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An Introduction to

Project Management

A Beginner's Guide

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OVERVIEW

The term "project management" may be a modern construct, but the very concept has existed for as long as humans have been around. Humanity's **introduction to project management** can be traced back to their hunter-gatherer days when coordination and planning became necessary to procure food and resources, safeguard the community, and migrate to better locations. Since then, people have always been dealing with "projects" that involved planning and management, be it the man-made wonders of the world to wars that changed the course of history.

Today, project management is at the core of nearly every business initiative. It is a means of achieving a strategic objective and is the key to organizational success. As the economy and the enterprise landscape become more competitive and chaotic than ever, effective project management is necessary for businesses to perform better, faster, and more efficiently.

In the world of disruptive technology, the payoffs from investing time, money, and resources into effective project management can be tremendous. The opposite is true, as well.

According to the **Project Management Institute (PMI)**, for every $1 billion that companies in the US spend on projects, they witness an estimated loss of $122 million—which means that 12% of the budget for projects, on average, goes down the drain. One of the key reasons behind this staggering loss is poor management.

IT projects are particularly notorious for cost overruns, which can amount to as much as 400%, **according to McKinsey**, and "can threaten the very existence of the company."

On the other hand, successful project completion has been shown to have a positive impact on the performance and the bottom line of an organization. According to PMI, 89% of high-performing companies have one thing in common: They tend to complete projects successfully.

Not surprisingly, leading companies worldwide are embracing project management as a way to cut costs, improve efficiencies, boost customer and stakeholder satisfaction, and gain competitive advantage. For many such companies, project management has become a dedicated function. The **State of Project Management report** found that 85% of companies had a project management office (PMO) — a specialist team that overlooks all aspects of project management — in 2016.

In keeping with this trend, the demand for project managers is high. The Project Management Institute (PMI®) estimates that there will be 22 million new project management job openings by 2027.

This Basics of Project Management handbook aims to provide you with an **introduction to project management**, the phases involved in a project management process along with examples, as well as a lowdown on the top tools and applications in the field. We will also discuss how you can power up your project management skills with practical, expert-led training.

WHAT IS PROJECT MANAGEMENT?

There are many ways to look at project management and many ways to define it. But for the sake of simplicity, let's follow the **Project Management Institute's (PMI) definition** of it. PMI refers to it as "the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements," where "project" means "a temporary endeavor undertaken to create a unique product, service, or result."

Because of the temporary nature of a project, it has a defined beginning and end, and therefore, defined scope and resources. This helps to set proper expectations around what can be delivered, by when, and at what cost, preventing projects from getting derailed, veering off deadlines, or stretching out of scope.

A project typically can encounter any of these six constraints:

- Scope
- Quality
- Risk
- Time
- Cost
- Resources

PROJECT MANAGEMENT PHASES

From its start to end, there are different phases of a project, which constitutes the project life cycle. In its most basic form, a project management process goes through the following phases:

Preparation   Execution   Closure

Preparation phase

This is the phase where a project is set up. The project manager collaborates with all parties involved — customers, contractors, and stakeholders — to establish the formal aspects of the project. This includes putting together a team to work on the project, creating a project plan, setting project goals and budget, resource allocation, conducting a project kick-off, and other activities.

Execution phase

This phase has to do with everything that is needed to turn the project goal into reality. Given the number and complexity of activities involved in this stage, it takes the longest and is also the most challenging to manage.

Closing phase

During this closing phase, the last finishing touches are added to ensure that the project is up to customer satisfaction, and the final product/process is ready for the handover to the customer.

REAL-LIFE EXAMPLE OF PROJECT MANAGEMENT

With this basic understanding of a project management process, let us dive deeper into how a real-life project might be carried out successfully. For this purpose, we will follow PMI's project phase model, which breaks down into:

Initiating

Monitoring and Controlling

Planning

Closing

Executing

1. Initiating

Consider that an auto manufacturing company wants to cut down their manufacturing costs to ramp up their revenue and profits. What happens next? The top executives might call a board meeting and delegate the job to a senior manager who will look for a suitable project manager (PM) to take over the project's reins.

The project manager will coordinate the next steps, which involve defining the rough scope of the project, setting targets, building a team, and documenting the project requirements in a charter.

The initiation, like in this example, is the very first step of the process.

