Fundamentals of Project Management

Comprehensive Training "Boot Camp"

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Project Management Definition

- **Project management** is the practice of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria at the specified time to meet pre-defined objectives.

- The **primary challenge** of project management is to achieve all the project goals within the given constraints.

- Project Management **constraints** are within a specific **scope**, **time, quality and budget**

Roles and Responsibilities of Project Managers

- Activity and resource planning
- Organizing and motivating a project team
- Controlling time management
- Cost estimating and developing the budget
- Ensuring customer satisfaction
- Analyzing and managing project risk
- Monitoring progress
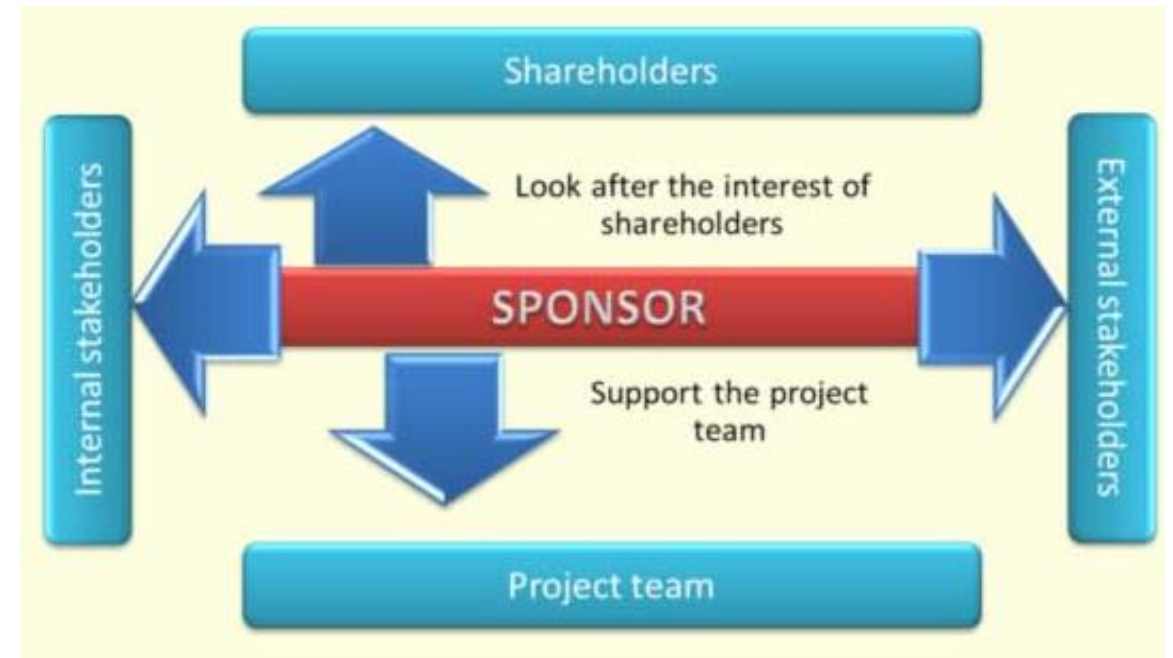- Managing reports and necessary documentation

Roles within a Project Management Environment

- Programme Manager

- Project Sponsor

- Project Manager

- Subject Matter Expert (SME)

- Project Coordinator

- Project Administrator

- PMO Analyst

Roles in Project Management

Roles within a Project Management Environment

- **The project sponsor** is a very important part of the project management organizational chart. In fact, every project has a sponsor.
- The project sponsor is one and only one, level above the project manager. They **do not manage the day to day operations of the project** but they ensure the resources are in place, promote the project, and hold **overall responsibility** for the project's success.
- They **represent the business side** of the project.
- They were probably involved when the project was being conceived and **advocated for its inception** before a project manager was assigned

Project Sponsor an individual - responsible for:
- Presenting the business case
- Approving the budget funds
- Identifying & defining project
- Managing senior stakeholders
- Appointing a project manager
- Authority & drive to overcome issues or cancel project

Shareholders

Internal stakeholders

External stakeholders

Look after the interest of shareholders

SPONSOR

Support the project team

Project team

Roles within a Project Management Environment

Project Management Office (PMO) is a central place to make sure company standards, procedures and practices are being followed to ensure projects are successful. According to the Project Management Institute (PMI), a PMO also "facilitates the sharing of resources, methodologies, tools and techniques"

Programme Management is the process of managing several related projects, often with the intention of improving an organization's performance.

Programme Manager has oversight of the purpose and status of the projects in a program and can use this oversight to support project-level activity to ensure the program goals are met by providing a decision-making capacity that cannot be achieved at project level or by providing the project manager with a programme perspective when required, or as a sounding board for ideas and approaches to solving project issues that have program impacts.

Subject-Matter Expert (SME) or domain expert is a person who is an authority in a particular area or topic. The term domain expert is frequently used in expert systems software development, and there the term always refers to the domain other than the software domain

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Roles within a Project Management Environment

- Business Analyst

- Business Process Owner (BPO)

- Subject Matter Expert (SME)

- Technical Architect

- Software Tester/ Quality Assurance

- Software Developer

- Content Editor

- UI/ UX

- Web Designer

- Product Owner/ Manager

- Scrum Master

- Release Manager

- DevOp Engineer

- Engineers

Identifying Stakeholders

A **stakeholder** can influence the success and failure of the project. To note down the information about the stakeholder, Stakeholder Register is used.

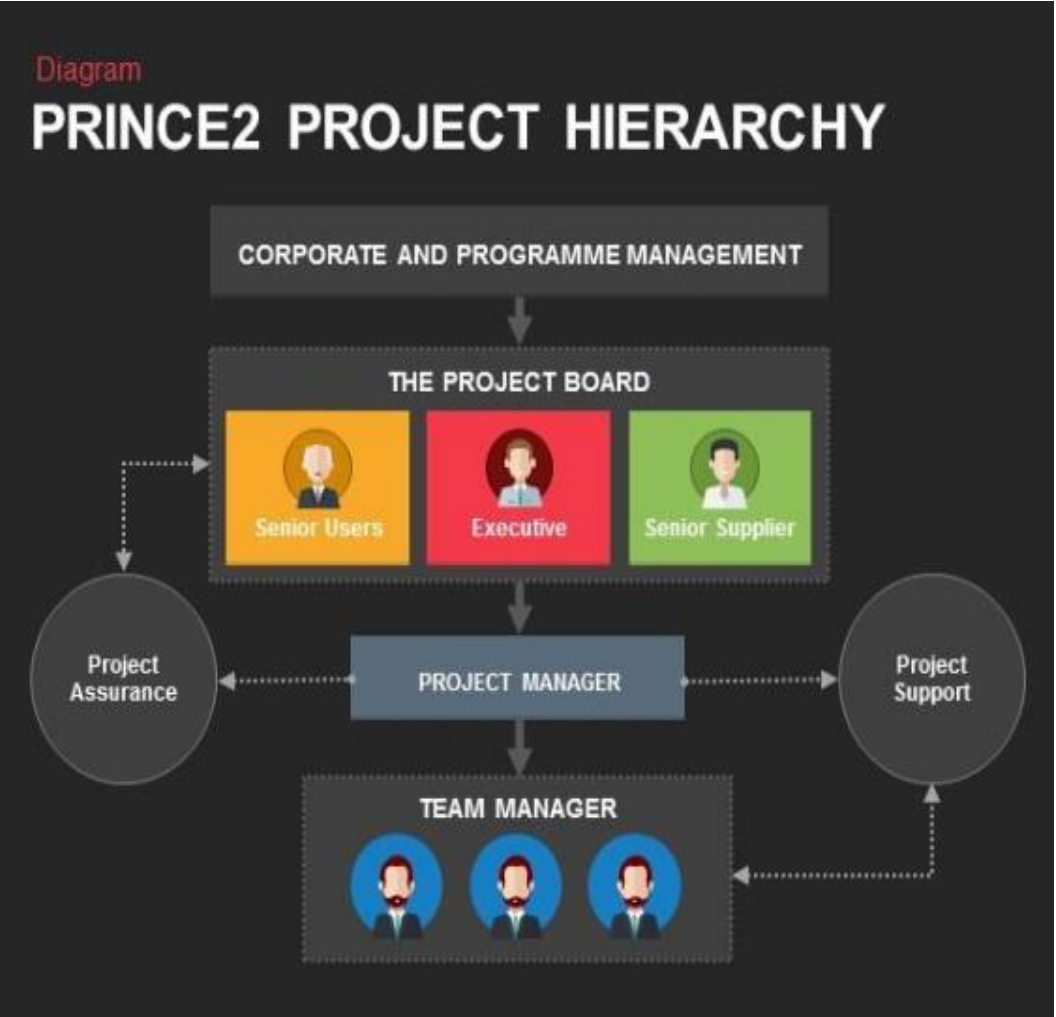The stakeholder register will have information such as:

- Type of stakeholder
- Expectation of each stakeholder
- Role in Project (Business Analyst, Tech architect, Client PM)
- Designation (Director, Business Lead, etc.)
- Type Communication (Weekly/Monthly)
- Influence on the project (Partial/Supportive/Influencer)
- Assigning the project manager
- Determining the stakeholder needs, expectations and high-level requirements
- Define the project success criteria
- Identify particular budget for particular stage
- Make sure that the project is aligned with the organizations strategic goal

Stakeholder Information

Person	Role Title	Frequency	Format/Channel	Notes
Ben Aaton	VP of Communications	Major Milestones	High-level timeline/budget/ progress update via email	Prefers to see final approved files only
Patrice Embry	Communications Project Lead	Weekly	Weekly-check in meetings, emails (CC)	Final approval on milestones, strategic direction if needed
Natalie Semczuk	Communication Coordinator	Daily	Weekly check-in meetings, daily emails as needed	Go-to contact for needs, questions, deliverables, etc. Pulls in others as needed

The stakeholder register and project charter are used as inputs to the other development groups such as planning process group

# Project Management Organisation Chart
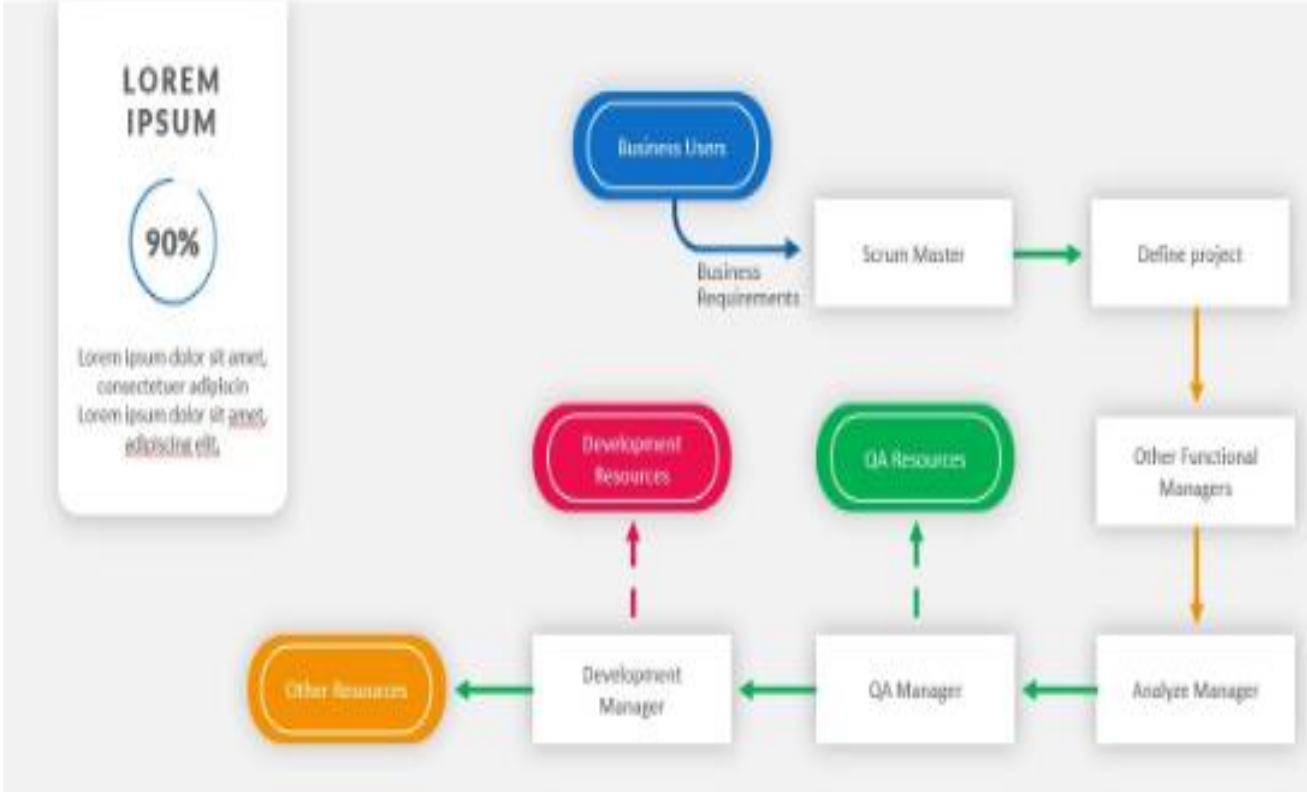
Manage Stakeholder Engagement

This stage includes actively managing stakeholders throughout the project. To avoid unexpected project delay or abandoning the project in between, stakeholder expectation is identified and quickly resolved.

There are inputs to manage stakeholder process
- Stakeholder register
- Stakeholder management strategy
- Project management plan
- Issue log
- Change log

Stakeholder Analysis
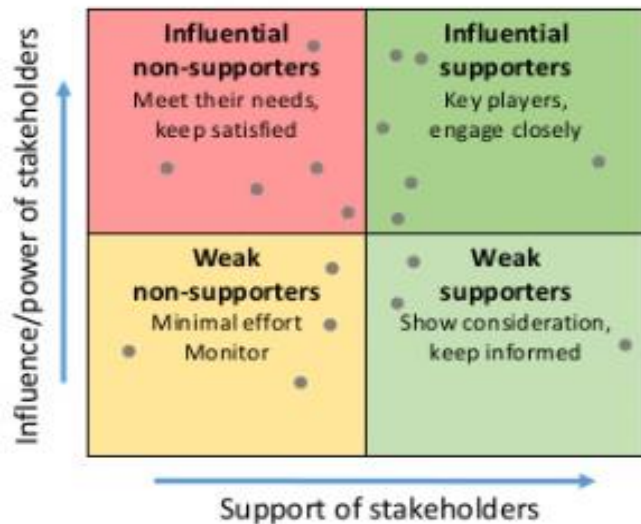
- Regularly review the stakeholder map for key initiatives with close allies
- For key stakeholders, develop a plan
  - Why they are important to the project
  - What's important to them
  - Their reason for support/resistance
  - Who "owns" the relationship
  - Specific actions to be taken
- Keep this confidential!
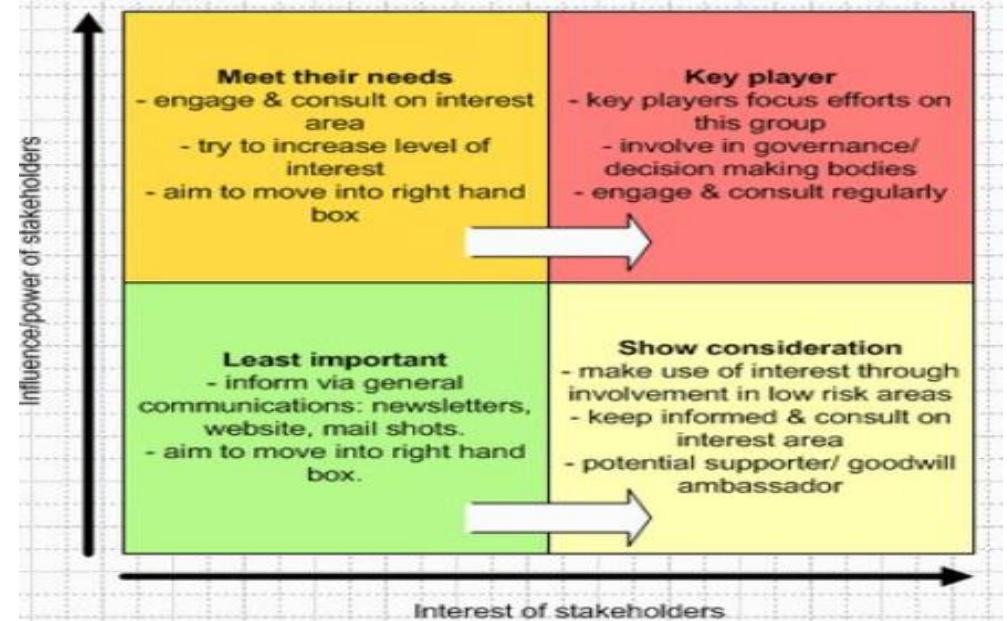
Project Management "Key Thought Process"

(GOOD)
Quality

(THE DELIVERABLE)
Scope

Schedule
(FAST)

Cost
(CHEAP)

What Are You Tasked With Delivering?

