### **Phases of Project Management**

Dr. Santosh Kumar Majhi
Assistant Professor
Department of Computer Science and Engineeirng
Veer Surendra Sai University of Technology, Burla

#### Introduction

- While some people think a project manager's sole job is to remind everyone about deadlines and set up status meeting, that's simply not the case.
- There is a science to what they do -- they have a deep understanding of and can perfectly execute the five phases of project management.
- Developed by the <u>Project Management Institute (PMI)</u>, the five phases of project management include conception and initiation, planning, execution, performance/monitoring, and project close.
- PMI, which began in 1969, is the world's largest nonprofit membership association for the project management profession.
- It has set the standards for project, program, and portfolio management and offers training and certifications. The gold standard of certification from the association is the Project Management Professional (PMP)® certification.

# **Concept of the Project Life Cycle**

 When discussing project management phases, the mention of project life cycle is inevitable. So what's the difference? The project phases make up a project life cycle, and as such, the phases are tailored to fit a project's needs.

The elements of a project life cycle should define:

- What work must be accomplished
- What deliverables must be generated and reviewed
- Who must be involved
- How to control and approve each phase
- Determining these elements will take a project from start to finish.
- It provides a systematic, timely, and controlled process that benefits a project's stakeholders.
- This helps PMs define what needs to be accomplished before moving onto the next phase of a project.

# **5 Phases of Project Management**

- According to PMI, "project management is the application of knowledge, skills, tools, and techniques to a broad range of activities in order to meet the requirements of a particular project."
- There are five phases of project management
- The lifecycle provides a high-level view of the project
- The phases are the roadmap to accomplishing it.

#### 5 Phase of PM



# **Phase 1: Project Initiation**

- This is the start of the project, and the goal of this phase is to define the project at a broad level.
- This phase usually begins with a business case.
- This is when you will research whether the project is feasible and if it should be undertaken.
- If feasibility testing needs to be done, this is the stage of the project in which that will be completed.
- Important stakeholders will do their due diligence to help decide if the project is a "go."
- If it is given the green light, you will need to create a project charter or a project initiation document (PID) that outlines the purpose and requirements of the project.
- It should include business needs, stakeholders, and the business case.

### **Phase 2: Project Planning**

- This phase is key to successful project management and focuses on developing a roadmap that everyone will follow.
- This phase typically begins with setting goals.
   Two of the more popular methods for setting goals are S.M.A.R.T. and CLEAR



#### S.M.A.R.T. Goals

- This method helps ensure that the goals have been thoroughly vetted. It also provides a way to clearly understand the implications of the goal-setting process.
- Specific To set specific goals, answer the following questions: who, what, where, when, which, and why.
   Measurable – Create criteria that you can use to measure the success of a goal.

Attainable – Identify the most important goals and what it will take to achieve them.

Realistic – You should be willing and able to work toward a particular goal.

Timely – Create a timeframe to achieve the goal.

- C.L.E.A.R. Goals A newer method for setting goals that takes into consideration the environment of today's fastpaced businesses.
- Collaborative The goal should encourage employees to work together.
  - Limited They should be limited in scope and time to keep it manageable.
  - Emotional Goals should tap into the passion of employees and be something they can form an emotional connection to. This can optimize the quality of work.
  - Appreciable Break larger goals into smaller tasks that can be quickly achieved.
  - **R**efinable As new situations arise, be flexible and refine goals as needed.

- During this phase, the scope of the project is defined and a project management plan is developed.
- It involves identifying the cost, quality, available resources, and a realistic timetable.
- The project plans also includes establishing baselines or performance measures.
- These are generated using the scope, schedule and cost of a project.
- A baseline is essential to determine if a project is on track.