2. Project planning

During the project planning phase, every aspect of the project, down to a weekly (or even daily) level, is mapped out. The PM finds the people with the required skill set and puts together a team. This stage also involves the following activities:

Creation of a scope statement – It spells out what is expected from the project and what is not expected. The delivery, scope, parameters, and benchmarks are well established and clearly stated.

Creation of a project plan – A plan is drafted to visualize the project workflow, typically using a Gantt chart. It outlines a detailed schedule of what will happen and when.

Defining key milestones – Milestones are what need to be completed and accomplished in accordance with the plan—for example, reducing manufacturing costs to increase profitability, in this case.

Setting up a communication plan – It states how and by what means will the team and the stakeholders involved in the project communicate.

Performing risk analysis – This is a critical stage since it helps the team identify risks and be prepared for a 'Plan B' if an issue arises.

3. Execution

This is the phase where the hammer falls on the nail. Given the pressure to produce tangible and previously planned results, the management of this phase is almost always very hectic and stressful. This is where the project runs into the risks of cost overruns, delays, and unexpected issues threatening to derail progress. It's the PM's job to manage these challenges and steer the project in the right direction.

4. Monitoring and controlling

A project must be monitored on an ongoing basis to ensure it stays on track. To this end, the PM routinely checks the progress and quality of the project against several factors such as:

- ✓ Whether the targets are being met

- ✓ Is the project staying within budget?

- ✓ Any possible deviations from the scope and how to accommodate the changes

5. Closing

This is the last phase where the project is completed, finalized, and handed over to the customer. In our example, the PM will prepare a final report with the actual cost values. It may also involve final checks and test runs to ensure the desired outcome has been achieved.

TOP PROJECT MANAGEMENT TOOLS AND APPLICATIONS

Depending on the size and scope of a project, it can be easy to lose sight of one or more critical aspects such as lack of clarity in task or project status, inconsistent execution, ineffective collaboration, or siloed teams and information. This is where the need for project management tools and applications comes in.

According to **Capterra**, businesses using PM tools have largely experienced positive gains in several areas, the most significant being an increase in the number of projects completed on time. This is perhaps why **59% of organizations** are investing in their employees' ongoing training on the use of project management tools and techniques.

However, the market today is flooded with hundreds of project management software and applications. And while it can be hard to choose from the seemingly countless options, there's undoubtedly a software out there that can meet your needs and budget.

Here's a list of the top 10 project management tools you can pick from.

1. Trello
2. Asana
3. Basecamp
4. Wrike
5. Gantt Chart

6. AceProject
7. ProofHub
8. ClickUp
9. WorkZone
10. Scoro

To know more about these tools, how they work, their pros and cons, and pricing, you can check out **this article** from our specialist-curated repertoire of project management resources.

Now that we have seen how a project management process might unfold in the real world and the tools that help you in the process let's look at some key terminologies used in the field.

A GLOSSARY OF PROJECT MANAGEMENT TERMINOLOGIES

In this section, we present you with some basic project management terms that you should be familiar with while dealing with this subject.

Agile

The Agile family of methodologies is an iterative development approach focused on fulfilling the ever-changing customer requirements. Agile development progresses in the form of a series of iterations with incremental improvements made in each iterative step. Agile methodologies are highly adaptive because agile projects don't have fixed scopes.

Work Breakdown Structure (WBS)

A work breakdown structure systematically divides the project deliverables into smaller, more manageable portions. Organizing the team's work in this hierarchical fashion contributes to a better understanding of the nature of work and allows the execution of project goals effectively.

Critical Path Method (CPM)

CPM is an algorithm mainly used for scheduling the project activities. It is used to determine the steps of the project, which in turn determines the total timeframe of the project. These activities must be completed according to this set sequence to achieve the desired project goals.

Waterfall Model

This is a traditional project management approach that works in a downward fashion, so the pattern appears to be like a 'waterfall'. In this model, project development occurs systematically, from one phase to another. Each phase must be completed before proceeding to the next phase, and the phases don't overlap, making it difficult to make any changes mid-process.

Kanban

'Kanban' is a Japanese word meaning visual signal. Kanban is a project management process that utilizes a visual communication approach, using visual tools like sticky notes or virtual cards in an online whiteboard to represent project tasks and to track and specify progress throughout a project.