What Level of Quality Must The Deliverable Have?

What Time-Frame Do You Have To Deliver It Within?

What Budget Constraints Must You Deliver Within?

Project Management Process and Knowledge Areas

It is essential to follow a defined Project Management process n order to achieve successful outcome. This processes formed the project life cycle of any project regardless of **area, type, size and complexity.**

These processes are pretty consistent, regardless of the industry or the type of deliverables.

Project Management Lifecycle

The Project Life Cycle is a series of activities which are essential for accomplishing project objectives or targets regardless of size, complexity and dimension.

5 Key stages of Project Management Lifecycle

- Initiation Phase
- Planning Phase
- Execution Phase
- Monitoring, Controlling
- Closing Phase
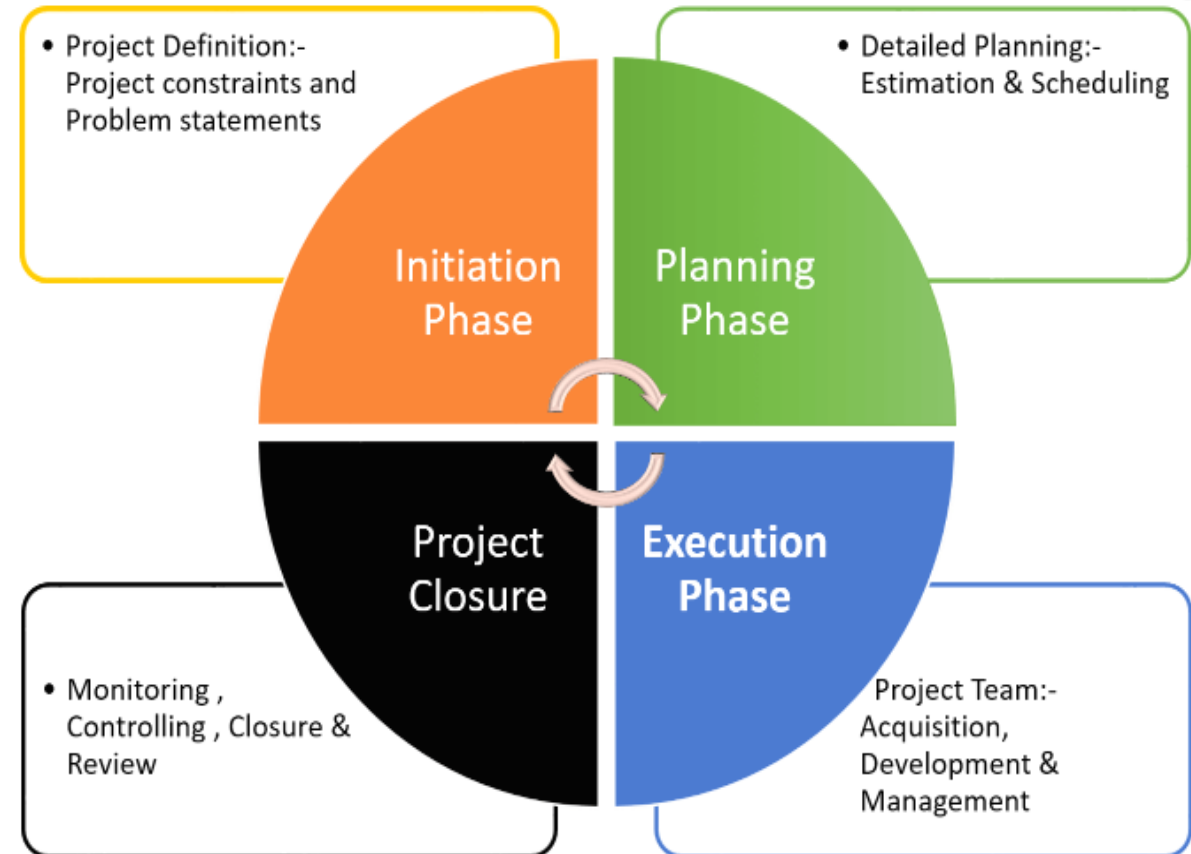
Project Initiation Phase

- It defines those processes that are required to start a new project.
- The purpose of the project initiation phase is to determine what the project should accomplish. This phase mainly composed of two main activities:
    - Develop a Project Charter
    - Identify Stakeholders

- All the information related to the project are entered in the Project Charter and Stakeholder Register.
- Once the project charter is approved, the project becomes officially authorized.

Triggers, goals & objectives
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

Scope & deliverables
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

Communication plan & assumptions
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

Project Initiation

Vendors & stakeholders
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

Budget & spending
This slide is 100% editable. Adapt it to your needs and capture your audience's attention.

Constraints, risks & dependencies
This slide is 100% editable. Adapt it to your needs and capture your audience's

Project Initiation Phase

Project Charter

The Project Charter defines and contains the following elements

- Project Triggers, Goals and Objectives
- Project Problem statements
- Scope and Deliverables
- Vendor and Stakeholders
- Constraints, Risk and
- High-level Budget and Spending
- High-level schedule
- Project Organisational chart
- Project Milestones (High –level)
- Approvals

This document allows a project manager to utilize **organizational resources** for the sake of the project.

Project Planning Stage

Project Planning phase covers about 50% of the whole process. Planning phase

- It determines the scope of the project as well as the objective of the project.
- The output of the planning phase serves as the input for the **execution phase**.
- Project planning is part of project management, which relates to the **use of schedules** such as Gantt charts to plan and subsequently **report progress** within the project environment.
- Project planning can be done **manually** or by the use of **project management software**.

Before the project planning,

- ensure the project scope is defined
- the appropriate methods for completing the project are determined.

Project Initiation Phase Activities Flow
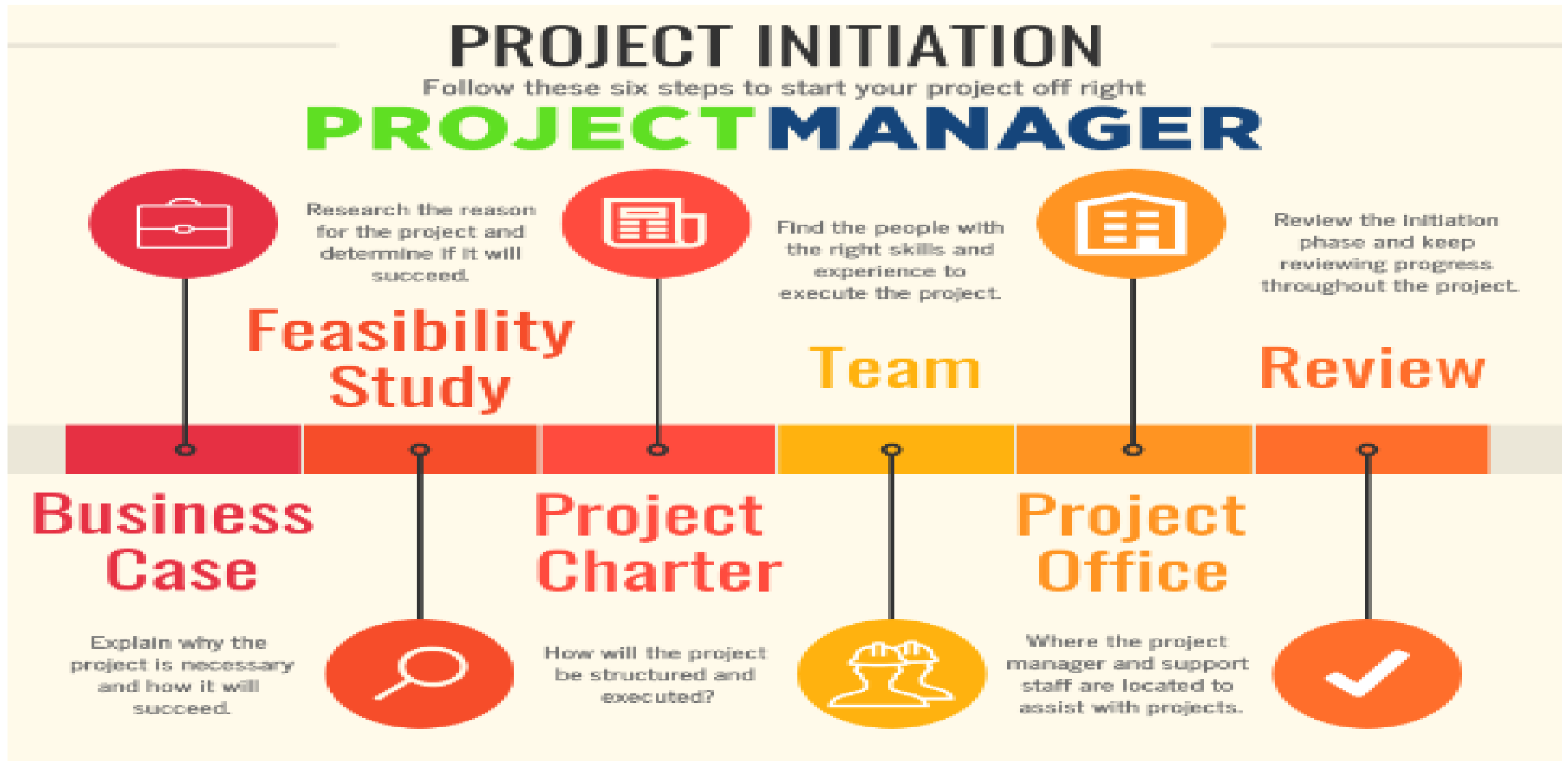
Feasibility Studies

Five areas of feasibility - Technical, Economic, Legal, Operational and Scheduling

- Outline design of system requirements
- To determine whether the company has the technical expertise to handle completion of the project
- A brief description of the business to assess more possible factors which could affect the study
    - The part of the business being examined
    - The human and economic factor
    - The possible solutions to the problem

The technical feasibility assessment is focused on
- Gaining an understanding of the present technical resources of the organization and
- Applicability to the expected needs of the proposed system.
- It is an evaluation of the hardware and software and how it meets the need of the proposed system[l]

Consideration
- Availability of inputs or raw materials and their quality and prices.
- Availability of markets for outputs of each method and the expected prices for these outputs.

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Feasibility Studies

A project feasibility study is a comprehensive report that examines in detail the five frames of analysis of a given project. It also takes into consideration its four Ps. In other terms, the technical or business impact assessment which is completed in order to determine the viability of a change.

The **four Ps** are traditionally defined as
- Plan
- Processes
- People
- Power

The **risks** are considered to be external to the project

- Plan - Weather conditions
- Plan - Financial and organizational
- Processes - Environmental and technological
- People – Marketing and sociocultural
- Power - legal and political.

Other Factors:

- Financial
- Legal / Regulatory
- Resources
- Time / Estimates
- Operations/ BAU

Other constraints of calendar, costs and norms of quality that can each be objectively determined and measured along the entire project lifecycle.

Business Case

- Captures the reasoning for initiating a project or task. It is often presented in a well-structured written document or presentation. A compelling business case adequately captures both the quantifiable and non-quantifiable characteristics of a proposed project.

- The logic of the business case is that, whenever resources such as money or effort are consumed, they should be in support of a specific business need. An example could be that a software upgrade might improve system performance, but the "business case" is that better performance would improve customer satisfaction, require less task processing time, or reduce system maintenance costs.

How to Write a Business Case

- Identify and thoroughly understand a relevant business problem, issue or goal.
- Brainstorm about potential options for resolving the business case problem, issue or goal.
- Review your business's mission statement.
- Determine who should write the business case.
- Write down the problem statement.

Project Requirement Management

Requirements management is the process of capturing, assessing and justifying stakeholders' wants and needs. A clear and agreed expression of requirements and their acceptance criteria is essential for the success of any project, programme or portfolio.   It addresses "**what**" is needed rather than "**how**" it is completed which is solution implementation.

Requirements may be expressed as **deliverables or business benefits**, as **aspirations or solutions**, and as **functional or technical** needs. Most requirements will be generated by internal and external stakeholders with elements legal or regulatory included.

Steps to Requirement gathering process (SMART):
- **Uniquely identifiable:** it addresses only one core requirement
- **Current:** it is up to date and relevant to the business need
- **Consistent**: it does not contradict any other requirement
- **Understandable**: concisely stated and not open to different interpretations
- **Verifiable:** compliance can be verified through inspection, demonstration, test or analysis
- **Traceable:** the requirement can be traced from the originating need, through the plan, to what is delivered
- **Prioritized**: its relative importance is understood.

A simple process for requirements management has four steps:
- Gather requirements from stakeholders
- Analyze the requirements to look for overlaps, gaps and conflicts
- Justify the requirements to distinguish wants from needs
- Baseline the needs before commencing the solutions development process

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Requirement Gathering and Projects

High-level requirements are defined during the concept phase of the project life cycle. These need to be detailed enough to complete a project brief. This, in turn, is used to make an investment decision (**i.e. whether or not to proceed to the definition phase).**

- The level of detail captured during the concept phase, therefore, needs to be sufficient to justify proceeding to the definition phase.
- **For projects that are part of a programme**, these high-level requirements will be derived from the programme requirements. They will relate to an output and, if the programme requirements are sufficiently well described, the process may be correspondingly brief, as it simply needs to add the final details.

For stand-alone projects:
- The first consideration is whether the requirements are expressed as outputs, outcomes or benefits. This will govern whether the project includes benefits realisation as part of an extended project life cycle.
- Some methodologies, including Agile approaches, are designed to enable the continuous gathering and refinement of requirements on the assumption that the stakeholders may not be sure of their needs at the outset.
- The use rigorous prioritisation mechanisms, such as MoSCoW, to ensure that only valuable and justifiable requirements are included in each phase of work.

