- Measuring the ongoing project activities ("where are we")
- Monitoring the project variables (cost, effort, scope, etc.) against the project management plan and the project performance baseline (where we should be)
- Identify corrective actions to address issues and risks properly (How can we get on track again)
- Influencing the factors that could circumvent integrated change control so only approved changes are implemented.

In multi-phased projects, the monitoring and control process also provides feedback between project phases, in order to implement corrective or preventive actions to bring the project into compliance with the project management plan.

Project maintenance is an ongoing process, and includes:

- Continuing support of end-users
- Correction of errors
- Updates in deliverables where necessary

Change Control:

Over the course of any project, the work scope may change. Change is normal and expected part of the process. Changes can be the result of necessary design modifications, differing site conditions, material availability, impacts from third parties, etc.

When changes are introduced to the project, the viability of the project has to be re-assessed. It is important not to lose sight of the initial goals and targets of the projects. When the changes accumulate, the forecasted result may not justify the original proposed investment of the project.

Project Controlling:

Project control is the element of the project that keeps it on-track and within budget. Project control begins early in the project with planning and ends late in the project with post-implementation review, having a thorough involvement of each step in the process. Projects may be audited or reviewed while the project is in progress. If project control is not implemented correctly, the cost to the business should be clarified in terms of errors and fixes. Control systems are needed for cost, risk, quality, communication, time, change, procurement, and human resources.