* **Project Management Plan Steps and Processes**

Project planning is performed through a series of six steps:

* + Planning:
    - Collect Requirements
    - Roles & responsibilities
    - Define Scope & Create WBS
  + Monitoring & Controlling:
    - Validate Scope
    - Manage & Control Scope
* **Project Scope Statement purpose and inclusion of what areas?**

The project scope statement is a short statement that must describe the project, typically in a few sentences. Must list the problems/opportunities the project seeks to solve and how they affect the business.

* **Different methodologies used and 5 project-specific drivers.**
  + **Waterfall**

Follows a linear and sequential approach, where each step must be completed before moving on to the next. Emphasizes upfront planning and documentation, with little flexibility.

* + **Agile**

There’s more than one agile methodology, such as Scrum and Kanban. They focus on adaptive planning, collaboration and delivering working increments. Encourage flexibility and responsiveness to changes and customer feedback. Include sprints (typically of 2 weeks).

* + **Lean**

The goal of lean is to maximize value and minimize waste. Originated in the 80s when used by Toyota to optimize efficiency.

* + **PRINCE2 (Projects in Controlled Environments)**

Is a process-based methodology that provides a structured approach to project management, with clearly defined roles, stages, and deliverables. Emphasizes project control and risk management through 7 principles:

* + - There is an existing business justification.
    - Team learning must take place throughout the project.
    - All roles are clearly defined.
    - All work is planned in stages.
    - Board members manage issues by exception.
    - Quality must be a continuous focus.
    - The approach is tailored to each project.
  + **Six Sigma**

Focuses on reducing defects and improving quality. Uses statistical methods and data-driven approaches to minimize variations and achieve process improvements.

* + **Critical Path Method**

Is a technique for planning and scheduling activities in a project. It identifies the critical path and helps optimizing timelines and identifying activities that could cause delay.

* + **PRISM (Projects Integrating Sustainable Methods)**

Incorporates sustainability principles into project planning and execution. It aims to balance environmental, social, and economic considerations throughout the project lifecycle.

* **Know one methodology well – what it is and when is it used.**

**Agile**

**What it is**

Is an iterative and incremental approach to project management that prioritizes customer collaboration, responding to change and delivering functional deliverables quickly.

**When it’s used**

Used mainly for software development projects but can be applied to other projects. It’s suitable for projects where requirements are likely to change, and flexibility and adaptability are crucial.

**Key practices**

Scrum – is a popular Agile framework that involves organizing work into sprints.

Sprints – periods of 1 to 4 weeks (usually 2 weeks) that the project is divided into. Each sprint has specific tasks to be completed within its time.

Sprint planning – Meeting before every sprint to plan and define what tasks will be part of the sprint.

Daily – Meeting that occurs every day during the sprint between the team to update the progress and problems faced by each one.

Sprint review – meeting that occurs at the end of each sprint to review the outcomes of the sprint and evaluate if the tasks were delivered as expected.

* **Risk Management Processes (5)**
  + Risk Identification
  + Risk Analysis/Assessment (probability of occurrence and potential impact)
  + Prioritize the Risks
  + Risk Response
  + Risk Monitoring and Control
* **Six Sigma – know target for perfection is the achievement of?**

Six Sigma's target for perfection is the achievement of no more than 3.4 defects, errors, or mistakes per million opportunities.

* **Lean processes**

Lean processes focus on streamlining business processes to eliminate waste and make things more efficient.

* **Lean Six Sigma & five process improvement stages.**

Lean Six Sigma combines the principles and process of Six Sigma with the focus of lean processes. That is, it looks at how to improve business processes to create a leaner, more waste-free business.

Five stages of process improvement:

* + Definition
  + Measurement
  + Analysis
  + Improvement
  + Control
* **Probability-Impact Matrix Tool purpose and use**

It is used to assess and prioritize risks based on their probability and impact.

* **Role of Project Manager**

Planning, executing, monitoring, controlling, and closing projects.

* **Progressive Elaboration**

Refining project details as the project progresses and more information becomes available.

* **Acceptance Criteria – articulated at what stage and know what it may include.**

Acceptance Criteria are typically articulated during project planning and may include specific conditions that must be met for deliverables to be accepted.

* **Project Exclusion**

Everything that explicitly not included in the project.

* **Risk Management – what is it?**

Is the series of processes involved in dealing with uncertain events involving a project.

* **Project Constraints**

What prevent the project to growing further, like scope, time, budget, and resource limitations, quality requirements and risks.

* **Response Strategies & Risk Areas**

Response strategies are: Mitigate, avoid, transfer, accept or exploit.

* **Types of Risks**

Positive or negative. Positive risks are called opportunities and have a good outcome, while negative risks are called threats and have a negative outcome.

* **Transferring Risk/Tools Used**

Risks can be transferred so they don’t need to be mitigated or accepted by the project team. One of the main tools for that is insurance, where a third party is paid to accept the risk.

* **WBS purpose**

The purpose of the **Work Breakdown Structure** is to break down the project into smaller tasks, making it more manageable. It is used to break the project down into lower and lower levels of detail to reveal exactly what work will need to be done to complete the project.

* **Project milestone and deliverable (difference)**  
  + **Milestones** are significant steps towards the completion of the project and serve as reference points to evaluate the progress of the project.
  + **Deliverables** are measurable and verifiable outcomes or objects that must be created according to the terms of an agreement.