

Introduction to Project Management at Amazon

Content Outline

In this course, you will learn how to...

- Define project management, describe how it is done and understand its value to an organization
- Articulate industry standard project management methodology (phases and gates)
- Describe the triple constraint and its importance to a project
- Name the different ways to monitor and control a project, and relate their importance on a project
- Describe how risk and issue management is done on a project
- Express what is expected of Project Managers at Amazon
- Locate Amazon project management tools

Module 1: What is Project Management?

In this module, you will learn how to...

- Define a project
- Understand the role of the Project Manager
- Explain why project management matters

What is Project Management?

Project Management is a methodical approach to planning and executing a project. Its goal is to deliver projects by organizing resources and activities, and providing oversight and control.

What do you mean by 'project'?

Projects can be simple, like organizing a birthday party. Or complex, like building a space rocket. They have a start and end in order to achieve a specific goal. Because the work has an end, projects are different than programs, processes, or operations.

What does a Project Manager do?

Project Managers ensure their projects deliver the business value expected by the customer within a set of limitations, like scope, time and cost. They plan for these limitations, monitor them and take action when needed.

Why does Project Management matter?

Project management, when correctly applied, is proven to prevent or mitigate problems, like delivering late or over budget, or not achieving desired business outcomes.

How does it help?

For example, **planning sessions** with the project team help you understand the scope of work that needs to be done so you can accurately estimate the time it will take. Also, making sure the **customer signs off on the requirements**, sets expectations and the baseline for controlling scope, time cost and quality.

So, it solves all my problems?

Applying project management doesn't mean problems won't come up. But with project management, problems are dealt with proactively, rather than haphazardly, using smooth running processes like scope, risk and issue management.

T/F 1: You should apply project management practices to offer ongoing, 24/7 customer service support.

False.

Project management practices are best applied to activities that have a clear start and end.

T/F 2: Effective project management will ensure that no problems arise during the course of the project.

False.

Effective project management will prevent many problems, but not all. It will help mitigate those problems that do arise.

T/F 3: A project planning session with your full project team will help you identify necessary work and resources.

True.

You should plan together with you full project team to make sure you don't miss any key tasks, dependencies, stakeholders or risks.

T/F 4: You're hiring 75 associates to provide a new service for amazon employees. You should use project management practices to establish a new location for them to work in.

True.

This work has a clear beginning and end, and requires coordination across resources and stakeholders.

T/F 5: A requirements sign off ensures that you've identified and understood the various stakeholders who will be impacted by the project.

False.

A requirements sign off ensures that you've agreed with the customer on the business requirements that the project will address.

Module 2: Phases and Gates

In this module, you will learn how to...

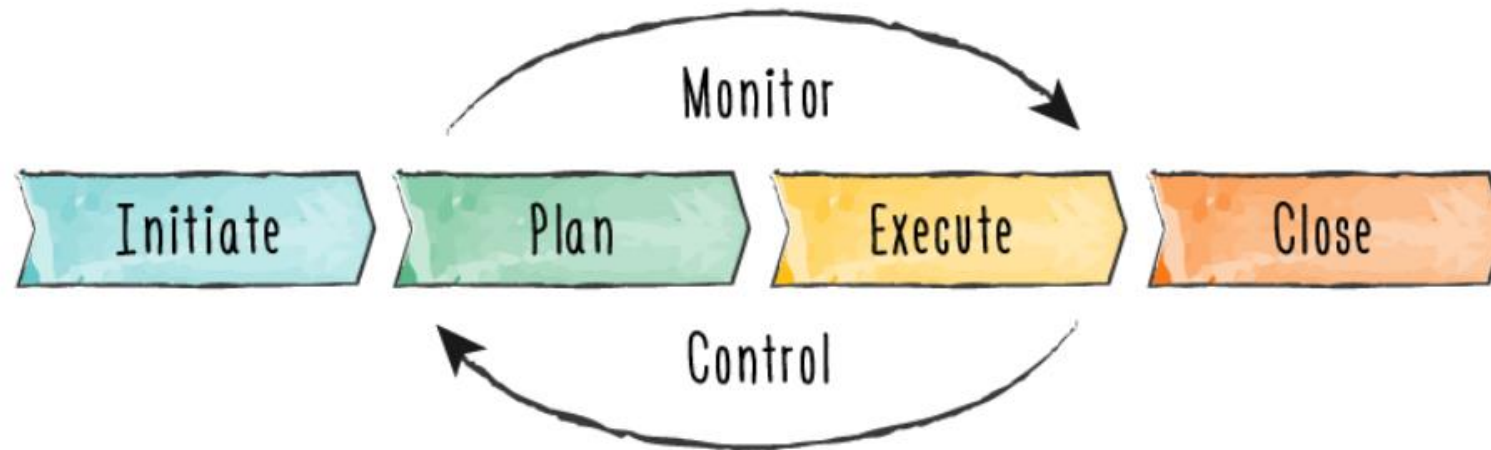
- Describe industry standard project phases and when they occur
- Summarize what happens at each phase: initiate, plan, execute, monitor and control, close
- Define gate meetings, how to prepare for them and what happens at each