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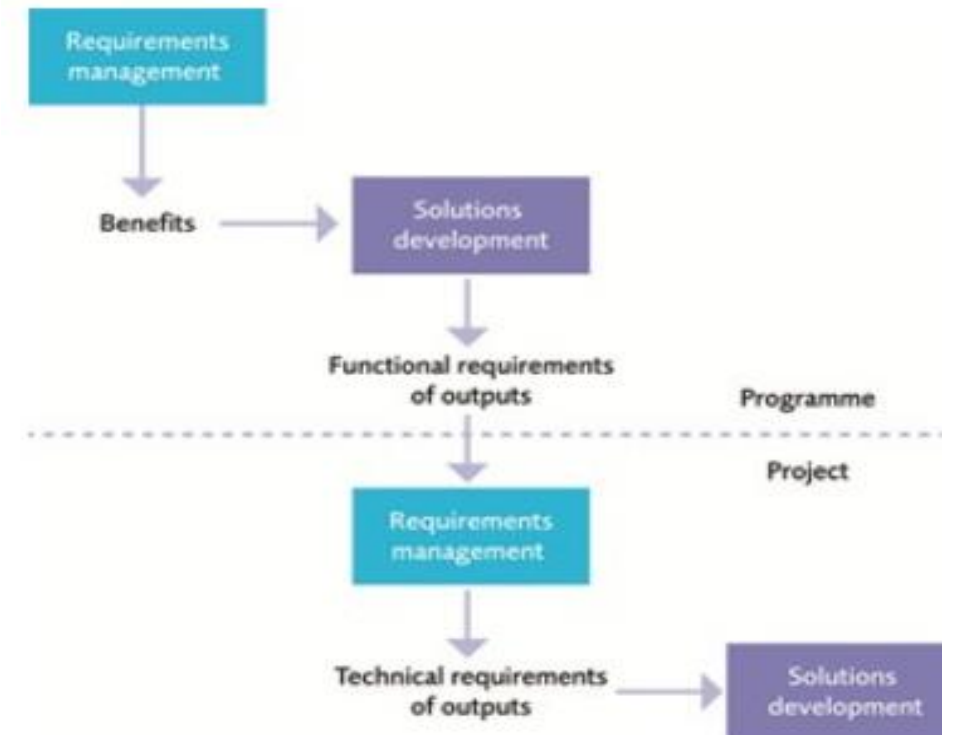
Project Charter

Project charter, project definition, or project statement is a statement of the scope, objectives, and participants in a project.

- It provides the roles and responsibilities
- Outlines the project objectives
- Identifies the main stakeholders,
- Defines the authority of the project manager.
- It serves as a reference of authority for the future of the project.

The terms of reference are usually part of the project charter.

A project charter should:
- Contain the essence of the project.
- Provide a shared understanding of the project.
- Act as a contract between the project sponsor, key stakeholders and the project team.

The purpose of the project charter is to document:
- Reasons for undertaking the project
- Objectives and constraints of the project
- Directions concerning the solution
- Identities of the main stakeholders
- In-scope and out-of-scope items
- Risks identified early on (A risk management plan should be part of the overall project management plan)
- Target project benefits
- High level budget and spending authority

Project Scope Management

In project management, scope is the **defined features and functions** of a product, or the scope of work <u>needed to finish</u> a project. Scope involves getting information required to start a project, and the features the product would have that would **meet its stakeholders requirements.**

Scope management is the listing of the items to be produced or tasks to be done to the required quantity, quality and variety, in the time and with the resources available and agreed upon, and the modification of those variable constraints by dynamic flexible juggling in the event of changed circumstance called as [Scope creep](#)

Characteristics of Scope:
- It has boundaries
- It must be defined
- It must be agreed by Project Key stakeholders i.e. Project sponsor
- It must be validated
- It must be SMART
- It must be monitored
- It must be controlled at each stage gate i.e. regularly reviewed
- It must be signed off by key appointed stakeholder

Project Scope Checklist

1/ Project objectives	Overall goal →what, when, how much
2/ Deliverables	Major expected outputs
3/ Milestones	Natural and significant events → time, cost, resources
4/ Technical requirements	To assure performance
5/ Limits and exclusion	Avoid false expectations
6/ Reviews with costumers	Understanding and agreement of expectations

→ Avoid **scope creep** : added costs or delays

Project Scope Creep and Management

Scope creep refers to changes, continuous or uncontrolled growth in a project's scope, at any point after the project begins. This can occur when the scope of a project is **not properly defined, documented, or controlled**. It is generally considered harmful.

Reasons for Scope Creep

- Poorly defined Requirement
- Unapproved work/ unauthorized changes
- Unrequested addition by the project team to the features already agreed
- Lack of planning and oversight
- Poor Communication
- Lack of communication
- Ambitious and/or unmanaged expectation and promises

How to control this is to ensure and do the opposite the above reasons

Project Scope Creep and Control

How to Write a Scope of Work Document

What

- Scope of Work (SOW)
  An agreement on the Work
  to be performed.
- Includes:
  - Deliverables / Products / Results
  - Time line
  - Milestones
  - Reports
- Template: *ProjectManage.com Template
  1. Glossary
  2. Problem Statement
  3. Goals
  4. Objectives / Deliverables
  5. Administration
  6. Timeline

~~Best~~ **MUST** Practices:

1. Be Specific
   - What Terms Mean
   - Who does what by When
   - ⊘ Traps: Confusion, Miscommunication, Disputes.

2. Use Visuals
   - What will it look like in the end.
   - What will people be able to do in the end.
   - Picture is Worth a Thousand Words.
   - ⊘ Traps: Misinterpretations.

3. Get Sign Offs
   - Ensure Authorized Approvers Sign off.
   - Sign off on Critical Milestones + Deliverables
   - ⊘ Traps: Selective Amnesia, Disputes, Rework.

Project Management Deliverables

A deliverable is an element of output within the scope of a project.

- There can be one or several deliverables within a single project.
- Deliverables can be items that are supposed to be sent externally to a customer or just to an internal stakeholder. It usually means that the individual is expecting the deliverable on a certain date. When a deliverable is sent, that means a big deadline or milestone has been met.
- They are dependent on another deliverable being completed first. This is common when managing a project with a multiple milestones, such as events.
- It is a tangible action item within a project.
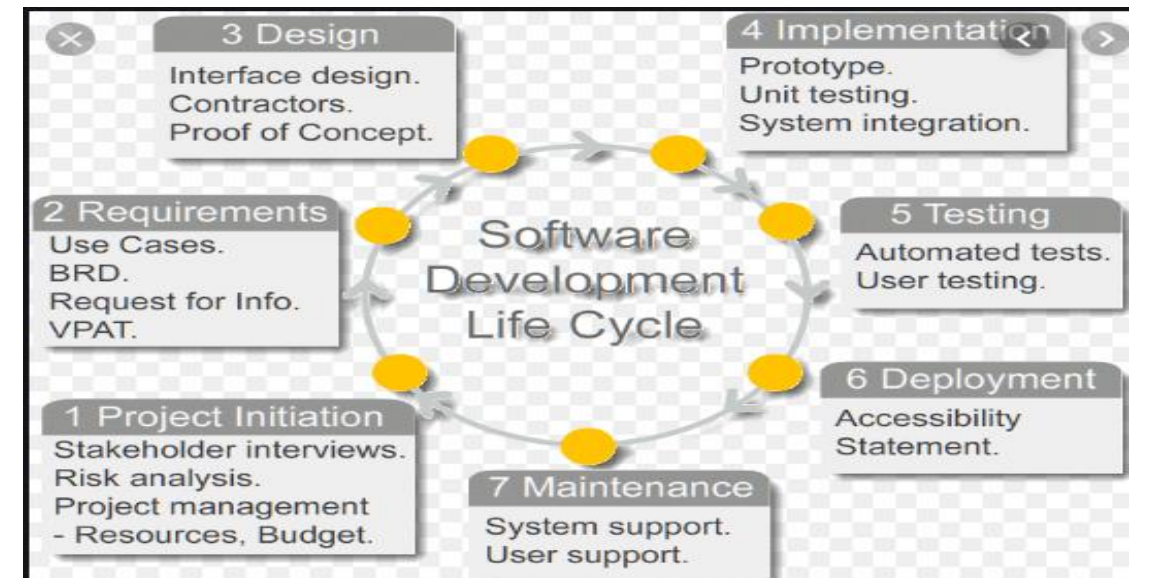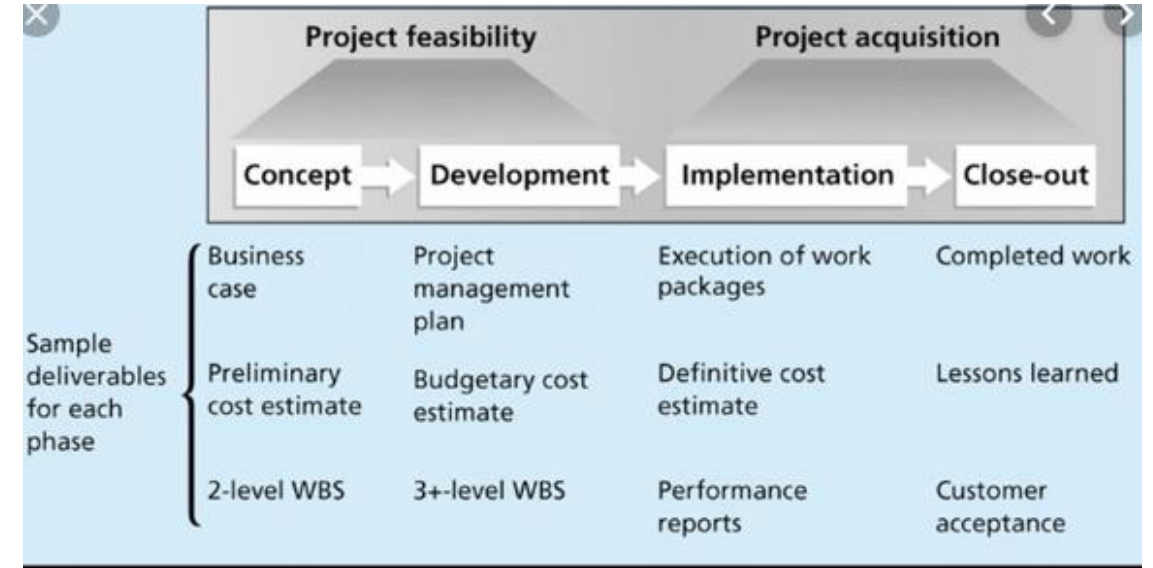
Project Planning Phase

Following this step, It is important to know

- The durations for the various tasks necessary to complete the work are listed and grouped into a **work breakdown structure.**
- Project planning is often used to organize different areas of a project, including **project plans**, **Tasks and the management of teams and individuals.**
- The **logical dependencies** between tasks are defined that enables identification of the critical path. Project planning is **inherently uncertain** as it must be done before the project is actually started.
- Therefore the duration of the tasks is often estimated through a weighted average of **optimistic, normal, and pessimistic cases**.
- The critical chain method adds **"buffers"** in the planning to anticipate potential delays in project execution.
- Then the necessary **resources** can be **estimated and costs for each activity** can be allocated to each resource, giving the total project cost.
- Once established, reviewed and agreed by proposed project team/ Lead, the project schedule becomes what is known as the **baseline schedule**.
- Progress will be **measured against the baseline schedule** throughout the life of the project.
- The inputs of the project planning phase 2 include the **project charter** and **the concept proposal (Solution)**.
- The outputs of the project planning phase include the **project requirements**, **the project schedule**, and the **project management plan**.

Project Plan - Activities

For any successful project WBS (Work Breakdown Structure) Following are steps to create WBS and plan.

- Conduct a brainstorm to list all the tasks
- Involve your whole team for brainstorming
- Break down into little tasks

Further breakdown your top WBS into a hierarchical

- List out set of activities, for instance, For example hardware, software, trainee, management teams, etc.
- Use sections in manner of:
  - Planning
  - Analysis
  - Design
  - Implementation
  - Testing
  - Completion
  - Transition and Closure
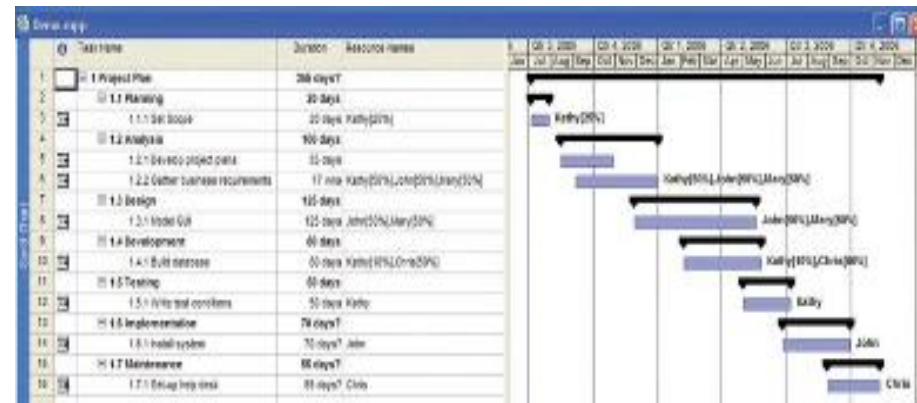
Project Planning
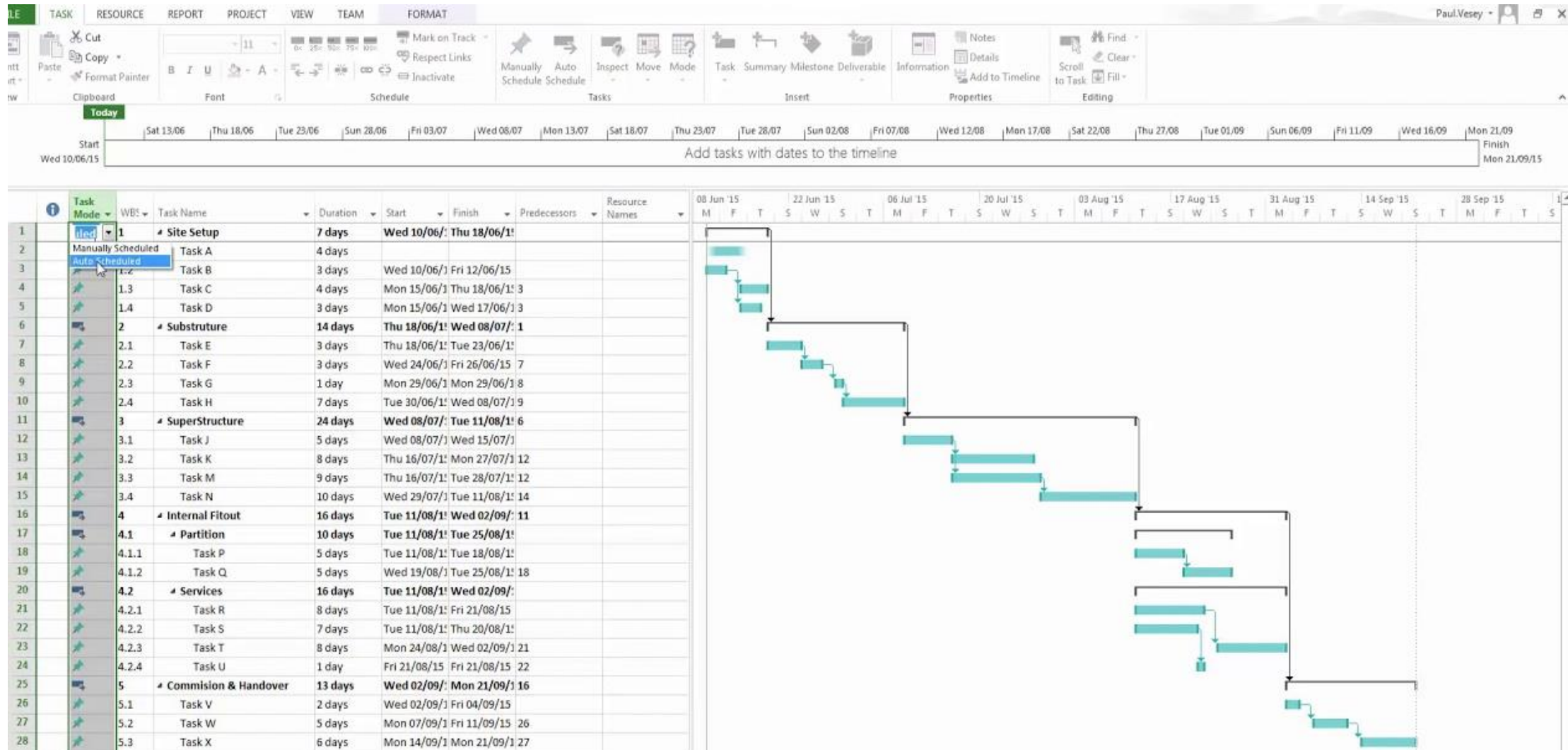
Project Communication Plan

A communication plan is a policy-driven approach to providing stakeholders with information.

