

Classnotes

1. Project Management Fundamentals
2. Comparing Agile vs. Waterfall

1. Project Management Fundamentals - Step 1 & 2

"The best way to learn project Management is planning a real project, live, together, on-screen."

"APM - Association of Project Managers"

"PMI - Project Management Institute"

"The 12 step process works for: Every project, regardless of size, industry or timeframe"

"Step 1 is all about deciding what is in and out of scope, to think about all the steps, to organize a kickoff meeting with all the stakeholders, to decide 3 circles, to decide a deadline and to define your "key driver" which is your priority constraint".

"Brainstorming tool works great for Step 2"

"Tasks should be divided into categories to list your tree of tasks or work breakdown structure"

"At Step 2 you should ask experts and have enough levels of detail to make the next steps easier (budgeting for example)"

"20-30 tasks are recommended for a project".

1. Project Management Fundamentals - Step 3

"Establishing tasks' order: one of the low-tech ways to do it is using post-its"

"Best practice on Step 3 - The post-it technique (it works better as a team activity):

- write one task per note
- diamonds are the events and have no duration
- start putting them in whiteboard
- first tasks with no predecessors
- put them in order with no arrows
- arrange the task left to right in dependency order
- it's ok to change the tasks while doing it (divide it)
- add dependency arrows (they show you can't do the activity until the predecessor is done, every task must have an arrow in and out (except the initial tasks))
- put the activities early as possible
- try not to cross your arrows
- add a finish event

1. Project Management Fundamentals - Step 4

"We put a safety margin to have in mind that if something goes wrong while executing the project we can have the holistic vision about adjusting the final delivery or we put extra resources to do it quicker or reduce the quality of the plan or we overlaps sometimes to do it quicker. Safety margin will decrease the risks of finishing late."

"The best time to do a Gantt Chart - You cannot jump to the Gantt chart before establishing task orders."

"Step 4 - estimating times: you must be honest and specific"

"There are two types of "time": hours worked and elapsed time (use this)"

"Unit of time to consider: Weeks not days because days can be harder to measure for working periods: recommended hours of work and weeks for elapsed time;"

"Identify the critical path or the longest and slowest path in time (draw the critical path in red): The sequence of activities which add up to the longest overall duration."

"Planning means you set an achievable deadline. Planning is the key moment!"

"Safety margin - It's recommended to add half of the worst-case scenario".

1. Project Management Fundamentals - Step 5 & 6

"Step 5 - instead of adding the safety margin at the end of the project distribute it along the critical path. That'll make you more reliable"

"Step 5 - 3 ways to speed up your plan:

- To spend more
- To push your quality down (doing fewer subtasks or reducing the quality of them)
- Overlapping tasks (one of the best exits: it means risk but saves time)

"Step 5 - the critical path is the only way to affect the overall time."

"Step 6: It's highly recommended to have a second Gantt chart (sub-Gantt chart) if your number of tasks is higher than 30 or if a task is too complicated."

The "Gantt of Gantts" ensure you can handle all your different projects at the same time.

1. Project Management Fundamentals - Step 6 & 7

"Step 6: Gantt charts are a visual representation of the plan:

- you can allocate names for the responsible for each task
- add worked hours per week for each task
- sum-up your worked hours for each week to check how busy you are throughout the project, you can see where your time is going summing up all the hours for every task and maybe delegate, consider moving floating tasks to get a lighter workload."

"Step 6: Gantt chart for costs: For every task, you can assume how much your time would cost and if outsourcing is possible."

"Step 6: in a Gantt chart you can check on forgotten tasks, realistic budget, time promised, risks. It's great for communication for team, boss, contractors, stakeholders and also to plan resources (time and money), checking/monitoring progress.

"Step 7: Resources - limiting fact, make sure the hours required are realistic, note which tasks are waiting for tasks or outsourced, check non-working times such as holidays.

1. Project Management Fundamentals - Step 8 & 9

"Gantt of all your Gantts can be useful to ensure you can handle all your different projects at the same time".

"Step 8 - Risk Analysis - is all about what do we do to prevent something goes wrong and what do we do if something goes wrong. Good project managers are "pessimists" because they need to be ahead of everything, covered of all the things that might go wrong."

"Step 8: look at other types of risks like the weather. try to think as many issues as possible, involve other people, experts, etc.

"Step 8: how likely and how serious are the risks? Think about ways of reducing risks' likelihood or severity. Consider contingencies if it's hard to mitigate."

"Step 9: while you're colouring your Gantt chart and monitoring the execution of the project you can ensure no tasks get forgotten. Have a "now" line! to see and fix the ripple effects;"

"You can draw a Gantt chart in the middle of the project to know where you are"

1. Project Management Fundamentals - Step 10, 11 & 12

"Step 10: monitor costs: it can be easy and expensive to overspend on projects if you're over budgeting you might decide to change the scope of the plan.

"The Gantt chart helps you with monitoring cash-flow."

"Step 11 - Adjusting the plan - can be an "unpleasant step": be clear with your client and manage expectations, revise the plan choosing which key drivers you'll compromise on:

- To pay extra money to catch up the time;
- To reduce quality to save time;
- To overlap tasks (risk to the project).

"Step 12: Reviewing a project

- Lessons learned: what was good, what was bad, what could be done better or differently?
- Lessons learned in quality cost/time.
- Noticing the differences between the original Gantt and the real one to gain experience and a realistic approach to the next projects.

2. Comparing Agile vs. Waterfall

"Agile Manifesto: a list of 4 core values that define an iterative approach to project management."

"Agile break up things into small chunks and works best for Software projects"

"It's better to look at short-term plans and be flexible"

"In agile you need to trust your Gantt and balance the cost of planning".

"The most important feature on a project is an important question to ask a client"

"Waterfall works better if the deadline is very strict and the specification is clear"

"During the planning in Waterfall you'll need to set a fixed budget and timescale".

"It's harder to see all the projects together in Agile approach."