What are project phases?

Project phases, or stages, help you to organize tasks and maintain focus on near term milestones. They break up the work so that you can validate deliverables at the end of each phase, and project team members can prepare for the next phase.

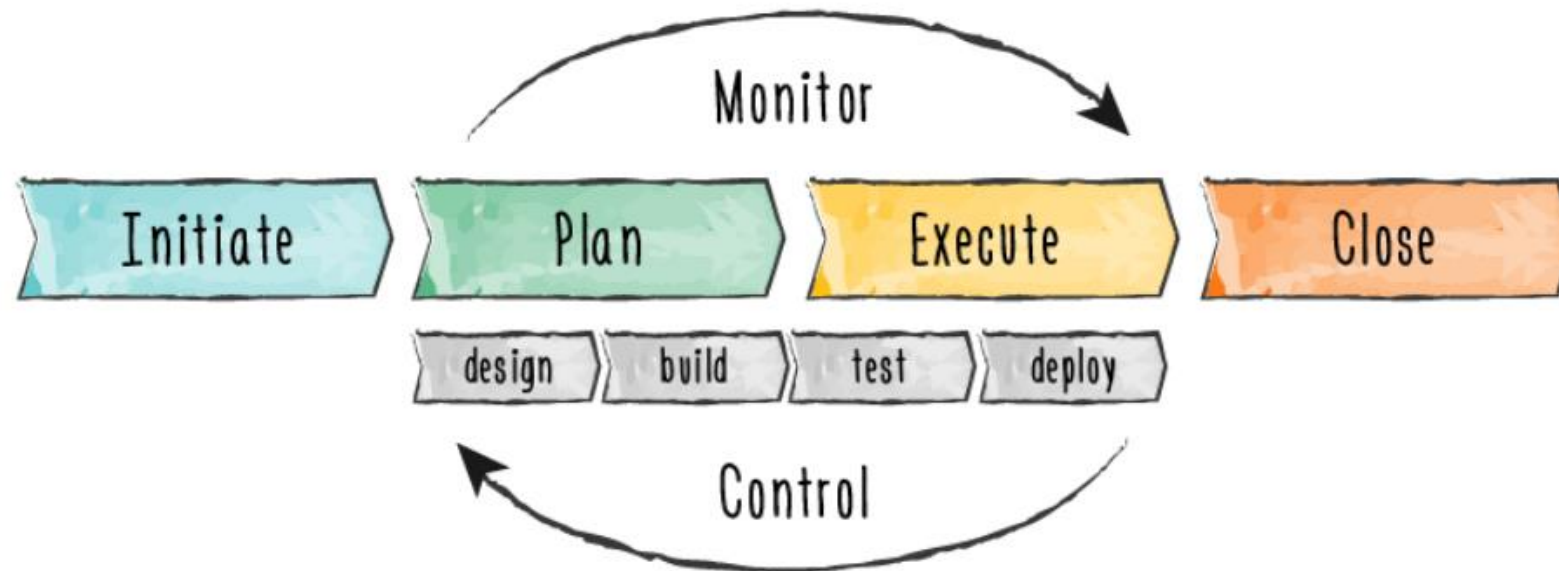
What are the different phases?