- The plan formally defines **who** should be given specific information, **when** that information should be delivered and **what** communication channels will be used to deliver the information.
- An effective communications management plan anticipates what information will need to be communicated to **specific audience** segments.
- The plan should also address who has the **authority** to communicate confidential or sensitive information and how information should be disseminated e.g. email, websites, printed reports, and/or presentations.

Finally, the plan should define **what communication channels** stakeholders will use to solicit **feedback** and how communication will be **documented and archived**.

Description	Frequency	Method	Audience	Owner
Name of the communication	How often it will happen	Method of communication	Who will receive the communication	Who is responsible
Project team meeting	Daily	Meeting	Project team	Project manager
Stakeholder update	Monthly	Email newsletter	Stakeholders	Project manager
Board meeting	Every two weeks	Meeting	Project board	Project manager
Contribution to department newsletter	Quarterly	Section of newsletter	Wider development	Project manager to deliver to department administration

3. Communication Matrix

Techno-PM
Project Management Templates

#	Communication	Format	Frequency	Owner	Distribution	Escalation
1	Weekly Status Update	E-Mail	Once a week	PM	All project team members and major stakeholders	CEO
2	Action Items FollowUp	Conference Call & E-Mail	Once every 2 work days(M, W, T)	PMO	Everyone who has an action item allocated, and their TL's, PM	COO
3	Budget Usage	Face to Face Presentation & E-Mail	Fortnightly	CFO	CEO, COO, PMO, PM, Key Stakeholders	CEO
4	Risks Review and Update	Face to Face Presentation & E-Mail	Fortnightly	PMO	PM, TL's, COO	PM

Project Estimation and Cost Management

Project estimation is a process of forecasting or approximating the time and cost of completing project deliverables. The task of balancing expectations of stakeholders and need for control while the project is implemented

There are many different types of estimation techniques used in Project Management with various streams like Engineering, IT, Construction, Agriculture, Accounting, etc.

A Project manager is often challenged to align mainly six project constraints:
- Scope
- Time
- Cost
- Quality
- Resources
- Risk

It is essential a PM can answer the following questions:
- How much work is to be estimated (scope)
- How to estimate the project (techniques)
- How much time it will require to complete the project (Schedule)
- Who will be doing the project (resources)
- What is the budget required to deliver the project (cost)
- Any intermediary dependencies that may delay or impact the project (Risks)

Approach and Importance of Project Estimation

- Have people familiar with the task make the estimates
- Use several people to make the estimates depending on what is been planned to be carried out
- Base estimates on normal conditions, efficient methods and a normal level of resources
- Use consistent time units in estimating task times i.e. resource rate per day or per hour

Importance of Project Estimation

- Project estimation support good decision making for both the internal stakeholders as well as management
- It is used to schedule task, work activities through out the project lifecycle
- To determine how long the project should take and its cost
- To determine cash flow needs
- To determine whether the project is worth doing
- To determine how well the project is progressing i.e. project progress tracking
- To determine whether the project is worth doing
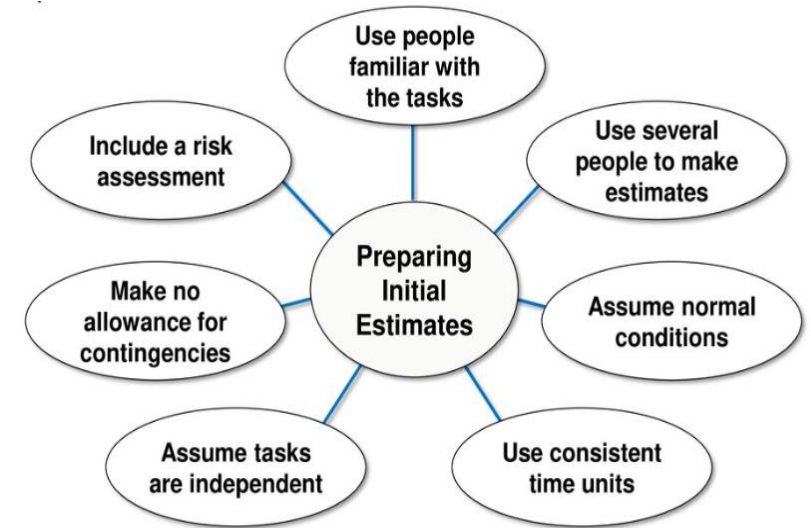
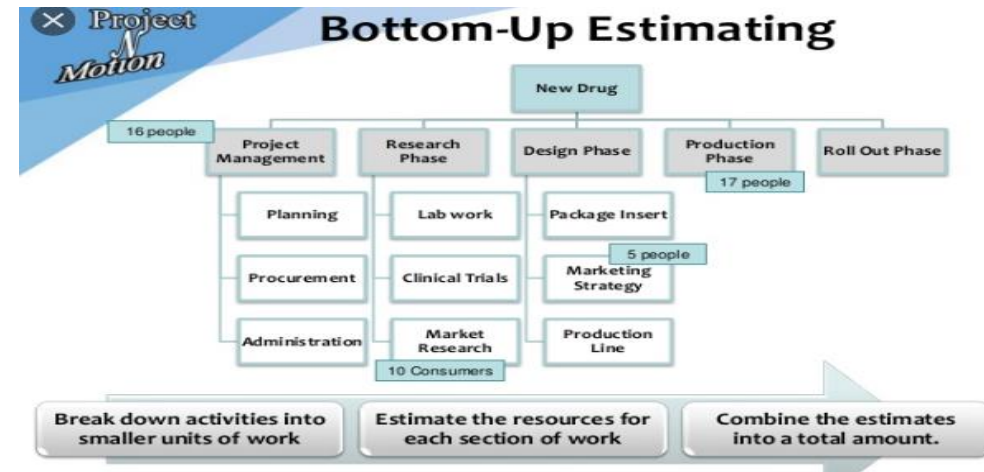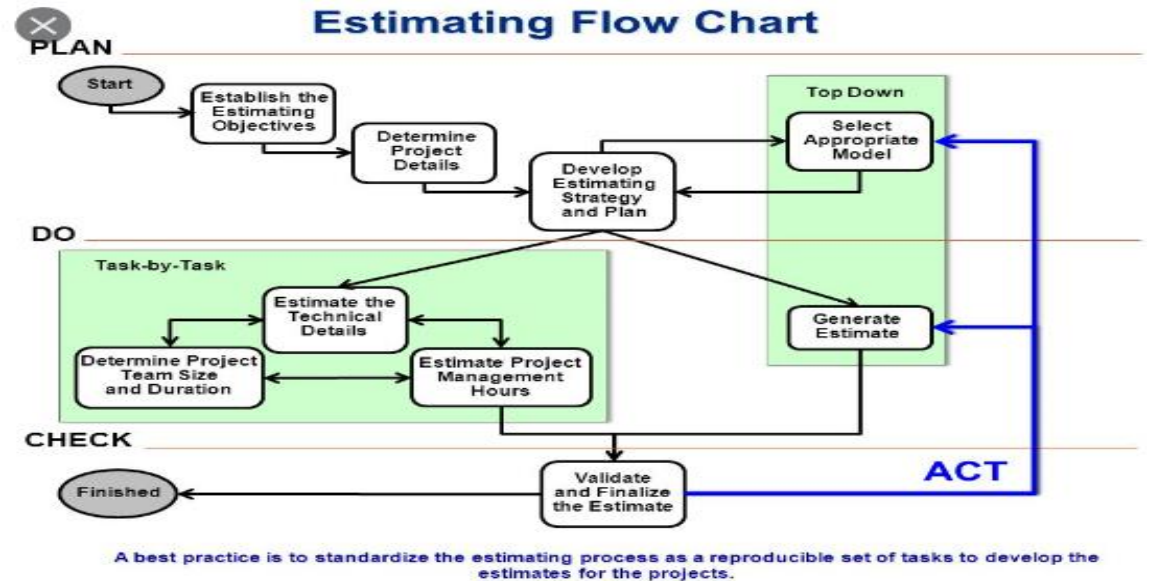# Project Estimation, Sizing and Techniques

Top-Down Estimate

- High-level chunks at the feature or design level are estimated
- Decomposed progressively into smaller chunks or work-packets as information is detailed

Bottom-Up Estimate

- Requirements are known at a discrete level where the smaller workpieces
- Aggregated to estimate the entire project. This is usually used when the information is only known in smaller pieces

Analogous Estimating

- This technique is used when there is a reference to a similar project executed
  - Easy to correlate with other projects
  - Expert judgment
  - Historical information of similar activities

Estimating Flow Chart

A best practice is to standardize the estimating process as a reproducible set of tasks to develop the estimates for the projects.

Bottom-Up Estimating

Break down activities into smaller units of work — Estimate the resources for each section of work — Combine the estimates into a total amount.

Project Estimation, Sizing and Techniques

What-If Analysis

This technique uses

- Assumptions based on varying factors like scope, time, cost, resources, etc., to evaluate the possible outcomes of the project by doing impact analysis.
- Project estimate is done by conducting estimation workshops with the stakeholders of the project, senior team members who could give valuable inputs to the estimation exercise.
- The high-level scope is broken down into smaller work packages, components and activities, each work package is estimated by effort and resource needed to complete the work package.

The following activities are done during the workshop:

- Break down the scope into smallest work package, components or activities
- Sequence the activities in the order in which they will be performed
- Identify the effort required to complete each activity
- Identify the resource estimate to complete each task or activity
- Identify the dependencies to complete each activity
- Identify the possible risks and assumptions
- Define the resource and cost estimate to the completion of each activity, component and work package

When estimates are required

Project phase	Estimates required
Initiation	Time, cost and benefit estimates in project definition.
Planning	Time estimates in project schedule. Cost estimates in project budget. Cost and benefit estimates in business case.
Start of project stages	Time and cost estimates reconfirmed for the stage.

==The above exercise gives an exact estimate of the project and the outcome of the workshop may be a project plan and a project schedule with effort, resource and cost estimates.==

Project Cost Management

- **Project Cost Management** is a process to ensure that the project is completed within the approved budget

- **Resource Planning** - Determine resources (People, Equipment, Materials) and their quantities required to perform project activities

- **Cost Estimating** – Develop estimates pf the cost of resource needed to complete the project activities

- **Cost Budgeting** – Allocating the overall cost estimates to individual work items

- **Cost Control** - Controlling changes and deviation in project budget

Cost Control

Controlling changes to the project budget

Resource Planning

Determine the resources (people, equipment, materials) needed for project completion

Cost Estimating

Develop an approximation of overall cost of resources needed to complete the project

Cost Budgeting

Allocation of the overall cost estimate to the project budget

Control cost is comparing **baseline cost** for each deliverable against the **actual cost**.

The cost baseline should change only in response to a **change request** that has gone through the Perform Integrated **Change Control process**.

Control cost ensures that your project stay within funding limitations.

Project Budget Management

A project budget is the total projected costs needed to complete a project over a defined period of time. It's used to estimate what the costs of the project will be for every phase of the project.
The project budget will include such things as labor costs, material procurement costs and operating costs.

Process of Creating Project Budget

- Use of Historical Data
- References from past lesson learned
- Use Expert Knowledge
- Review numbers and confirm accuracy
- Baseline and Re- Baseline budget
- Update in Real time

Types of Budgets

- Budget Forecast Profile
- Budget Actuals
- Variance
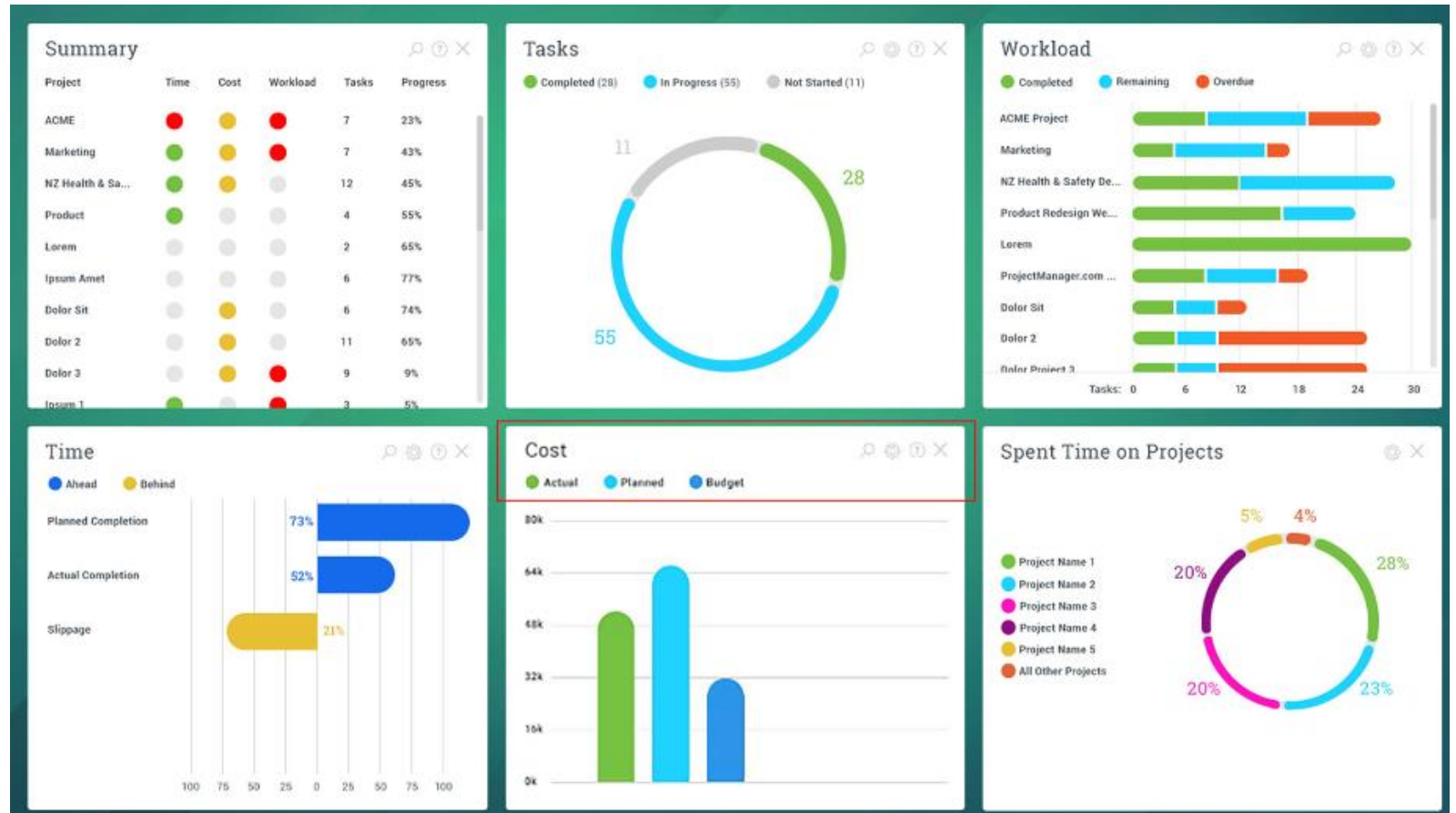
Project Budget Management

Project Forecast

Forecasts refer to the complete and thorough estimations, guesses, or predictions that are made by the project team on the particular conditions in the projects future that may arise. These forecasts are derived through a careful and explicit evaluation of all information and knowledge that is available at the time that the aforementioned forecast is made.

