

PMI – Project Management Ready

Project Management Fundamentals: <https://www.youtube.com/watch?v=6LJLfRfrts>

War Room – meeting space to co-locate all stakeholders in a meeting

Steps to forming a team:

1. Forming
2. Storming
3. Norming
4. Performing
5. Adjourning

Scrum Sprint Parts:

- **Sprint Planning**- A team planning meeting that determines what to complete in the coming sprint.
- **Sprint Backlog** - list of tasks identified by the Scrum team to be completed during the sprint – commonly done on a spreadsheet. **This is an output/document.**
- **Sprint Stand-Ups/Daily Scrum** – Informal daily meeting with core team where each person says what they did yesterday, today, and issues they're having
- **Sprint Demo**- A sharing meeting where the team shows what they've shipped in that sprint.
- **Sprint Reviews** - informal meeting to determine if definition of done/acceptance criteria met
- **Sprint Retrospective** - recurring meetings held at the end of the sprint to review issues in the sprint process itself

Portfolio Management- The centralized management of one or more portfolios to achieve strategic objectives. A portfolio is a grouping of projects (related or not), programs, subsidiary portfolios, and operations managed to achieve a strategic objective. It considers every project or potential project and its potential to achieve business goals. The objective of portfolio management is to effectively balance the implementation of change initiatives with the potential return on investment.

Program Management - a group of **related projects** managed in a coordinated manner to obtain benefits not available from managing them individually.

Project Charter - a document, issued by the project initiator or sponsor, that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities.

Story Points - units of measure for expressing an estimate of the overall effort required to fully implement a product backlog item or any other piece of work. Teams assign story points relative to work complexity, the amount of work, and risk or uncertainty.

Gantt Chart - illustrates a project plan. It typically includes two sections: the left side outlines a list of tasks, while the right side has a timeline with schedule bars that visualize work.

Project Scope- The work performed to deliver a product, service, or results with specified features and functions. Helps determine specific goals, tasks, costs, and deadlines for the project.

Project Constraints – Scope, Time, Cost.

Scope Baseline - The approved version of a scope statement, work breakdown structure (WBS).

Network Diagram- Diagram showing activities and events of a project.

Work Breakdown Structure (WBS) – A hierarchical diagram decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables.

Work Breakdown Structure Dictionary – Document with detail project info (deliverables, schedule, etc).

Stakeholder Register- Includes names, titles, projects, types, communication, expectations.

In Agile – There are no project managers. There is:

- **Scrum Master** - leads team & supports owner by relaying updates to the team
- **Product Owner** - prioritizes work and manage the product backlog

Projectized Organization Structure – Project manager has FULL (the most) authority on task assignments

Critical Path – The sequence of activities that represents the longest path through a project, which determines the shortest possible duration. Zero total float. Any delays in critical tasks will delay the rest of the project.

Change Management Plan- A component of the project management plan that establishes the change control board, documents the extent of its authority, and describes how the change control system will be implemented. Defines the process to manage change on a project when it occurs.

Change Management Process – 1. Request for Change, 2. Impact Analysis, 3. Approve or Deny, 4. Implement Change, 5. Review/Reporting.

User Story – Written in the perspective of the end user or customer – it is a general explanation of a software feature.

Communication Channels – Calculated by the number of people involved is multiplied with itself after subtraction of 1 and subsequently divided by 2. For example: 10 stakeholders would be 45 potential communication channels. For 15 people there would be 105 channels ($15 * 14 / 2 = 105$).

Product Roadmap - A product roadmap is a high-level visual summary that maps out the vision and direction of your product offering over time. A product roadmap communicates the why and what behind what you're building.