The standard project phases are: initiate, plan, execute, monitor and control, and close. The exact names and sequence may vary depending on the project.



When do the phases vary?

For example, technology projects have a subset of phases which may be completed separately, simultaneously, or iteratively.



Seems pretty straightforward...

Not every phase occur in a linear sequence. Monitor and control needs to happen throughout the life of a project to ensure that it's delivered as planned. This is emphasized during the execute phase, however all phases include monitor and control activities, such as status reporting, and tracking issues, risks and decisions.

What are project gates?

Gates are checkpoints to ensure the previous phase was executed satisfactorily, the project is ready and approved to move to the next phase, and the resources needed to proceed are reasonable and available.

Why do gates matter?

The attention and rigor required in passing a gate can depend on the investment and the impact of the project. Having regular checkpoints with key stakeholders can help prevent false starts and rework on project. In addition, gates can help identify related projects that may have overlaps interdependencies, or need to be consolidated into one project.

What happens at each gate?

Project gates are formal meetings where key stakeholders jointly review the relevant project information, ask clarifying questions, and decide whether or not the project should proceed to the next phase.

What do I need to bring?

To determine whether the project should proceed, a summary document is presented at the gate meeting. The summary may include things like, approvals of project deliverables, business case validation, updated schedule and budget, project reporting and metrics.

What are the possible outcomes?

After key stakeholders reviewed the prepared summary, the results, may be to proceed, proceed with conditions, cancel, or put on hold. If all prior work is validated as complete and correct and there is commitment to proceed, the project will be approved to move to the next phase. Otherwise, the project will be canceled or put on hold.

T/F 1: Every type of project at Amazon uses the same phase names and sequence.

False.

The exact names and sequence of the phases may vary depending on the type of project. For example, technology projects have a subset of phases: design, build, test and deploy.

T/F 2: The monitor and control phase occurs at the end of a project.

False.

The monitor and control phase needs to happen through the life of a project to help ensure that it's delivered as planned.

T/F 3: During the initiate phase of a project, you will define the problem you're trying to solve, establish project objectives, and outline the benefits of the project.

True.

This statement accurately describes what happens during the initiate phase.

T/F 4: Project gates are an opportunity to determine whether the business should continue to invest in the project through the next phase.

True.

This statement accurately describes project gates, and is one of the most important characteristics of gates.

T/F 5: During a project gate, leadership will assess whether the project manager has been doing a good job.

False.

A project gate focuses on the state of the project and the business. It is not a time to assess the project manager.

Module 3: Planning a Project

In this module, you will learn how to...

- Name the components of a project plan and a project schedule
- Clarify the difference between a project plan and project schedule
- Describe how a project plan and schedule is created
- Explain the critical path
- Understand the importance of identifying skills when resourcing a project

What is a project plan?

The project plan is a formal document that defines how the project will be executed, monitored and controlled. It compiles all your planning efforts in a blueprint to guide the project team.

What do I need to get started?

To build a plan, the first thing you will need is a project charter. The charter is the starting point for planning your project. It describes at a high level what the project is about, what it will deliver and cost, when it will take place, and who needs to be involved. It is used to obtain stakeholder approval and establishes a project manager.

What goes into a project plan?

The project plan includes goals, objectives, a problem statement, and benefits. It also includes the following:

- Scope
- Approach
- Budget
- Deliverables
- Key milestones and timeline
- Risks, assumptions and dependencies
- Stakeholders
- Resources, roles and responsibilities
- Communication and learning plans

How is a plan different from a schedule?