- At this time, roles and responsibilities are clearly defined, so everyone involved knows what they are accountable for.
- Here are some of the documents a PM will create during this phase to ensure the project will stay on track:
- **Scope Statement** A document that clearly defines the business need, benefits of the project, objectives, deliverables, and key milestones. A scope statement may change during the project, but it shouldn't be done without the approval of the project manager and the sponsor.
- Work Breakdown Schedule (WBS) —This is a visual representation that breaks down the scope of the project into manageable sections for the team.
- Milestones Identify high-level goals that need to be met throughout the project and include them in the Gantt chart.
- <u>Gantt Chart</u> A visual timeline that you can use to plan out tasks and visualize your project timeline.
- Communication Plan This is of particular importance if your project involves outside stakeholders. Develop the proper messaging around the project and create a schedule of when to communicate with team members based on deliverables and milestones.
- **Risk Management Plan** Identify all foreseeable risks. Common risks include unrealistic time and cost estimates, customer review cycle, budget cuts, changing requirements, and lack of committed resources.

# **Phase 3: Project Execution**

- -This is the phase where deliverables are developed and completed.
- -This often feels like the meat of the project since a lot is happening during this time, like status reports and meetings, development updates, and performance reports.
- A "kick-off" meeting usually marks the start of the Project Execution phase where the teams involved are informed of their responsibilities.
- Tasks completed during the Execution Phase include:
- Develop team
- Assign resources
- Execute project management plans
- Procurement management if needed
- PM directs and manages project execution
- Set up tracking systems
- Task assignments are executed
- Status meetings
- Update project schedule
- Modify project plans as needed

While the project monitoring phase has a different set of requirements, these two phases often occur simultaneously.

# Phase 4: Project Performance/Monitoring

This is all about measuring project progression and performance and ensuring that everything happening aligns with the project management plan.

Project managers will use key performance indicators (KPIs) to determine if the project is on track.

- A PM will typically pick two to five of these KPIs to measure project performance:
- Project Objectives: Measuring if a project is on schedule and budget is an indication if the project will meet stakeholder objectives.
- Quality Deliverables: This determines if specific task deliverables are being met.
- **Effort and Cost Tracking:** PMs will account for the effort and cost of resources to see if the budget is on track. This type of tracking informs if a project will meet its completion date based on current performance.
- **Project Performance:** This monitors changes in the project. It takes into consideration the amount and types of issues that arise and how quickly they are addressed. These can occur from unforeseen hurdles and scope changes.

During this time, PMs may need to adjust schedules and resources to ensure the project is on track

### **Phase 5: Project Closure**

- This phase represents the completed project.
- Contractors hired to work specifically on the project are terminated at this time.
- Valuable team members are recognized.
- Some PMs even organize small work events for people who participated in the project to thank them for their efforts.
- Once a project is complete, a PM will often hold a meeting sometimes referred to as a "post mortem" – to evaluate what went well in a project and identify project failures.
- This is especially helpful to understand lessons learned so that improvements can be made for future projects.
- Once the project is complete, PMs still have a few tasks to complete.
- They will need to create a project punchlist of things that didn't get accomplished during the project and work with team members to complete them.
- Perform a final project budget and prepare a final project report.
- Finally, they will need to collect all project documents and deliverables and store them in a single place.

# What is project planning?

- Project planning is the process of defining your objectives and scope, your goals and milestones (deliverables), and assigning tasks and budgetary resources for each step.
- A good plan is easily shareable with everyone involved, and it's most useful when it's revisited regularly.
- Simply outlining a plan and never discussing it with your team again is a good recipe for wasted time and effort.
- You can do your project planning in a simple Google doc, or you can use project management software.
- The benefit of using project management software is that you're usually able to store all of your documents and deliverables in one place, and you can avoid losing important discussions and decisions to the email or Slack void.
- With a tool like Basecamp, for example, it's easy to track progress and keep track of conversations and items that require collaboration with a few different people.

# seven keys to successful project planning

- 1. Think of your plan as a roadmap for stakeholders
- Every project needs a roadmap with clearly defined goals that should not change after the first phase of the project has been completed.
- All stakeholders benefiting from the outcome or involved in executing the project should be named and their needs stated during the initial project planning process.