Project Actuals

Actuals are the amount of work that has been completed on a project. Project actuals can be traced back to their source documents. Those source documents include time, expense, and journal entries, and also invoices.

Cost Variance

This is the difference between the actual cost and the budgeted cost or what you expect to spend on a project. It is a process of evaluating the financial performance of your project before it starts and what was actually spent.

| Forecasts	Budget
Forecasts is mainly concerned with anticipated or probable events	Budget is related to planned events
Forecasts may cover for longer period or years	Budget is planned or prepared for a shorter period
Forecast is only a tentative estimate	Budget is a target fixed for a period.
Forecast results in planning	Result of planning is budgeting
The function of forecast ends with the forecast of likely events	The process of budget starts where forecast ends and converts it into a budget
Forecast usually covers a specific business function	Budget is prepared for the business as a whole
Forecasting does not act as a tool of controlling measurement.	Purpose of budget is not merely a planning device but also a controlling tool.

Project Uncertainties, Assumptions and Contingency

Project uncertainty is a cause that makes projects to finish with overruns on their schedules and budgets, and with products of compromised specifications, in spite of costly planning, attentive risk management. It is a situation in which something that may affect the project is unknown and unpredictable. This could be internal or external.

A **Project Assumption** is believed to be true either through Experience or high-level Historical Data. A **Project Assumption** is stated without any empirical evidence. All **Project Assumptions** are potential risks. **Project Assumptions** should be well Documented and well Communicated.

Contingency, an amount of funds added to the base cost estimate to cover estimate uncertainty and risk exposure, is a topic of interest for both **project** managers and sponsors alike.

A contingency plan is a plan devised for an outcome other than in the usual (expected) plan. It is often used for risk management for an exceptional risk that, though unlikely, would have catastrophic consequences.

Other 7%
Design Updgrades 15%
Risks 35%
CONTINGENCY BUDGET
Unknown 20%
Costs 23%
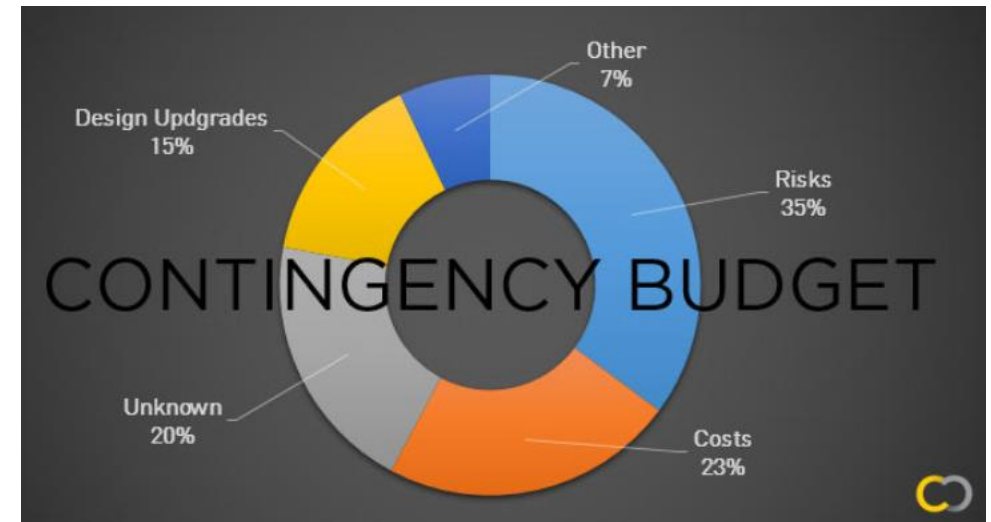
Project Risk Management

Risk Management is the identification, evaluation, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability or impact of unfortunate events or to maximize the realization of opportunities

A **RAID** log, or risks, assumptions, issues, and dependencies log, is a project planning tool you can utilize for effective project management.

- RAID Log

RAID Dashboard Example:

	Risks		Assumptions		Issues		Dependencies
1	Critical	0	Critical	0	Critical	0	Critical
1	High	1	High	0	High	0	High
0	Moderate	1	Moderate	1	Moderate	0	Moderate
0	Low	0	Low	1	Low	0	Low
0	Negligible	0	Negligible	1	Negligible	0	Negligible
	2		2		3		0

Plan Risk Management	• Defines how to conduct risk management activities
Identify Risks	• Determines which risks affect the project and document their characteristics
Perform Qualitative Risk Analysis	• Prioritizes risks for further analysis or action by assessing and combining their probability of impact and occurrence
Perform Quantitative Risk Analysis	• Numerically analyzes the effect of identified risks on the overall project
Plan Risk Responses	• Develops options and actions to enhance opportunities and reduce threats to project objectives
Monitor and Control Risks	• Risk response plans, track identified risks, monitor residual risks, identify new risks, and evaluate risk process effectiveness

RAID Analysis

This is analysis of the four key areas of project planning and management which are the risks, assumptions, issues, and dependencies.

Risks

This pertains to the events that will have an adverse effect on the project that they are going to work on.
The risks must be evaluated based Likelihood that they will occur as well as their impact on the project.
To address this, you can take action by implementing risk mitigation strategies based on the level of risk.

Assumptions

These are the aspects of the project that you assume will be in place to help the project run although it cannot be guaranteed. "What exists, or do we presume to be true, that will, in a way, help our project to be accomplished?" You must constantly reassess your assumptions at regular intervals to ensure they are still valid.

Issues

They are risks that have eventuated, which you must control as soon as possible for the project to stay on track. After determining the issue, assess and take action that would contain or remove the issue and keep them from spreading across your different projects.

Dependencies

These are activities that you depend on before you can start or complete your project. The factors may be internal or external events, suppliers, or partners. To clarify your dependencies, you must answer the question, "Who or what are we dependent on and who depends on us?"

You must also constantly monitor and manage the connection and dependencies to examine if you still continue to depend on them or they still continue their dependence on your project.

Project Risk Management Mitigation

Risk mitigation can be defined as taking steps to reduce adverse effects. There are four types of risk mitigation strategies that hold unique to Business Continuity and Operations.

- **Risk Acceptance** does not reduce any effects however it is still considered a strategy.
- **Risk Avoidance** is the opposite of risk acceptance. It is the action that avoids any exposure to the risk whatsoever.
- **Risk Transference** is the involvement of handing risk off to a willing third party. This can be beneficial for a company if a transferred risk is not a core competency of that company.
- **Risk Reduction** is the most common risk management strategy used by businesses. This strategy limits a company's exposure by taking some action. It is a strategy employing an immediate action to mitigate the risk raised dependent on its likelihood and Impact.
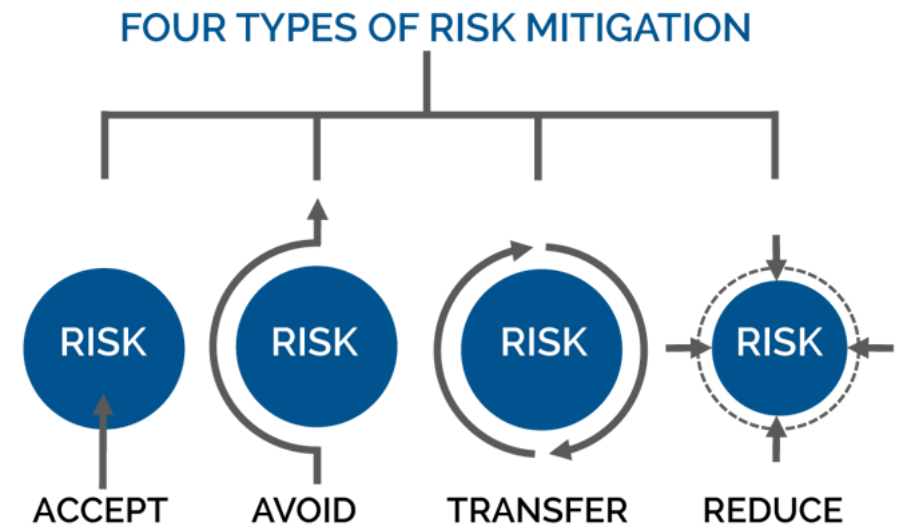
It is important to note that a company might decide to use a combination of one or more risk mitigation.

FOUR TYPES OF RISK MITIGATION

ACCEPT AVOID TRANSFER REDUCE

Project Risk Management Control

Throughout the project cycle, risk analysis is a continuous process. It is important that you continuously analyze, identify and respond to risks.

The activities include in **risk control** are:

- Tracking existing risks
- Monitoring residual risks
- Identifying new risks
- Implementing risk response plans
- Continuously evaluating risk process

The input for control risk are
- Risk register
- Work performance information
- Performance reports

The output for the control risk are
- Updating risk register
- Risk management plan

Sample Templates for Risk and Issue Log

Project Issue Log

ID	Description	Date Raised	Issue Owner	Impact	Recovery Plan	Update	Status
1	No space to set up project office	10/07/2011	Ellie	High	Locate space	17/7/11: Ellie sourced alternative building for project office. Moving in early August.	Closed
2	Budget for Phase 2 has not yet been approved	11/07/2011	Claude	High	Prepare strategy paper for Project Board meeting explaining scope of Phase 2 and budget forecast.	In progress	Open
3	Test data will not be available until October. This will delay the testing phase and the eventual go live date	30/07/2011	Marylin	Medium	Discuss with test manager and replan team's activities to enable a smaller set of data to be used for testing	1/8/11: Marylin is meeting with the test manager this week	Open

Project Risk Log

ID	Description	Date Raised	Risk Owner	Probability	Impact	Score	Timescale	Mitigation Plan	Status
1	There is a risk that severe snow might impact the project over the winter	01/10/10	Claude	3	4	12	Imminent	Build contingency into the plan	Open
2	There is a risk that long equipment lead times impact the project	08/10/10	Claude	3	4	12	Next few months	Ellie to source alternative vendors just in case	Open

Project Decision Log

Ref	Date	Description	Agreed by
1	10/07/2011	The new customer demographic information will be captured for customers going forward but not imported from the old system for existing customers.	Marylin and Sales team
2	12/07/2011	The Northern Customer Service call centre will be refurbished during October so the software deployment at that office must happen after that.	Customer Service Director
3	25/07/2011	All the software elements deployed as part of this project must be web-based.	Project Board
4	25/07/2011	We will not capture html or text email preferences for customers: default will be html although text version will also be provided.	Claude and Ellie

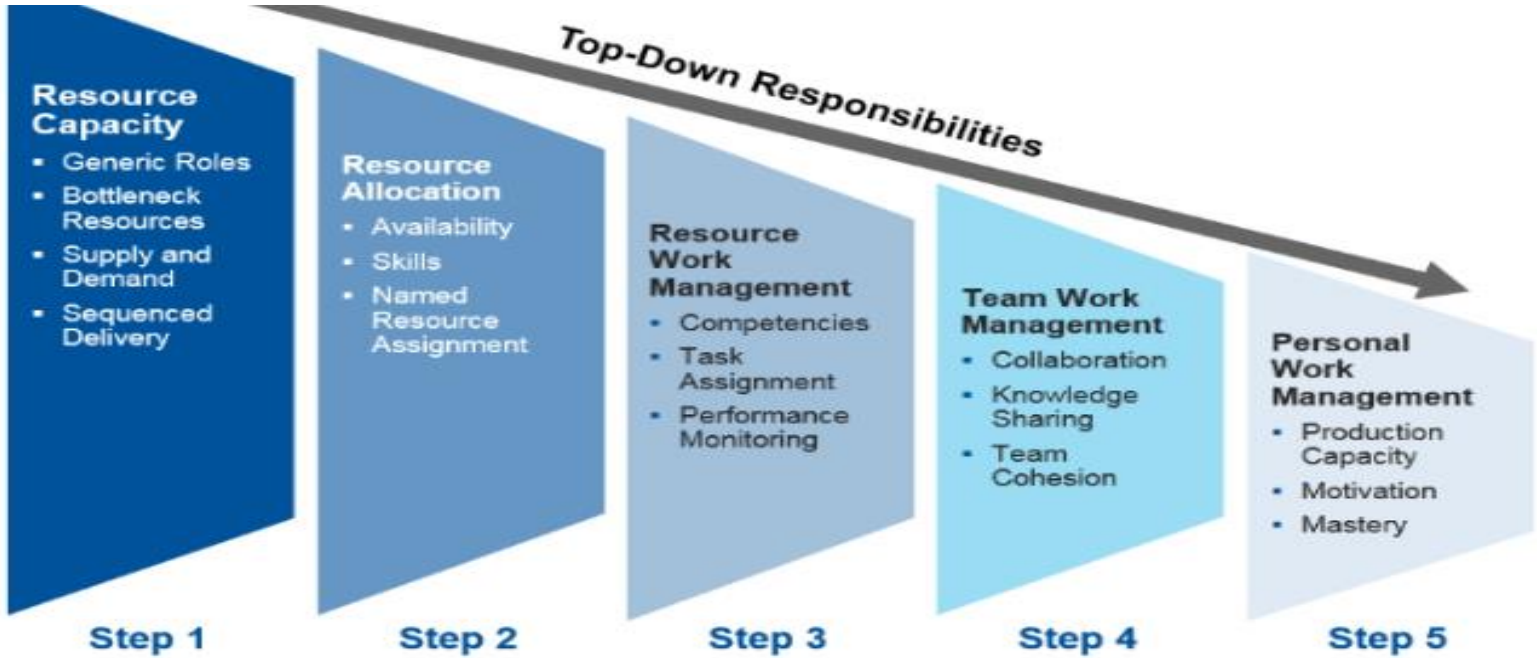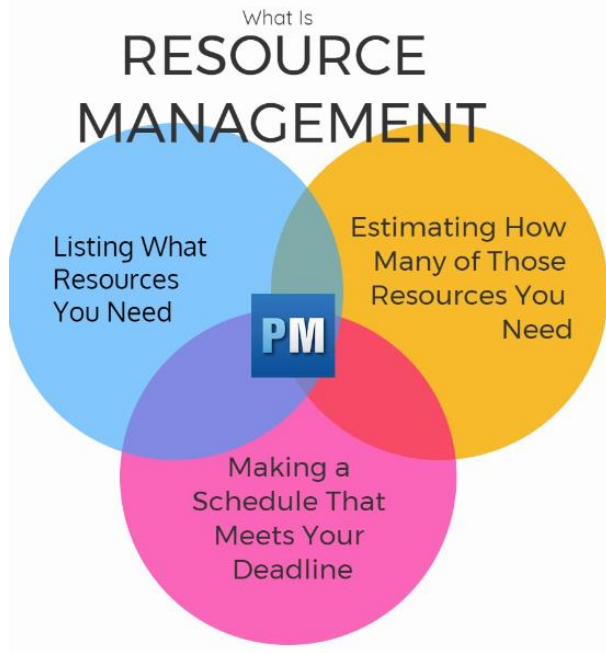| Likelihood	Consequences				
	Insignificant (Minor problem easily handled by normal day to day processes)	Minor (Some disruption possible, e.g. damage equal to $500k)	Moderate (Significant time/resources required, e.g. damage equal to $1million)	Major (Operations severely damaged, e.g. damage equal to $10 million)	Catastrophic (Business survival is at risk damage equal to $25 Million)
Almost certain (e.g. >90% chance)	High	High	Extreme	Extreme	Extreme
Likely (e.g. between 50% and 90% chance)	Moderate	High	High	Extreme	Extreme
Moderate (e.g. between 10% and 50% chance)	Low	Moderate	High	Extreme	Extreme
Unlikely (e.g. between 3% and 10% chance)	Low	Low	Moderate	High	Extreme
Rare (e.g. <3% chance)	Low	Low	Moderate	High	High

Project Resource Planning and Management

Resource management is acquiring, allocating and **managing** the **resources**, such as individuals and their skills, finances, technology, materials, machinery and natural **resources** required for a **project**.