Although often used interchangeably, the project plan is different than the project schedule. The plan details how the project will be managed. The schedule describes when the project will be delivered. It contains the required activities and tasks, including start and end dates, resources, estimates and dependencies. It is the timeline for the project.

What do I need to create my project plan?

Start by reviewing your project charter to understand the high level problem, goal or objective, benefits and scope. Then, meet with your project sponsor, key stakeholders and subject matter experts to get more details for your plan. You can also get information by researching white papers, shadowing, analyzing processes, and conducting interviews and focus groups.

How do I build a project team?

Once you have identified the skills, potential resources, and the amount of time needed for their part of the project, share the approved project charter with resource managers to allocate the right people to the project team. This helps ensure you have their support for the project. Because you won't know the full scope of work at the initiate and plan phases, this may mean just asking for the time to get through a specific phase or gate.

How do I build the project schedule?

With your project team, start by reviewing the plan as a group. From there, begin listing out the tasks that need to be completed by each work stream. Discuss how long each task should take and order them to find the critical path, which is the longest sequence of the project's activities. Lastly, build the schedule from end to end, identifying any risks, issues or dependencies that may prevent the project from staying on task, target and time.

How do I finalize the project plan and schedule?

Review a draft of the plan and schedule with your project team, sponsor and stakeholders. Once scope, requirements, timeline, resources, and budget are approved, they are baselined. This means the plan and schedule are locked, and changes after this time need to be managed by the project's steering committee. This typically right before the execute phase.

T/F 1: A project plan and a project schedule are two different terms for the same document.

False.

A project plan details how the project will be carried out, where a schedule details the work that needs to be completed, and when it needs to be done by.

T/F 2: You should begin with your project plan in order to create a project charter.

False.

You need a project charter to begin your project plan. A project charter is the starting point for a project, and describes it at a high level.

T/F 3: A project plan is iterative and should be updated throughout the course of the project.

True.

This statement is true. However, once scope, timeline, requirements and resources are approved, the plan is locked and can only be changed through change controls.

T/F 4: You need to understand the task sequence and dependencies in order to find the critical path of your project.

True.

This statement accurately describes the critical path. The critical path is the longest overall duration of activities in your schedule. To find it, you must first know when each task occurs.

T/F 5: Using people's titles is the best way to know whether they are the right fit to meet a project need.

False.

Just because someone has a fitting title doesn't mean they can do the work you need. Discuss the need with the resource manager to ensure employees have the expertise and time to be part of the team.

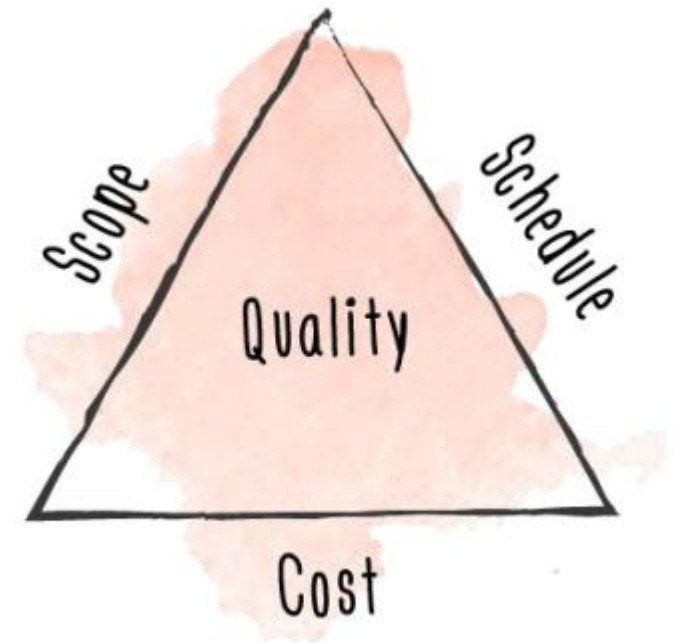
Module 4: Balancing Constraints

In this module, you will learn how to...