Key performance indicator (KPI)

A Key performance indicator is a metric for measuring project success. For successful execution and completion of a project, key performance indicators must be established beforehand.

Six Sigma

This approach to project management aims at achieving close to total elimination of product or service defects. It uses quality management methods to improve and optimize processes involved in the production of a product or service so that more than 99% of the outcomes are free from any defect.

Lean manufacturing

This is a production methodology based on the idea of streamlining and getting done more with less. An example would be providing customers with the same value while eliminating waste and consequently cutting down production costs.

Lean six sigma

Lean six sigma is a concept that marries the waste elimination ideals of lean manufacturing with six sigma's ideal of achieving defect-free process outcomes. Therefore, the goal of Lean six sigma is to eliminate both waste and defects to improve the quality and consistency of the project deliverables while reducing the cost of the project.

HOW TO BUILD YOUR CAREER IN PROJECT MANAGEMENT?

In a world of shrinking budgets and increasing competition, project managers can really make a difference. There is hardly an industry today which doesn't benefit from project management skills, and therefore, the demand for skilled managers is peaking in IT, business service, oil and gas, finance and insurance, manufacturing, construction, and utility industries—the list is endless.

In keeping with the growing demands, the salaries for project managers are becoming competitive too. According to Glassdoor, the national average project manager salary is **$80,854**.

Project managers also play a big role in influencing the team morale and not just the company's bottom line. This, coupled with a lucrative salary, makes 'project manager' a highly rewarding and satisfying role.

So how do your break into this career? Here are some project management skills that will not only help you become a successful project manager but also benefit your general approach towards work and life.

Time management

This features at the very top of the list of project management skills. And that's because time is not only money but also the difference between project success and failure. A project manager not only must be at the top of project timelines, but also must be able to make quick decisions, have effective meetings, and come up with workarounds in the face of challenging situations. Effective time management skills equip you to do these faster, and better.

Organization skills

Without this skill, it can be difficult to complete the simplest of tasks, let alone managing projects, which can often be a handful, to say the least!

Communication

A project relies heavily on communication. Therefore, project managers must have sufficient skills in this regard to successfully get the project over the finish line, on time, and within budget. Plus, any professional needs to communicate on a daily basis, be it through calls, emails, or texts, at meetings or presentations. This is why honing in on communication skills is critical for professional success, regardless of which career you choose.

Problem-solving

Project managers encounter problems with each project on a daily basis. By practicing problem-solving approaches, you can ensure your team promptly deals with the problems and gets back on track without losing too much time or money.

Teamwork

Being a team player and having good team dynamics are crucial if a project manager wants to achieve targets, meet deadlines, and promote a shared approach among the team members. This helps to ensure work gets done on time, as per specifications, and people get along or at least are on the same page in the entire duration of a project.

Budgeting

A project manager who gets the budgeting right proves his worth in gold. This skill is prized for not only does it help you control project costs, but also deliver client satisfaction. As a project manager, you are responsible for monitoring daily budgets, timelines, and resources to keep the project budget from bloating.

Besides, a project manager could also benefit from cultivating the following interpersonal skills:

✔ Motivation   ✔ Leadership   ✔ Negotiation

GET STARTED TODAY

Today, 90% of organizations globally view project management certifications as the key to ensure quality performance. Being a certified project manager opens up plenty of opportunities for advancement, which includes better positions and higher salaries.

While becoming a project manager doesn't necessarily require you to have a specific degree or college education, becoming a successful one requires you to gain the knowledge it takes to implement the right strategies for efficient planning and execution of a project.

Also, project managers are forever learning. They must regularly brush up their knowledge of project lifecycles, processes, and structures as well as stay on top of emerging trends and best practices to gain insights into new technology, products and services, and customer needs.

This is why taking up a project management course like the **ones offered by Simplilearn** can help aspiring project managers gain the array of skills needed to accomplish the multitude of tasks involved in project management.

Individual Courses	**PMP® Certification Training Course** **PMI-PgMP® Certification Training** **PRINCE2® Foundation and Practitioner Certification Training** **PRINCE2® Agile Foundation & Practitioner** **MSP® Foundation & Practitioner Certification Training**
Master's Program	**PMP® Plus** **Digital Project Manager**
Prost Graduate Program	**Post Graduate Program in Project Management**

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