This forms an essential part of the **project management** plan. Resource management comprises the acquisition and deployment of the internal and external resources required to deliver the project, programme or portfolio.

What Is
RESOURCE MANAGEMENT

Listing What Resources You Need

Estimating How Many of Those Resources You Need

PM

Making a Schedule That Meets Your Deadline

Top-Down Responsibilities

Resource Capacity
- Generic Roles
- Bottleneck Resources
- Supply and Demand
- Sequenced Delivery

Resource Allocation
- Availability
- Skills
- Named Resource Assignment

Resource Work Management
- Competencies
- Task Assignment
- Performance Monitoring

Team Work Management
- Collaboration
- Knowledge Sharing
- Team Cohesion

Personal Work Management
- Production Capacity
- Motivation
- Mastery

Step 1   Step 2   Step 3   Step 4   Step 5

Project Change Management and Control

Change management, within the context of a **project**, is the tools and processes you use to **manage** change within a **project** and your **project** team.

Change management is the process, tools and techniques to **manage** the people side of **change** to achieve the required business outcome. ... **Project management** focuses on the tasks to achieve **project** requirements. **Change management** focuses on the people impacted by the **change**.

Change is an action or project that affects the way work is performed. Change in an organization, simply put, is when something starts or something stops; when something that used to happen one way starts to happen another way.

Change Management Process

Project Execution Phase

The **executing phase** consists of those activities that are defined in project management plan. This process involves:

- Managing stakeholder expectation. Once you have successfully passed the Planning Phase.
- **The Project Execution Phase** of the project management lifecycle is about **deliverables & outputs**. It is here that the intended product or service is delivered to the customer for approval.
- It is **usually the longest** phase in the project management life cycle and consumes the most energy and resources.
- To enable you to monitor and control the project during this phase, you will need to implement a range of project management processes. These processes help you to manage time, cost, quality, change, risks and issues. They also help you to manage procurement, customer acceptance and communications.
- The **primary objective** of Execution and Control is to **construct deliverables as per the master project plan** and consistently evaluate the processes and plans involved to **deliver the output** as per the **agreed specifications such** PM coordinating with people and resources, as well as performing other activities related to project deliverables.
- Project Manager actively involve in this phase to monitor, manage, control and communicate progress of work during implementation with status reports always emphasize the anticipated end point in terms of cost, schedule, and quality of deliverables.
- Project Manager **direct, monitor and manage** in terms of the use and consumption of project cost, time and resources.
- Project Managers ensures all **project deliverables are produced** as such input and output of the projects.
- During this stage**, expert's judgments, meetings, and reporting KPI** (Key Performance Indicators) are of prime importance.
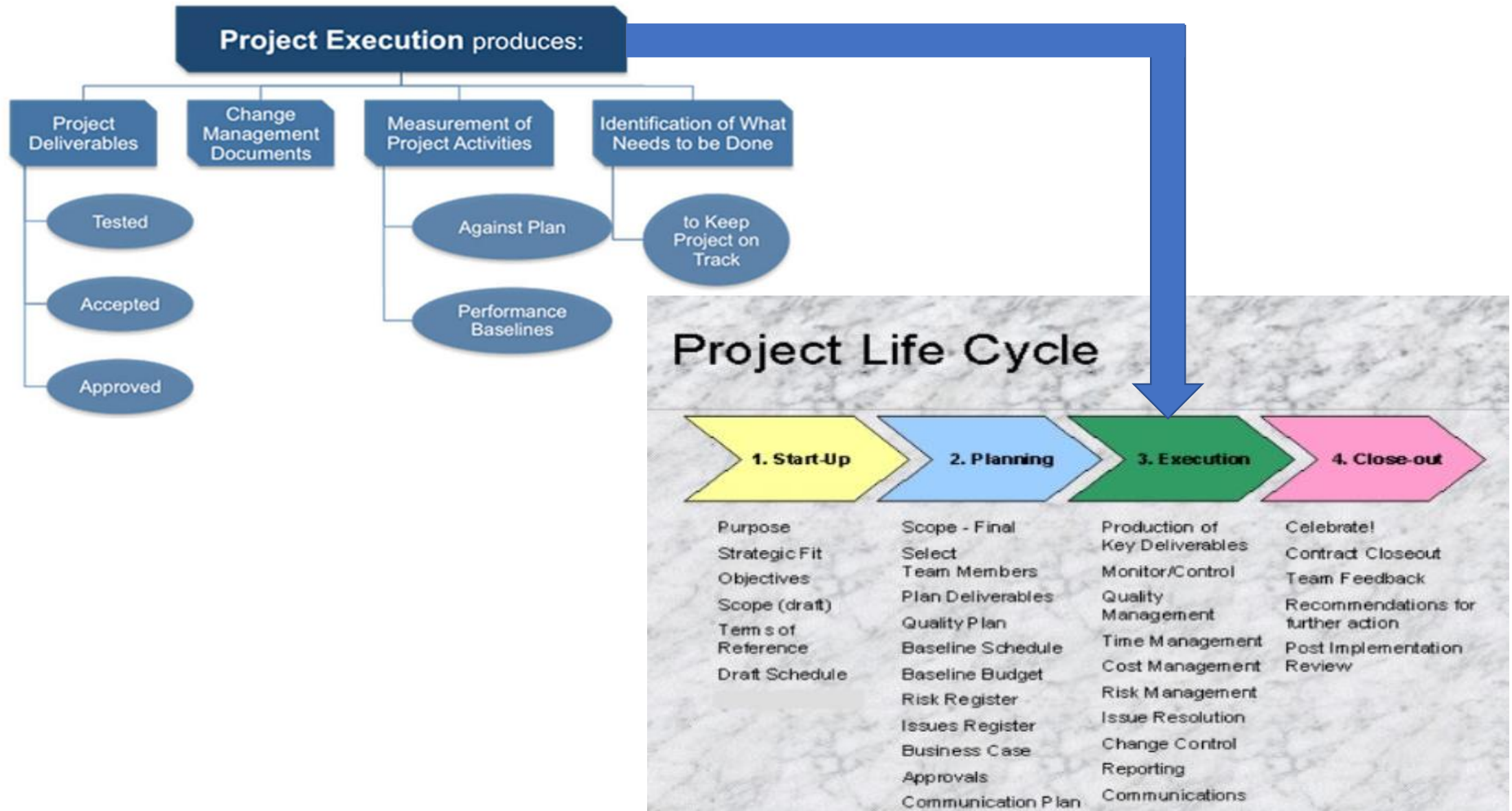
What are included in Project Execution Processes
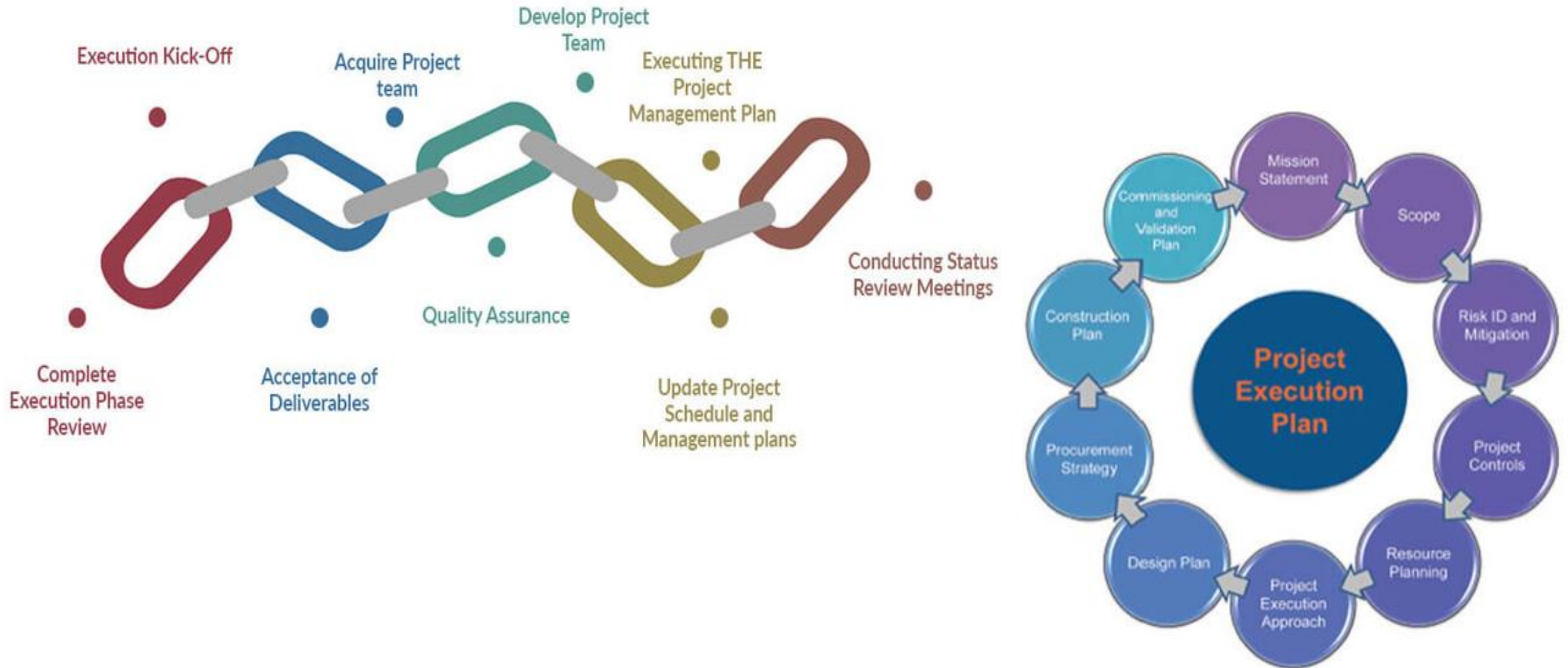
Project Execution Activities

- Progress is **continuously monitored** and appropriate adjustments are made and **recorded as variances** from the original plan.
- During project implementation, people are carrying out the tasks, and progress information is being reported through **regular team meetings.**
- The project manager uses this information **to maintain control** over the direction of the project by comparing the progress reports with the project plan to **measure the performance** of the project activities and **take corrective action** as needed.
  - The first course of action should always be to bring the project back on course (i.e. to return it to the original plan).
  - If that cannot happen, the team should record variations from the original plan and record and publish modifications to the plan.
  - Throughout this step, project sponsors and other **key stakeholders should be kept informed** of the project's status according to the **agreed-on frequency** and **format of communication**.
  - The plan should be updated and published on a regular basis

- Each project deliverable produced should be reviewed for **quality** and measured against the **acceptance criteria.**
- Once all of the deliverables have been produced and the **customer has accepted** the final solution, the project is ready for closure.

Project Execution Phase Activities

Project Execution produces:

- **Project Deliverables**
  - Tested
  - Accepted
  - Approved
- **Change Management Documents**
- **Measurement of Project Activities**
  - Against Plan
  - Performance Baselines
- **Identification of What Needs to be Done**
  - to Keep Project on Track

Project Life Cycle

1. Start-Up	2. Planning	3. Execution	4. Close-out
Purpose	Scope - Final	Production of Key Deliverables	Celebrate!
Strategic Fit	Select Team Members	Monitor/Control	Contract Closeout
Objectives	Plan Deliverables	Quality Management	Team Feedback
Scope (draft)	Quality Plan	Time Management	Recommendations for further action
Terms of Reference	Baseline Schedule	Cost Management	Post Implementation Review
Draft Schedule	Baseline Budget	Risk Management	
	Risk Register	Issue Resolution	
	Issues Register	Change Control	
	Business Case	Reporting	
	Approvals	Communications	
	Communication Plan		

Project Quality Management, Control and Assurance

Quality Management is the process for ensuring that all **project** activities necessary to design, plan and implement a **project** are effective and efficient with respect to the purpose of the objective, fitness for purpose and its performance. ...It is a **continuous** process that starts and ends with the **project**.

3 **Key Quality Management Concepts**
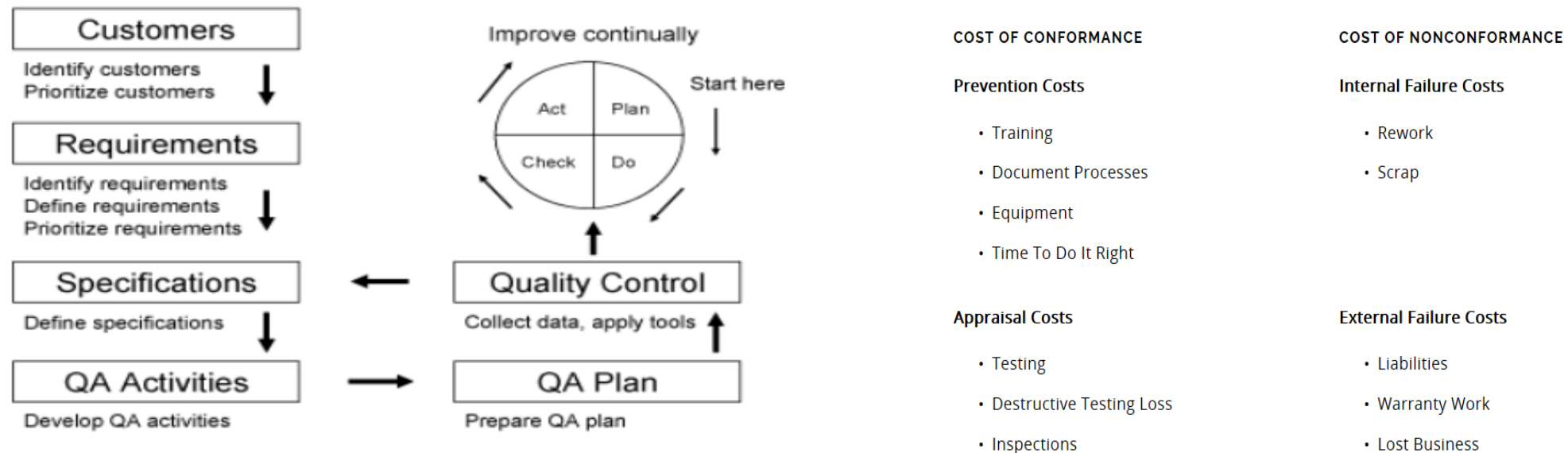
- Customer Satisfaction
- Prevention over Inspection
- Continuous Improvement

Project Quality Management

Customer Satisfaction: it important to make sure the project requirements are met, managing customer expectations is also a critical activity that you need to handle well for your project to succeed.

Prevention over Inspection: This involves process to avoid failures and money spent during and after the project because of failures. These are known as the **Cost of Conformance** and the **Cost of Nonconformance**.

Continuous improvement – It is the ongoing effort to improve your products, services, or processes over time. These improvements can be small, incremental changes or major, breakthrough type changes.

COST OF CONFORMANCE

Prevention Costs

- Training
- Document Processes
- Equipment
- Time To Do It Right

Appraisal Costs

- Testing
- Destructive Testing Loss
- Inspections

COST OF NONCONFORMANCE

Internal Failure Costs

- Rework
- Scrap

External Failure Costs

- Liabilities
- Warranty Work
- Lost Business

Project Quality Management Process

PLAN QUALITY

- **Identify** the quality requirements for both the project and the product
- **Document** how the project can show it is meeting the quality requirements such as Quality Management Plan, quality metrics, quality checklists and a Process Improvement Plan

PERFORM QUALITY ASSURANCE

- This is used to verify that the project processes are sufficient and are being adhered to the project deliverables.
- Have **process checklists** and process for **Project audits** such as Six Sigma and CMMI

PERFORM QUALITY CONTROL

This verifies the product meets the quality requirements. **Peer reviews and testing** are two methods used to perform quality control. (1) **identify** the causes of poor process or product quality and recommending and/or taking action to eliminate them; and (2) **validate** that project deliverables and work meet the requirements specified by key stakeholders necessary for final acceptance

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3rd Party Vendor Management (PM Role)

Features of Vendor Management

- Contract Negotiations
- Job Assignments
- Relationship Management
- Evaluation of Performance
- Payment Dissemination

verifying:

- Whether goods or service being delivered
- Whether it is delivered on time
- Whether invoice charged is for correct quantity
- Whether all conditions of the contract being met
- Whether the relationship between buyer or seller are managed properly

Project Management Methodologies

A project management methodology is a series of **repeatable methods, processes and best practices** that should be followed by project managers when managing a project in order to deliver a higher rate of success.