- Define the triple constraint
- Articulate each constraint and its relationship and impact to each other
- Identify how the triple constraint is managed and balanced

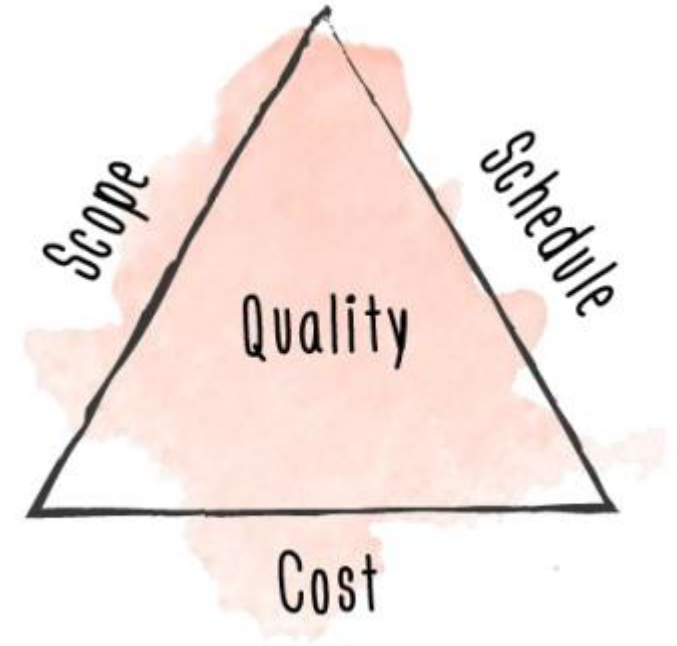
What are project constraints?

The quality of a project is dependent on certain constraints. Projects are executed under certain constraints. The traditional constraints are scope, time and cost. These are commonly referred to as the triple constraint and represented as a triangle. The triangle demonstrates that if any one constraint changes, the other must also change.



What do I need to know about project constraints?

Project Managers are responsible to manage the agreed upon scope, and to deliver it on time, on budget and with the desired quality. A change to any one of these factors requires the project team to rebalance the constraints, which is done in collaboration with the stakeholders. Because of this, they need to educate the project team about the triple constraints in the early stages of the project.



How do I balance project constraints?

The adage "fast-cheap-good. You can only have two" has a grain of truth to it. Rarely do Project Managers have the budget to deliver the highest quality product in the shortest amount of time. They must use good judgment to weigh one constraint against another and negotiate with stakeholders to get agree upon scope, schedule, and budget.

How do I work with stakeholders?

After reaching an agreement with stakeholders, and depending on the magnitude of the change, the project team will need to review and potentially update: Plan, Schedule, Budget, Resource Management and Business Requirements. Ensure the changes to these documents is communicated to the entire project team and stakeholders.

T/F 1: The project triple constraints are: scope, time and schedule.

False.

The triple constraints are: scope, time and cost. Time and schedule are sometimes used interchangeably.

T/F 2: It is not important for your stakeholders to understand how the three project constraints are related.

False.

You should educate your stakeholders early on about project constraints so they understand the impact of changes to the project.

T/F 3: Available resources for your project have been reduced. One way to balance this constraint is by decreasing the scope of the project.

True.

This statement is true. You could also extend the timeline

T/F 4: You can balance a shortened timeline by adding to the project cost and increasing the resources working on the project.

True.

This statement is true. You could also decrease the scope.

T/F 5: If stakeholders are requiring additional deliverables, you may need to balance the increase in scope by shortening the timeline.

False.

A scope increase is balanced by a longer timeline, or increased cost.

Module 5: Monitoring and Controlling

In this module, you will learn how to...

- Differentiate how a project is monitored versus controlled
- Express the difference between risks and issues
- State how to manage risks and issues to keep a project on track

How do I keep things on track?

