

9 Knowledge Areas (triple constraints) PM's Key to success!

Communications (90%), Human Resources, Risk, Integration, **Scope**, **Time**, **Cost**, **Quality**, Procurement

- 1) Initiating - Highest risk!
- 2) Planning - Most effort or work for PM
- 3) Executing - Most of budget spent!
- 4) Monitor/Controlling – Most time communicating
- 5) Closing - Lowest risk!

Major steps in a project (life cycle):

(documents in **bold**)

1) Initiating (Pre-project setup)

a. Identify project

- **project selection committee** decision model

Benefit Measurement Methods

Cost-benefit analysis, Scoring model, Payback period

Economic model

Discounted cash flow, Net present value, Internal rate of return

Constrained-optimization models

b. Validate project

i. **Business case document**

1. justification (a must!)
2. alignment to strategic plan (a must!)
3. May include high-level estimated budgets and timelines but does not always need a feasibility study.

ii. identify and analyzing stakeholders (done in 3 areas) ✓

c. Write **project charter** (and sign-off)

High-level plan

Business need

Project Justification

i. **High-level requirements (or also known as product description) document**

- Charter for the project must be prepared

Outlining objectives

Project description

Project goals and objectives
Problem statement
Key project deliverables
High-level milestones
High-level cost estimates
High-level assumptions
High-level constraints
High-level risks
General project approach

High-Level REquirements

Product Description

Strategic Value
Timing
Functional Requirements
Business Requirements
Technical Requirements
performance criteria
Historical Data

Planning

Name of the project manager and their authority level
Name of the sponsor
Other Content

Stakeholders ✓

- (signature) Obtain approval for project charter

2) Planning (project plan)

- a. Kick-off meeting (can be anytime in planning or beginning of execution or both)
- b. Cost baseline

1. Scope Planning and Scope-management plan

- A. **scope baseline** (only updated after change)
 - ii. **Scope statement (document)**
 - iii. **Work breakdown structure (WBS DICTIONARY)**
- B. change request process
- C. deliverable verification

2. Project schedule

- a. **Schedule baseline**
 - i. Define activities by breaking down WBS further to help determine times and dates
 - ii. Activity sequencing and network diagram
 - iii. Activity duration estimating
 - iv. Schedule development
 - v. Sign-off by stakeholders and functional managers who are supplying resources to ensure commitment

3. Communications Planning

i. **Communications plan**

- identifying stakeholders... 

ii. **Resource requirements document** = tells required resources for each work package in WBS

iii. **Resource pool description** = list of all the job titles within your company.

iv. **Responsibility assignment matrix (RAM and/or RACI)**

e. Human Resources Planning

- i. Organizational planning
- ii. Staff acquisition

iii. **Roles and responsibilities document** = lists team members & their responsibilities

iv. **Staffing management plan**

f. **Procurement Planning (CONTRACT ONLY!)**

i. **statement of work (SOW)** details the goods or services you want to procure.

ii. **procurement document** = to notify prospective sellers of upcoming work

g. Cost estimating & Budgeting

cost baseline = High-Level cost estimates (from charter) + contingency reserve

h. Quality Plan

4. **Quality Management Plan - Quality = Standards** (no gold-plating/over cl, or under cl)

i. **Quality Standards** -> plan (methods used to measure) definition!

- Quality metrics (I.E.G. acceptable tolerance)
- Quality checklists, documents to record
- Exit criteria

ii. **Quality Assurance process** -> execute (how to meet standards)

- Document how to meet standards.
- Testing and Inspection docs to use
- How to Prevent defects, continuous service improvements
- What Tools and Techniques to use.
(Pareto, fishbone, Control chart, and so on!)

iii. Quality Control process -> monitor (have they been met?) Measure results

- Inspections, peer-reviews, walk-thru's, audit
- Analyze problems/Inspect issues
- Prevent problems or frequency using tools/techniques

iv. Tools and Techniques

- a. cost-benefit analysis (no gold-plating)
- b. Benchmarking
- c. Flowcharting (DFD)
- d. Cost of Quality (prevention, appraisal, failure)

i. Risk Planning

i. Risk register

j. **Project Management Plan** sign-off

k. Transition plan (not always created here or ever)

3) Executing majority of budget spent!

- a. Staff acquisition
- b. Project Kick-off meeting
- c. Team development
forming, storming, norming, performing, and adjourning.
- d. Organizational Governance
- e. managing project quality – execute **quality assurance** (application of action or method to meet standards)

i. use diagramming methods (run chart, scatter chart, control chart, etc....) to document

- f. managing risks
- g. preparing performance reports and information
- h. following communications plan
- i. schedule meetings
- j. managing cost estimates (EVM)

4) Monitoring and Controlling

- a. Risk - Qualitative risk analysis -> to risk register - > possibly to Quantitative risk analysis, watch triggers
- b. initiate **quality control** (have standards been met?)
 - i. costs include - failure, prevention, appraisal
 - ii. deliverables = requirements = standards
 - a. uses *scope management doc* to verify
 - b. used WBS for success/acceptance criteria
- c. Create **change requests** (output)

d. **Comparing** project **performance** with all baselines (is it on time, on, scope, on budget?)

-Other tasks-

1. EVM/Root cause analysis
- 2 creates performance reports
3. updating plan documents when necessary

5) Closing

a. Steps

- i. obtaining sign-off and acceptance,
- ii. transferring the product to the organization,
 - warranty period
- iii. releasing project resources,
 - team members
 - final performance appraisal (post-project review)
- iv. closing out contracts, (not all projects)
 - vendor
 - Close Procurements
- v. performing Administrative Closure,
 - performing post-project reviews (lots to review!)
 - Centralizing documents
 - archiving project documents
 - **writing a final closeout report (last status report)**
 - distributing a notice of project acceptance.
- vi. documenting historical information,
- vii. conducting post-mortem analysis, and
- viii. conducting post-project reviews.

b. Main phases:

- i. Contract Closeout
- ii. Administrative Closure

d. **project close report (for archiving)**

- **Lessons learned document**