Product Backlog - a prioritized list of work/deliverables for the development team that is derived from the roadmap and its requirements. The most important items are shown at the top

Portfolio Management - leadership discipline that drives strategic execution and maximizes business value delivery through the selection, optimization, and **oversight of project investments** which align to business goals and strategies

Kanban Board: 1. Backlog, 2. Ready, 3. Coding, 4. Testing/Review, 5. Approval, 6. **Done**

Issue vs. Risk- An “issue” already occurred and a “risk” is a potential issue that may or may not happen and can impact the project positively or negatively.

Task Decomposition- The division of a larger (root) task into smaller, more manageable elements or sub-tasks to deal with the root task at the lowest possible level and therefore with higher simplicity.

Scrumban - hybrid of Scrum and Kanban. Provides the structure of Scrum with the flexibility and visualization of Kanban. Includes a Scrumban board which is similar to a Kanban board.

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 Principles: Welcome changing requirements, even late in development, Customer Satisfaction is #1 throughout the delivery, face to face convo is most effective way to convey info, projects are built around motivated individuals.

Traditional Project Management – fixed process, everything is pre-planned. Documentation of a complete set of requirements.

Requirements traceability matrix (RTM) - A grid that links product requirements from their origin to the deliverables that satisfy them. A tool that helps identify and maintain the status of the project’s requirements and deliverables.

Risk Register –A repository in which outputs of risk management processes are recorded. Includes potential risks, description, impact, response, prioritize, and assign owner.

Brainstorming – A business analysis technique and group activity to generate new ideas, identify a problem’s root causes, and come up with solutions to complex business problems.

MoSCoW – Stands for Must or Should, Could or Would. Determines if the item a must-have or a should-have? Is the demand something that could make the product better, or is it something that would be a good idea in the future?

Requirements – Business Requirements- scope of project/business objectives- higher level needs, **User Requirements-**user goals, inputs & outputs, **System Requirements-** functional (what the system does) & non-functional-how well the system does it.

Quality Requirement - non-functional requirement which is a condition or capability to be used to assess conformance by validating the acceptability of an attribute for the quality of a result.

Acceptance Criteria - specific and defined list of conditions that must be met before a project has been considered completed and the project deliverables can and will be accepted by the assigning party.

Non-Functional Requirement Analysis - used when there is a change in the technical solution to a particular problem. The primary aim of the business analyst is ensuring system performance and requirements of data storage

Requirement Analysis – The use of brainstorming, shadowing, and prototypes. Involves interviews for understanding the basic intention of requirements. Interviews include questions, captures, interprets, and workshops.

Business Case – A documented economic feasibility study used to establish the validity of the benefits of a selected component lacking sufficient definition and that is used as a basis for the authorization of further project management activities (a way to explain why you want and need to start your project).

Deliverable - any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project.

RACI – Responsible, Accountable, Consult, Inform. Helps define the stakeholder on a project and their overall involvement. A responsibility assignment chart that maps out every task, milestone or key decision involved in completing a project and assigns which roles are Responsible for each action item, which personnel are Accountable, and, where appropriate, who needs to be Consulted or Informed.

Meetings: Project Kickoff (initiate project), Project Status (status review), Project Stakeholder Meetings, Project Change Control (bring issues/solutions), Project Review (end of project meeting – closing phase).

Tools related to activities and status: Gantt Chart/Project Plan, Network Diagram, Requirements Traceability Matrix, Critical Path Method, Work Breakdown Structure.

Communications Management Plan - A component of the project, program, or portfolio management plan that describes how, when, and by whom information will be administered and disseminated.

Finish-to-Start – when a successor activity cannot start until a predecessor activity has finished.

Forward Pass - Technique for calculating the early start and early finish dates by working forward through the schedule model from the project start date or a given point in time.

Backward Pass - Technique for calculating the late start and late finish dates by working backward through the schedule model from the project end date.

Schedule Baseline- The approved version of a schedule model that can be changed using formal change control procedures and is used as the basis for comparison to actual results.

Three-Point Estimating- A technique used to estimate cost or duration by applying an average or weighted average of optimistic, pessimistic, and most likely estimates when there is uncertainty with the individual activity estimates.