Once planning is complete, Project Managers prepare to monitor and control their project in order to deliver its objectives. Reports provide the status of project work, so that actual performance can be compared to the plan. The Project Manager evaluates this status to determine if action is needed to keep the project moving forward as planned.

What does it mean to monitor a project?

To monitor project work, Project Managers track and report project progress. They collect information about project performance, provide forecasts for future work, track and analyze risks and issues, and communicate status.

What does it mean to control a project?

When actual performance varies from the project plan, a Project Manager develops corrective action plans to get the project back on track. This is project control. Depending on the degree of correction needed, the Project Manager may also need to submit a change request.

What is a change request?

A change request is typically used to review, approve, or deny significant changes that impact scope, schedule or budget. If approved, the project plan, schedule, or other projects documents, are updated to reflect the revised progress and forecast.

What is a project risk?

A project risk is an uncertain event or activity that could impact the scope, time, cost or quality if it happens. Some project risks are known at the onset of a project, and others arise later in the project. Examples might be inaccurate work estimates, misinterpreted requirements, or inadequate resources.

How do I manage project risks?

Risk management is about identifying, analyzing and responding to project risks. Work with the project team to identify risks that could threaten this project, or other projects. Risks are then broken down into three main parts.

Probability: How likely is the problem to occur?

Impact: How would it affect the project if it occurred?

Mitigation: How can we reduce the probability or impact?

We've identified and assessed risks. Now what?

The risk information needs to be documented in a risk log with its priority and response plan. Priority is driven by probability and impact. The risk log should be updated regularly as risks may change or new ones may be added. If a risk materializes, it becomes an issue and is moved to the issue log to be handled in real time.

What is a project issue?

A project issue is a problem, gap, or conflict that has happened that must be dealt with to prevent impacts to the project scope, schedule and cost. Think of it as an open question that needs to be answered or a decision that needs to be made in order to move forward with one or more deliverables.

How is an issue different from a risk?

The main difference between an issue and risk is that a risk *could* happen and an issue *has* happened. For example, being unable to find a qualified team member is a risk. A team member falling ill and being unavailable for three weeks is an issue.

How do I manage project issues?

To ensure issues get investigated and resolved, they need to be documented in an issue log, assign action, and tracked. This brings visibility to issues and accountability for timely resolution. It will also prevent the team from forgetting about issues. Issue logs should contain information like description, date identified, action plan, power and status.

T/F 1: To monitor a project means to decide on and implement correction actions when project performance varies from the plan.

False.

To monitor a project means to track and report on project progress.

T/F 2: A change request is not necessary if a change only impact the scope of the project.

False.

A change request should be completed whenever there is a significant change to the planned scope, schedule or cost of the project.

T/F 3: A project risk is a potential problem that could impact the scope, schedule or cost of a project.

True.

This statement is true and accurately describes project risks. When the risk is realized, it comes an issue.

T/F 4: You should determine the probability and impact of each project risk to know whether mitigation is needed.

True.

This statement is true. Probability and impact should be assessed to determine whether mitigation is needed.

T/F 5: You should track risks but it is not necessary to log and track project issues.

False.

Monitoring project issues is a critical part of making sure they're resolved without jeopardizing the success of the project.

Module 6: Moving Forward

In this module, you will learn how to...

- Describe how projects get started at Amazon
- List the different project management practices and tools at Amazon and the those used in HROA
- Express how Project Managers manage projects in Amazon's matrixed environment
- Summarize the responsibilities of a Project Manager at Amazon and tips on how to help be successful

How do I start a project at Amazon?

People at Amazon are thinking big about their business and obsessing about their customers everyday. The annual OP1 (Operating Plan) process, which kicks off each summer, is a way for teams to bring their big ideas in front of the S-Team (Senior Leaders at Amazon) and obtain approval and funding to move forward. This is one way projects get started.

What other ways can a project start?

A project can also arise outside of the OP1. Depending on the size and complexity, these projects may use existing or incremental resources. Either way, the project will need a business case to justify the investment. At Amazon, business cases are commonly presented as a white paper, press release and FAQs. These documents should be prepared with help from peers, leaders, customers and subject matter experts.

