SOFTWARE PROJECT MANAGEMENT

PROJECT MANAGEMENT STEPS

Project Management is just another process within an organization
A process is a workflow characterized by steps and roles
We will see the main steps common to all the projects

Forecast

At the beginning you need to understand what the customer want, what you can do and how you can do
You need to brainstorm with yourself, with your team and with your stakeholders and/or customer
Don't rush through this phase
Iterate on your understanding of the problem space, and potential solutions, until you're confident
In this phase the following should be done…

Prepare the business case

A business case is at the heart of any project and outlines the justification for undertaking the project
Talk to your target customers so you fully understand the problem space
When building a business case for your project, focus on what you want the customer to be able to do
Leave the specifics of how for when you brainstorm solutions with your team

Prepare the business case

Projects require an investment of not just money, but time and effort
The key question a business case must answer is therefore:

is this project worth it?

In simple terms, the purpose of a business case is to weigh the costs of undertaking the project against the expected benefits of the project once completed

Prepare the business case

The features of a project business case will often include the following elements:

Strategy

Options

Expected benefits and timescales

Costs

Return on Investment

Risks

Create and organize the project team

Gather people with the skills you'll need to solve the problem
Aim for a multi-disciplinary team with a variety of backgrounds and problem-solving styles
Research shows diverse teams deliver better results
Delaying the project's start by a couple weeks for the sake of getting the right team may prove worthwhile

Define the quality

Agree on measurable outcomes and metrics to track your progress toward them
These have to be party of your specification document

Brainstorm solutions

Think about specific solutions, how you would implement them, and how the customer will interact with the final product
Involve your team and ask them to support you on this

Define the quality

Agree on measurable outcomes and metrics to track your progress toward them
These have to be party of your specification document

Prototype and test

Depending on the nature of your project, a prototype could be anything from flowcharts to a prototype or a sketch
Put it in front of your target customers and stakeholders for early feedback
This is the ideal time to fail and adapt

Plan

In this phase you already defined what you have to do in order to realize your final output
In this phase the following should be done…

Finalize the project scope

Define the priorities in the project
Define what are the risks and the critical points
Define the options and the solution scenarios
Define the strategies

Understand and manage dependencies

Does your project depend on work, resources, or assets from outside the core project team?
Map those out, noting who will own each piece of work and when they're available to do it
Even if you can't resolve bottlenecks at this stage, you need to identify them and factor them into the project planning process

Break down your project

Break down the plan into phases and activities and distribute them on the timeline to verify when you can achieve your goals
With scope agreed upon and dependencies understood, break the project plan down into discrete pieces of work, and estimate the time and effort required for each
From there, you can project when you'll hit major milestones and set a target completion date
Then collect all pieces of work into a backlog you can use to plan in short, iterative cycles

Start doing risk assessment

Anticipate and mitigate risks
Remove difficult situations
Think through ways the project might fail, and focus in prevention mode

Create a Communication plan and strategy

Establish a cadence for team meetings and updates to stakeholders, and share it around
Then schedule any recurring meetings, and put reminders on your calendar to update the project's plan and dashboard (or internal homepage) regularly

Execute

In this phase you already have a plan and it is time to execute it
In this phase the following should be done…

Work iteratively

Start each cycle with "just enough" planning
Execute and then plan again
Be sure to hold a short retrospective at the end of each iteration
It's your chance to share what went well (and what didn't) so the next iteration can be even better

Track the progress

How much work has been completed, how much of the budget remains, are you on track to meet your target delivery date?
If you start burning through budget or time faster than projected, raise that with your sponsor and team right away so you can course-correct before things get out of hand

Test and incorporate feedback

At the end of each iteration cycle, update your end-to-end demo to reflect the work completed, and show it to stakeholders and customers
Capture their feedback so you can take it into account when planning the next iteration
You may want to re-work X before moving on to Y

Deliver

The hard part is to be able to close your project and make your deliverable available for use
In this phase the following should be done…

Get the acceptance and celebrate

Collect the consensus and acceptance of your customer
Prepare and deliver the closing documentation
Collect the signatures

Close out the budget

Pay any outstanding vendor invoices
Get your payments from your customer
Use the budget data you've been tracking throughout the project to create a report for your project's sponsor
Include analysis of where you'd spend more (or save) money on similar projects in the future
Collect this info for your lesson learned report

Execute a retrospective workshop

Discuss with your project team: What went well? What went wrong? What did we learn?
Capture the lessons learned and share them with your peers so they can benefit
Document how you might improve on what you just delivered

Do an Announcement

Write up a short company announcement describing the project and thanking your team
If the project is external-facing, you might want to share the news with customers by way of an email or blog post

Improve

This is the last step of a software project
Brainstorm and verify if:
You have achieved your "success" (as you have defined it)
You have achieved your goals without de-scoping your project
Deliver your lessons learned report
Verify if you can create a project plan template for future similar projects
Verify if you can contribute to improve/modify the project management process of your organization