Methodologies provide project managers with a roadmap of key deliverables to ensure no tasks are missed during the course of the project.

Type of Project Management Methodologies

- Waterfall approach also known as "Traditional
- Agile Approach
- Six Sigma
- Kanban Techniques
- Hybrid Approaches
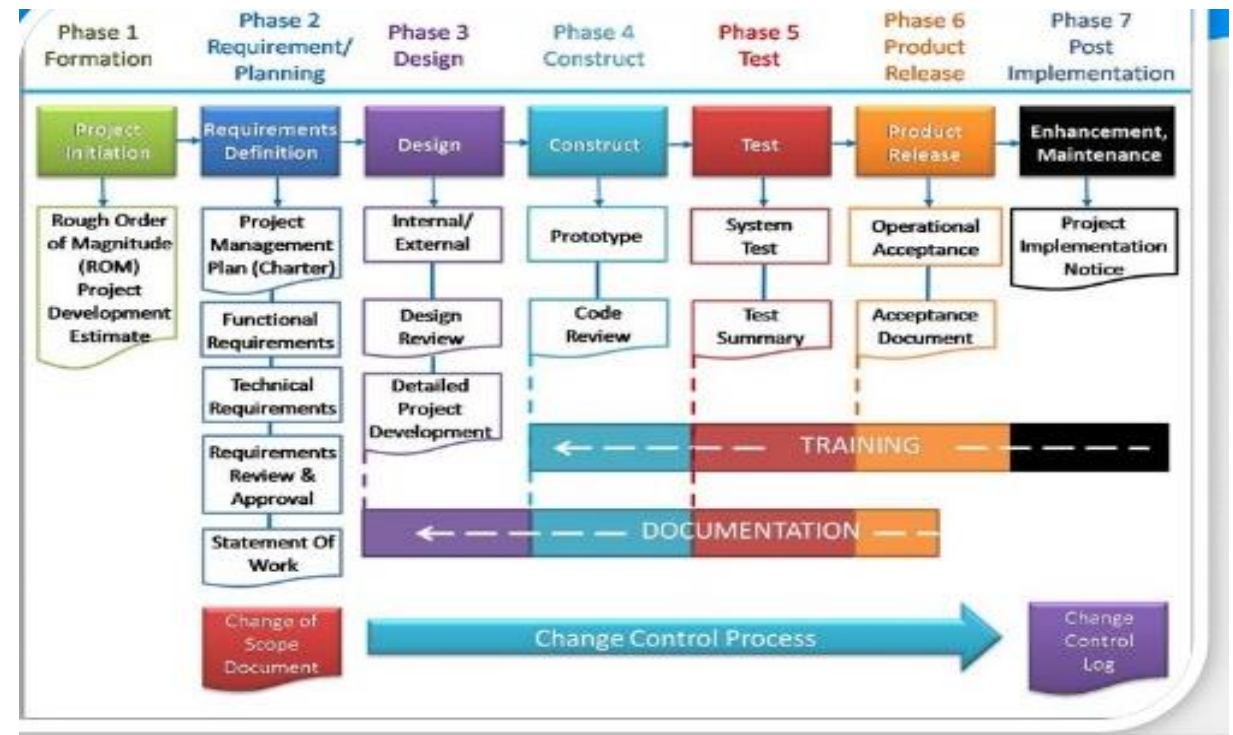
Waterfall "Traditional" Project Management

Waterfall method is a linear approach.

- Each stage of the project is finished before the next stage begins.
- There is typically a "gate" between stages, such as manager review of the output from each stage.
- The **project manager** first **determines the requirements** for the project, and then a project **developer designs** the project, project **members build the project** by putting all the pieces in order and the manager then **integrates the project** into the business for testing and debugging.
- Once the project is ready, management implements the project and a **manager is assigned to maintain** it.
- Project is completed in **distinct stages** and moved step by step toward ultimate release to consumers.

You make a big plan upfront and then execute in a linear fashion, hoping there won't be any changes in the plan

Waterfall "Traditional" Project Management

It is a **sequential software development process,** in which progress is seen as flowing steadily downwards through the phases of requirements gathering, analysis, design, development, unit testing, integration testing, acceptance testing and then release.

It is common in manufacturing and construction industries that is a very structured environment.

When to use the waterfall model:
- Requirements are very well known, clear and fixed.
- Product definition is stable.
- Technology is understood.
- There are no ambiguous requirements
- Ample resources with required expertise are available freely
- The project is short.

Planning — Find scope, solution. Estimate cost, efforts. Identify risks, benefits. — 1

Analysis — Focus on functional requirements. Perform solution analysis, derive end users needs. — 2

Design — Elaborate core specifications, features, functions, and flows to meet the requirements. — 3

Build — Actual development begins here following the design. Code reviews, unit testing are done. — 4

Testing — QA team tests the software for errors/bugs and determines if the solution meets the business goals. — 5

Deploy — After successful testing, software gets deployed in production environment for user acceptance and approval. — 6

Maintain — After software passes all the stages, it enters into the maintenance phase. The vendor here provides support for any future upgrades and bug fixes. — 7

Waterfall "Traditional" Approach

Advantages

- **Simple and easy** to understand and use.
- Easy to manage due to the rigidity of the model – **each phase has specific deliverables** and a review process
- Phases are **processed and completed one at a time**
- Works well for smaller projects where requirements are very well understood
- A schedule can be **set with deadlines** for each stage of development
- Product can proceed through the development process **steadily as fixed**

Disadvantages

- It **does not** allow for much reflection or revision
- It is **not flexible** to changes in customer requirements
- Time is wasted building features that **nobody needs**
- The end user **cannot give feedback** till it's completed coded
- You don't know how **stable** the system is until the end

Agile Methodologies

Instead of phases, projects are **broken down into releases and iterations**. At the end of each iteration you have a **fully functioning system** that could be released.

- The requirements for the project **do not** have to be codified upfront
- Requirements are **prioritized** and **scheduled** for each iteration.
- The requirements are composed of **user stories** that can be **scheduled into a particular release** and **iteration**.

Agile software development methodologies adhere to the same basic principles known as **"Agile Manifesto"**

__Individuals and interactions__ over processes and tools
__Working software__ over comprehensive documentation
Customer __collaboration__ over contract negotiation
Responding to __change__ over following a plan

Agile Project Management and Methodologies

- Scrum
- Kanban / Lean
- Extreme Programming (XP)
- Agile Unified Process
- Dynamic Systems Development Methods (DSDM)
- Featured Driven Development
- Rapid Application Development
- Scaled Agile Framework (SAFe)
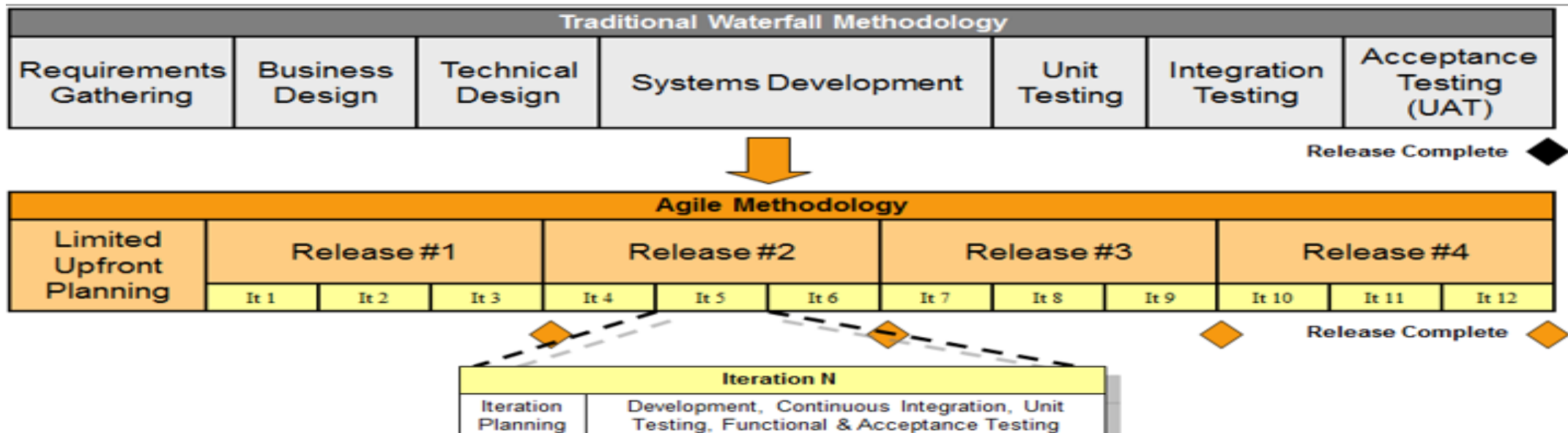
Scrum

Scrum has become one of the 'go-to' techniques for those striving to become Agile.

- It is the most well-known of the Agile methods, and also the most precisely defined which means that there is a lot of documentation and pre-built process for teams that are willing to adopt the methodology completely.
- It specifically described roles, short iterations, tight schedules, daily meetings and an insistence on a release-quality product after each iteration or Sprint.
- Requirements begin as a simple prioritized list of needs with little detail, known as the backlog with only enough of these needs are **pulled from the backlog** to fill a single sprint and to begin their short journey from refinement to tested software

Note:
Scrum can seem so **very foreign to inexperienced teams** that it can be **difficult to achieve early success** unless you have some **in-house knowledge**.
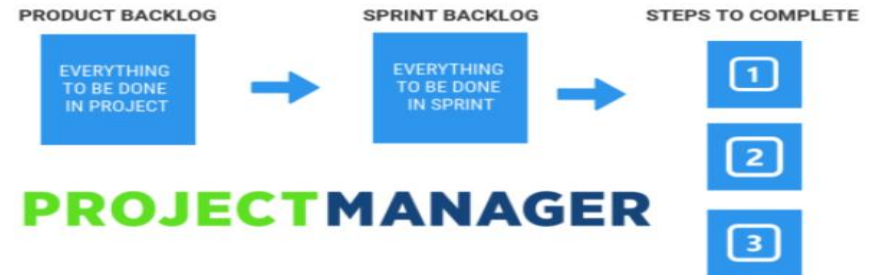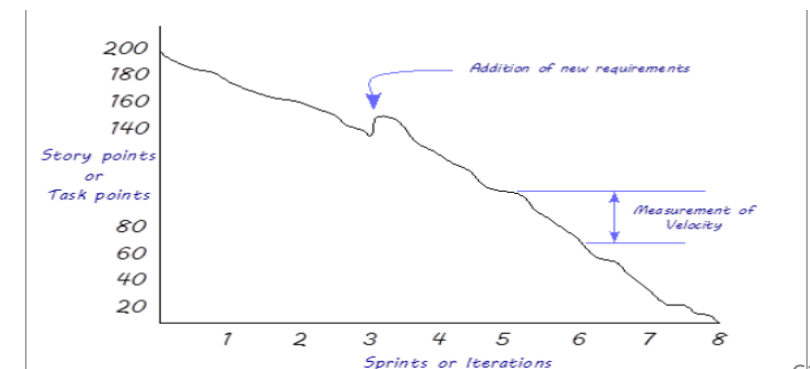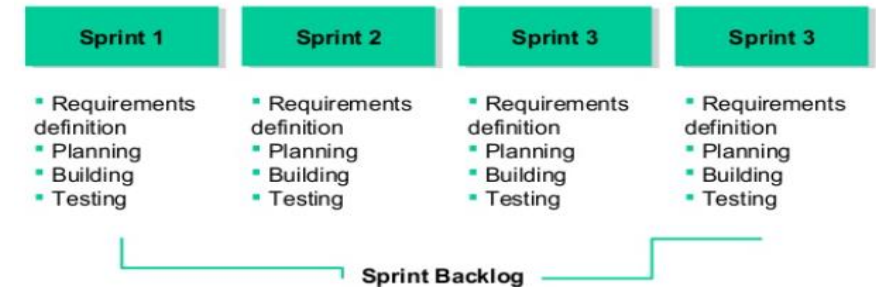
Kanban

Kanban approach has short iterations which mimic a project lifecycle on a small scale, having a distinct beginning and end for each iteration.

- It requires that the software be developed in one large development cycle
- The approach is not iterative but it is incremental
- It has no defined start or end points for individual work items; each can start and end independently from one another.
- Work items have no pre-determined duration. Instead, each phase of the lifecycle has a limited capacity for work at any one time

Kanban Process

- A small work item is created from the **prioritized** and **"not started"** requirements list and then begins the development process, usually with some requirements elaboration.
- A work item is not allowed to move on to the next phase until some capacity opens up ahead. By controlling the number of tasks active at any one time, developers still approach the overall project incrementally which gives the opportunity for Agile principles to be applied.

Requirement / Task / Incident Progress					
Backlog	**Planned**	**In Progress**	**Developed**	**Tested**	**Completed**
User Story	User Story	User Story	TK TK	User Story	User Story
	TK TK TK			TK	TK TK
User Story		User Story	TK TK IN		
	IN	TK		TK	IN IN
User Story		IN			
User Story					
User Story					
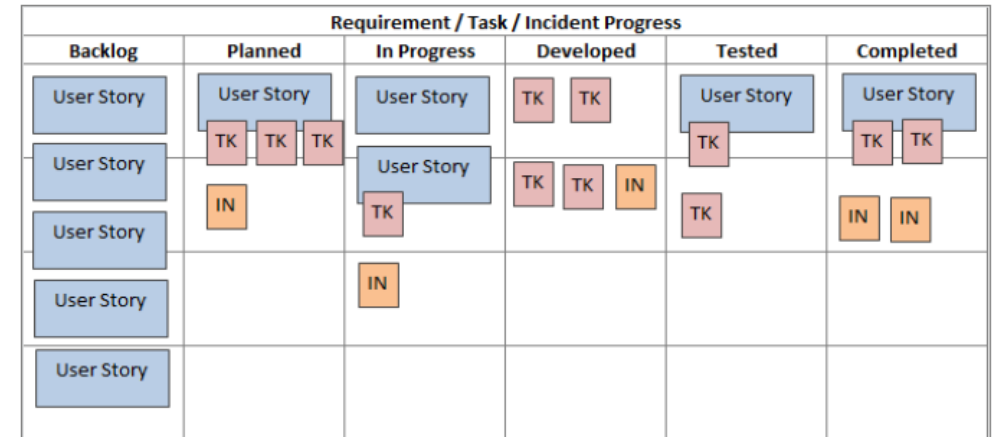
Feature-Driven Development - FDD

Feature-driven Development is implemented iteratively and not according to business needs as might be decided by a Product Owner, but by functional area.

To see how requirements can be organized by functional area, they must be fairly well understood and so a design is created. From the design is derived a **feature list** at which point the iterative implementation cycles can begin.