So, what should I do first?

HROA projects should be submitted in the project intake tool, called Request Center, along with the business case documents. After the project request is submitted, it is reviewed, and dispositioned by HROA service and solution owners. Prioritized projects are then prepared for the first gate, called Business Commit.

What happens at the Business Commit gate?

At the Business Commit gate, HROA leadership will validate the business need, and decide whether it's the right time to address it. If the project passes this gate, resources, including the project manager, are assigned and the project officially begins. The project moves in Project Center where it will be managed through the remaining project gates.

What gates come after Business Commit?

There are 4 additional gates after **Business Commit**. Review the descriptions below to learn more about each gate:

Concept Commit: Agreement on the approach and potential solutions to the problem or opportunity.

Execute Commit: Agreement that the proposed meets the needs of the business, and that its scalable and maintainable.

Readiness Commit: Ensure the solution is ready to be implemented, and that the business is prepared for the change.

Warranty Commit: Validate that the business need was met and the business is ready for the transition to an operational state.

What practices and tools are used at Amazon?

There is no one way to manage projects at Amazon. Amazonians use various practices and tools across the company. What is used often depends on the group or team you are on, and how to best deliver your intended solution.

So, I can use whichever practices I'd like?

In HROA, the methodology you use will depend on the type of project. Here are some commonly used methodologies at Amazon:

Waterfall: Linear approach where activities do not begin until the previous activity has finished

Agile: Iterative approach that emphasizes rapid delivery by leveraging sprints

DMAIC: (Define, Measure, Analyze, Improve, Control). Process improvement approach that places emphasis on defining an issue, and identifying root causes before considering possible solutions. Approach used for ACES.

What tools should I be using?

In HROA, Project Center is used to manage projects. Project Center is a portfolio and project management tool that acts as the single source for all HROA projects, providing global visibility and supporting best practices. Project Managers may choose to use other tools in addition to Project Center, such as Microsoft Project and Playbook.

How is managing projects different at Amazon?

Because Amazon is a highly matrixed organization, a Project Manager is often responsible for project delivery without having authority over the resources. The people needed for a project may be from various team across the organization, managed through different reporting chains.

How else is Amazon unique?

One of the key things that makes Amazon unique is our working backwards methodology. It is a process that encourages us to always begin planning by thinking about the customer first. It begins by creating a working Backwards document, which includes:

Press Release: Describe your ideas using customer-centric language.

FAQs: Unpack assumptions and anticipate needs from the customer and stakeholder point of view.

Visuals: Describe what the customer experience looks like.

What qualities will help me to succeed at Amazon?

A Project Manager must rely heavily on their interpersonal skills. This includes strong leadership, influencing, conflict resolution, and communication skills. They must also apply Amazon leadership principles. Most importantly customer obsession, ownership, earn trust, bias for action, dive deep, and deliver results.

Any final advice?

Learn how to become an awesome writer, and known you're expected to roll up your sleeves, be flexible, take risks, have a bias for action but not at the expense of quality, and be ready to communicate extensively up, down, and across the organization.

T/F 1: Every project at Amazon must be initiated through the annual OP1 process.

False.

Many small to medium sized projects are initiated and approved at the team level.

T/F 2: The first step to initiating a project is to present your idea at the Business Commit gate meeting.

False.

The first step is to write, socialize, and get feedback on a white paper, press release and FAQ.

T/F 3: Several project methodologies are used in HROA, including waterfall, agile and DMAIC.

True.

This statement is true. The methodology you use will depend on the type of project, and who you are partnering with.

T/F 4: HROA project managers should manage their projects in Project Center.

True.

This statement is true. HROA PMs may choose to use other project management tools in addition to Project Center.

T/F 5: Project Managers are generally not responsible for resolving conflicts or miscommunications.

False.

Interpersonal skills like communication and conflict resolution are critical for a successful project.