#### These stakeholders might include:

- The project manager or the person ultimately responsible for completion
- The "customer" who receives the deliverables—this can be someone on your team (internal) or an actual paying customer.
- The team, or the people responsible for any tactic that's part of the plan.
- Don't assume that you automatically understand each stakeholder's needs and goals.
- Before you get too far into documenting your project plan, talk to them to make sure you really understand the project and abilities and resources of everyone on the team.

# 2. Break the project into a list of deliverables

- Develop a list of all deliverables.
- This list should break down the larger project into smaller tasks that can be assigned to specific team members, and you should include estimated deadlines associated with each deliverable or task.
- Make sure that you understand and document the approval process for each deliverable.
- If your project is for an external customer, make sure you are clear on their internal approval process, so that you're not surprised by delays or slowed down with wading through competing opinions.

# 3. Talk to your team

- Identify by name all individuals and/or organizations involved in each deliverable or task, and describe their responsibilities in detail. Otherwise, miscommunication can lead to delays and situations where team members may have to redo their work.
- Hold a kickoff meeting to talk to your team about your intended plan of attack. Ask them to help you think about the best way to get the work done. Not only will this help you be more efficient, it will help you get their buy-in because they'll feel more ownership over the process. Using a project management tool like Basecamp can be helpful keeping everyone on track and storing documents and conversations all in one place.
- If you use email to communicate about projects, consider using a team inbox email solution that will allow you to assign emails that need project-related attention to team members as appropriate, rather than endlessly forwarding huge conversation threads back and forth.

# 4. Identify risks

- Determine the risks involved in your project. Think through what you'll do if something takes much longer than expected, or if costs end up being much more than you initially anticipated.
- You don't have to have a specific course of action identified for every possible negative outcome, but you should spend some time with your team, thinking through what could go wrong. Then, you can do as much as you can to mitigate those risks from the outset, rather than being caught off guard later. Risk factors can also have some influence on how you budget.

# 5. Create a budget

- Attached to your list of milestones and deliverables should be information about the project cost and estimated budget. Resist the urge to assign large dollar amounts to big projects without identifying exactly how the money is intended to be spent. This will help your team understand the resources they have to work with to get the job done. When you're setting your initial budget, these numbers might be ranges rather than absolutes.
- For certain items, you might need to get quotes from a few different vendors. It can be helpful to document the agreed upon project scope briefly in your budget documentation, in case you end up needing to make changes to the larger project based on budgetary constraints, or if your vendor doesn't deliver exactly what you expected.

#### 6. Add milestones

- Use your list of deliverables as a framework for adding milestones and tasks that will need to be completed to accomplish the larger goal. Establish reasonable deadlines, taking into account project team members' productivity, availability, and efficiency.
- Think about your milestones within the **SMART framework**. Your goals should be:
- **Specific:** Clear, concise, and written in language anyone could understand.
- Measurable: Use numbers or quantitative language when appropriate. Avoid vague descriptions that leave success up to personal, subjective interpretation.
- Acceptable: Get buy-in from stakeholders on your goals, milestones, and deliverables.
- Realistic: Stretch goals are one thing, but don't set goals that are impossible to achieve. It's frustrating for your team and for your stakeholders, and might ultimately delay your project because accomplishing the impossible usually costs more and takes longer.
- **Time-based:** Set concrete deadlines. If you have to alter deadlines associated with your milestones, document when and why you made the change. Avoid stealth changes—or editing deadlines without notifying your team and relevant stakeholders.

# 7. Set progress reporting guidelines

- These can be monthly, weekly, or daily reports. Ideally, a collaborative workspace should be set up for your project online or offline where all parties can monitor the progress. Make sure you have a communication plan—document how often you'll update stakeholders on progress and how you'll share information—like at a weekly meeting or daily email.
- Use the framework you set up when you identified your milestones to guide your reports. Try not to recreate any wheels or waste time with generating new reports each time you need to communicate progress. Keep in mind that using a project management software like Basecamp can keep stakeholders in the loop without cluttering up your inbox, or losing conversations in long Slack chats.
- The secret to effective project planning and management is staying organized and communicating well with your team and stakeholders.
   Whether you decide to use project management software or not, think about where and how you store all the materials and resources that relate to your project—keep everything in one place if you can.