Feature Driven Development (FDD) Approach

Develop Overall Model	Build Feature List	Plan By Feature	Design By Feature	Build By Feature
		Plan By Feature	Design By Feature	Build By Feature
		Plan By Feature	Design By Feature	Build By Feature
Establish Overall Model		Iterate for Each Feature		
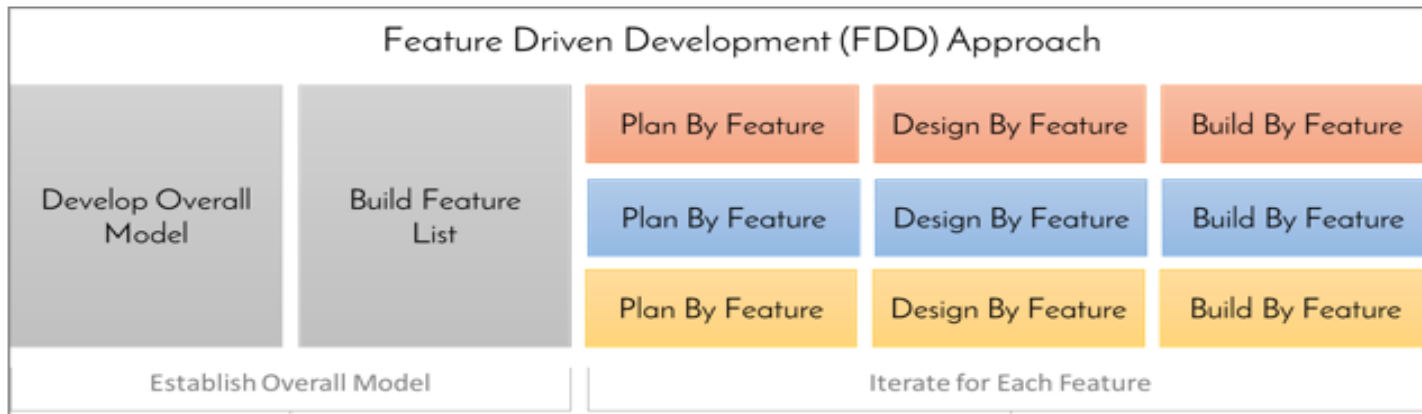
The method for Requirement prioritization used is called **MoSCoW**, offering four simple requirements categories:

- Must have
- Should have
- Could have
- Won't have this time around

Project Monitoring and Controlling Phase

After execution phase, to check the project is on right track, monitoring and controlling phase becomes active. During this phase various changes and reviews to enhance the project performance is done.

Project work involved in this phase:

- This stage involves tracking, reviewing and regulating the progress in order to meet the objective of the project
- It ensures that the deliverables are according to the project management plan
- The main focus of this step is to identify any changes made from the point of project management plan to determine appropriate preventive action

The inputs for this stage includes:

- Project management plan
- Performance reports
- Cost forecasts
- Schedule forecasts, Actual Review and remaining
- Validate changes
- Management of project risks and issues
- Management of Quality and success criteria

Project Progress Tracking and Status Reporting

Project status reporting is a regular, formalized **report** on **project** progress against the **project** plan.

- It keeps **project** stakeholders informed of critical aspects of **project** health such as schedule, issues, scope, resources, cost, etc.
- It allows management to take action to address **project** issues and risks.

A **progress report** is a document that explains in detail how you far you have gone towards the completion of a project.

- It outlines the **activities** you have carried out, the **tasks** you have completed, and the **milestones** you have reached against your project plan.
- It is used to communicate the current status of an ongoing project, whereas a status report is an update on the entire range of operations of a department or division of an organization.
- The frequency can either be weekly or bi- weekly. Comms for this is agreed as part of the communication plan

Monthly Status Report provides information on the progress of a project to stakeholders. It is a synopsis of the **month's** activities, and highlights changes to the project.

- **It is** required at the end of every **month**, and should be prepared during the last week of the **month**.

How to Write a Weekly Status Report: Best Practices

- Plan What to Include in Weekly Report
- Take the time to consider what the reader of your report might want to know
- Be Straightforward in Reporting (Use plain and simple language in reporting)
- Consider to keep a Journal of Daily Activities
- Ask questions
- Focus on results, not activities
- Include a brief summary:
    - A view of your progress against milestones
    - Key issues you've encountered,
    - Future action steps.
- Include charts or other visual elements.
- Keep it short, and have extra information in your back pocket
- Reports should be clear and concise
- They should not ramble on about standard, weekly tasks, and contain everything you have done during the week
- It should be no longer than a page if you're writing them out physically, and no more than 3-10 items if you are using software
- Know Who Will Read the Weekly Report
- Present the Data and Information According to Its Importance

Status Progress Tracking Checklist

Project Status Report Checklist

EXECUTIVE OVERVIEW
- Project identifiers (e.g., name)
- Project summary
- Overall health & percent complete

MILESTONES & DELIVERABLES
- Planned start date, planned completion date
- Actual start date, actual completion date
- Planned budget, cost to date

ISSUE, RISK & CHANGE MANAGEMENT
- Open issues
- Open risks
- Open change requests

TEAM PROGRESS
- Tasks scheduled for this week
- Tasks completed last week
- Tasks scheduled for next week

Project Status Report

Project Name	Rebuilt techno-pm.com	Project Summary - You can put a brief update about the project. Example – The quality assurance is delayed as the tester is on vacation. The development is on track.
Project Code	XYZ	
Project Manager	Swapnil Wale	
Status Date	12-Jan-2015	Techno-PM *Project Management Templates*

Project Key Parameters				Comments
Schedule	On-Track /	At-Risk /	Off-track	The project is 45% complete.
Quality	On-Track /	At-Risk /	Off-track	Test case prep is done. Execution in progress.
Scope	On-Track /	At-Risk /	Off-track	All ok.
Budget	On-Track /	At-Risk /	Off-track	Total : $400,000, Spent : $200,00, Remaining : $200,000
Risks	On-Track /	At-Risk /	Off-track	No major risks.
Issues	On-Track /	At-Risk /	Off-track	No major issues.

Techno-PM *Project Management Templates*

Project Schedule

Today

21 December   11 February   1 Asi

Analysis Fri 28 Nov - Thu

Build Fri 19 Dec - Thu 15 Jan

Test Case Library

Testing Fri 5 Feb - Thu 12 Mar

Implement Fri 13 Mar - Thu

Close Fri 3 Apr - Thu 23
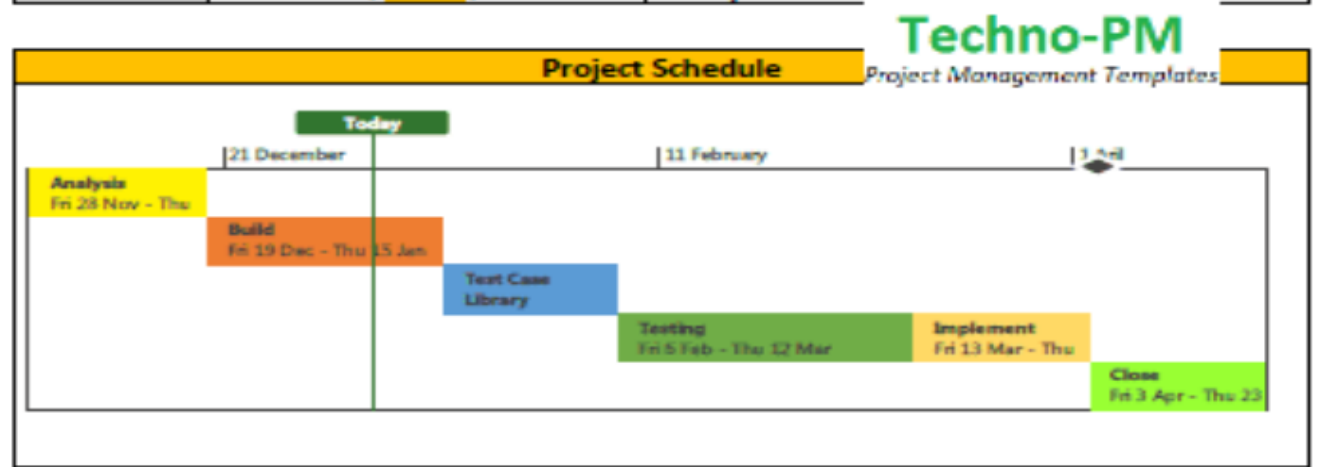
Project Risks and Issues (Top 5)

Risk / Issue	Risk / Issue Description	Owner	Status
Risk 1	There is something wrong in the project.	Myself	open
Risk 1	There is something wrong in the project.	Myself	open

Project Closure Phase

Project can either be completed or terminated. Project completion is measured whereby all project requirements (Scope) has been completed and formally approved.

During the final closure, or completion phase, the emphasis is on:

- Releasing the final deliverables to the customer
- Handing over project documentation to the business
- Terminating supplier contract
- Releasing project resources
- communicating the closure of the project to all stakeholders

The last remaining step is to:

- Conduct lessons-learned studies to examine what went well and what didn't. In most cases termed, Post Implementation Review (PIR)
- Through this type of analysis, the wisdom of experience is transferred back to the project organization, which will help future project teams.
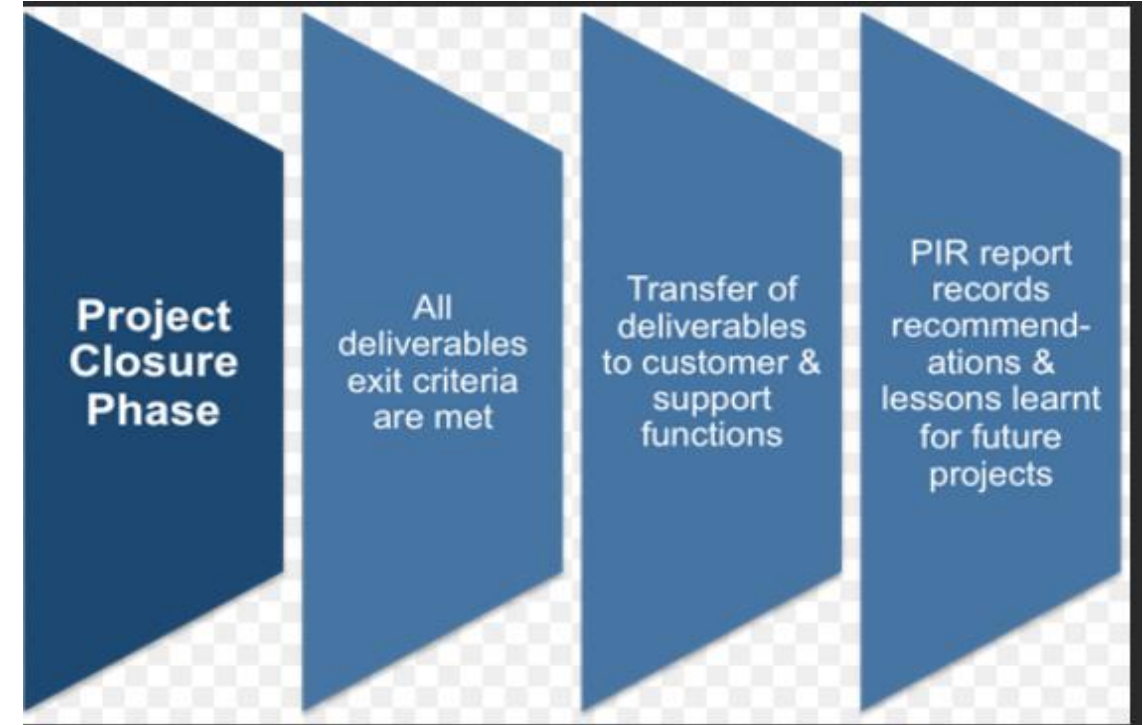
Project Closure

- Making certain that all documents and deliverables are up-to-date and that all issues are resolved
- Confirming the delivery and formal acceptance of deliverables by the customer
- Ensuring that all costs are charged to the project
- Closing project accounts
- Reassigning personnel
- Reallocating project facilities, equipment, and other resources
- Elaborating the final project reports as required by organizational policies

Finally, confirm **Formal Final Acceptance** of the Project (deliverables) from the project sponsor.

Product
- Confirm product
- Close procure-ments
- Accept product

Project
- Close finances
- Report closure to stake-holders

Documents
- Update project records
- Archive project records

Project Closure - Why?

It is in your best interest as a project manager to close it officially.

1. You will show your team (and your boss) that you are competent and professional.
2. You'll probably glean at least 2 things, usually more, that you can take with you to your next project to make it more successful.
3. You minimize the chance of problems resurfacing from this project down the road and slowing you down.
4. You create the opportunity for your team to tweak their process and structure before moving onto the next project.
5. You'll end up with a final project report that helps you make updates to your portfolios, processes and assets.

PROJECT CLOSURE CHECKLIST

☐ No items left over from any plans or timelines that weren't completed.

☐ All items left "for later" are taken care of.

☐ A "project is done" email/announcement has gone out internally.

☐ A "project is done" email has gone to the client with important info.

☐ Project retrospective is done.

☐ Feedback is collected from client.

☐ Your teammates have been thanked appropriately by you personally.

☐ You've followed all company-required closure procedures.

☐ You've given yourself the highest high-five you can give - outside, in the fresh air, while clearing your head.

Project Closure Phase Document Checks

Inputs	Tools & Techniques	Outputs

.1 Project charter
.2 Project management plan
  • All components
.3 Project documents
  • Assumption log
  • Basis of estimates
  • Change log
  • Issue log
  • Lessons learned register
  • Milestone list
  • Project communications
  • Quality control measurements
  • Quality reports
  • Requirements documentation
  • Risk register
  • Risk report
.4 Accepted deliverables
.5 Business documents
  • Business case
  • Benefits management plan
.6 Agreements
.7 Procurement documentation
.8 Organizational process assets
	.1 Expert judgment
	.2 Data analysis
	  • Document analysis
	  • Regression analysis
	  • Trend analysis
	  • Variance analysis
	.3 Meetings
		.1 Project documents updates
		  • Lessons learned register
		.2 Final product, service, or result transition
		.3 Final report
		.4 Organizational process assets updates

Project Management Certifications

- **Training**
  - Association Project Management Qualification (APMQ)
  - PMP Fundamentals Qualification
  - PRINCE2 Foundation and Practitioner
  - MSc Project Management
  - CMI Diploma in Project Management
  - Diploma in Leadership and Management
  - Youtube and Internet

Project Deliverables and Samples

Software Development Life Cycle (SDLC)

Phase	Deliverable type	Lead/ Owner
Planning	Project Charter, Project Plan, RAID Log High Level IT or Business Requirement, Budget Profile, Resource Profile etc.	Project Mgr
Analysis	Detailed Requirement, Detailed Plan, Approved Project Charter, Budget, Resource and High Level Solution Architecture Design etc.	Business Analyst
Design	Detailed Design Document (SAD), Approved Detailed Requirement etc.	Solution or Technical Architect
Go live/ Release	Release notes etc.	Project Mgr/ Release Mgr
Transition and Closure	Post Implementation Review (PIR), Operation and Acceptance Document (OAD) etc	Project Mgr

SDLC Activity	SDLC Deliverables
Requirements	Requirements Specification
Functional Specification Software Design Specification	Detailed Design Specification
Software Coding and Design	Software Code Design and Code Reviews Unit / Module Test Plans
Software Testing	System and Installation Test Plans
Configuration Management	Configuration Item List
Software Release	Configuration Item List Release Notes Software Code Detailed Design Specification
Development System Deployment	Executed Installation Test Plan
Production System Deployment	Executed Installation Test Plan
Software ownership, maintenance and revision – pre Software Acceptance Test (SAT)	Refer to SDLC deliverables defined herein
Software ownership, maintenance and revision – post (SAT)	Refer to SDLC deliverables defined herein

Sample Agile (Sprint Planning)

Status Report Templates

Excel Project Status Report Template

https://www.techno-pm.com/p/project-status-report-template-free.html

MASTER EXCEL PROJECT TRACKER