**Project management**

Much of project management involves: overseeing the work of others focused on leading and managing a project team, Influencing without authority. managing the needs and expectations of those above you, such as stakeholders, project sponsors, and other leaders within your organization.

# Tool

## Initiate the project

### Project charter

* SMART criteria create goal statement

specific measurable achievable relevant time-bound

* FACTS criteria to create Objectives and Key Results (OKRs)
* Triple-Constraint Model to manage in-scope, out-scope, scope creep

scope time cost Clearly document the scope during the initiation phase. Ensure the customer or stakeholder understands and agrees to the scope at the beginning of the project. Make sure the customer or stakeholder understands when proposed changes are out-of-scope. Come to a clear agreement about the potential impacts to the project and document your agreement. Collect costs for out-of-scope work.Document all costs incurred for out-of-scope requests, including those for work that’s indirectly impacted as a result, and be sure to indicate what the charges are for. Provide alternatives. Suggest alternative solutions to your customer or stakeholder and also help them analyze how their proposed changes might both address perceived problems and create additional risks. Perform a cost-benefit analysis, if necessary. Develop a change-of-scope checklist. Use this checklist to establish the impact of the proposed changes on all areas of the project. Be sure to get the customer or stakeholder to sign off on using this checklist as a communication and approval tool.

* success criteria to launch & land a project

Evaluating user engagement with the product Measuring stakeholder and customer satisfaction via surveys Tracking user adoption of the product by using sales data

### Building team

consider when building team: required role team size necessary skill availability motivation skills: technical skills Problem-solving skills leadership skills Interpersonal / people / soft skills

* Stakeholder analysis & Stakeholder buy-in

Procedure: First, make a list of all the stakeholders that the project impacts. Then determine the level of interest and influence for each stakeholder. Finally, assess their ability to participate, and find ways to involve them Power grid: We use the power grid to assign each stakeholder's level of importance to the project, measuring their interest and influence. Stakeholder buy-in: involves stakeholders in decision-making to reach a broader consensus

* RACI chart to define roles and responsibilities

A RACI chart helps to define roles and responsibilities for individuals or teams to ensure work gets done efficiently. It creates clear roles and gives direction for each team member. There are four types of participation included in a RACI chart. These are: Responsible: refers to those doing the work to complete the task. Accountable: refers to those making sure the work gets done. Consulted: includes those giving feedback, like subject matter experts or decision-makers. Informed: includes those just needing to know the final decisions or that a task is complete. Use case scenario: workload balance each task get only one Accountable

### Project management tools

Consider when introducing new tools: Discuss the tool early and often, if possible Ask for feedback from key stakeholders Involve the key stakeholders in demonstrations as you get closer to making the final decision on the project tracking tool Ensure the tool is fully functional before the team is introduced to it Set up training for the tool as needed before you ask the team to actually use it.

* scheduling & work management software

Task tracking Task assignment

• Asana and Asana Guide

• Basecamp

• Trello

• Jira

• ClickUp

• Monday.com

• Microsoft Project or Project Libre (open source)

• Smartsheet (Demo)

* Productivity tools

• Presentation

• Spreadsheet

• status updates

• Project overviews

• Project plans

• RACI charts

• spreadsheets

• meeting agendas

* Collaboration tools

• online shared documents

• email and chats

## Make a plan

### kick-off meeting

get together to establish a shared vision, align on the scope, and build team rapport

* Inviting people

• project team (RACI chart)

During the kickoff meeting, team members will learn more about how they'll contribute to the project and how they'll gain a deeper understanding of how the team will work together to reach the project's goals.

• project sponser

have a chance to understand the high-level plan for the project,

• project stakeholder

have a chance to understand the high-level plan for the project,

* Agenda (1-hr)

• Before

At the start of the meeting, ask a teammate to take notes on key points you discussed throughout the session and to record each teammate's action items

• Introduction (10-min)

how the project came to be why the project matter set a share vission

• Background (5-min)

how the project came to be why the project matter set a share vission

• Goal and scope (5-min)

in-scope out-of-scope target launch date milestone

• Roles (5-min)

What work everyone is responsible for throughout the duration of the project

• Collaboration (10-min)

share project tool and document

• What comes next (10-min)

Set expectation and action items

• Question (15-min)

gain clarity on meeting topic Ensure the project benefits from diversity of thoughts experience, and ideas

• After

send a follow-up email to the group, summarizing key points and outcomes from the meeting, as well as any action items to the attendees. In your follow-up email, be sure to also invite attendees to reach out if they have any additional questions

### Gantt Chart for timeline

* Work Breakdown Structure (WBS) for milestones & task

A WBS is a deliverable-oriented breakdown of a project into smaller components. It’s a tool that sorts the milestones and tasks of a project into a hierarchy, in the order they need to be completed. Start with the high-level, overarching project picture. Brainstorm with your team to list the major deliverables and milestones. Example: Imagine you are planning a company event. Your major milestones might include categories like “secure venue,” “finalize guest logistics,” and “establish agenda.” Identify the tasks that need to be performed in order to meet those milestones. Example: You could break a milestone like “secure venue” down into tasks like “research venues,” “tour and decorate space,” “make down payment,”and so on. Examine those tasks and break them down further into sub-tasks. Example: You could break down a task like “tour and decorate space” further into sub-tasks like “organize decorating committee,” “purchase decorations,” “assign decorating responsibilities,” and so on.

* time & effort estimation

Effective open-ended questions to the team: How long does it typically take you to mock-up a website design like this one? How complex is this task? What are the risk associated with this task? When do you think you could have this ready? how many faster could you do if I give you support on xxx? what is stopping from going faster? what team would you need to get involve to help this? we had a issue. are there similiar isuue in other part of the team? do we need to get together in a larger group to bring that together?

* Capacity planning
* critical path
* network diagram
* task buffer
* project buffer

### baseline budget

* Resource cost rate

• researching historical data

• leveraging experts

• the bottom-up approach

* Reserve analysis

Contingency reserves are an estimated amount, whereas management reserves are generally a percentage of the total cost of the project. To determine a project’s management reserves, you can estimate a percentage of the budget to set aside. This estimate is typically between 5–10%, but the amount is based on the complexity of the project. A project with a more complex scope may require higher management reserves. Note that the project manager will generally need approval from the project sponsor in order to use management reserves.

• Contingence reserve

contingency reserves are used to cover the costs of known risks

• management reserves

management reserves are used to cover the costs of unknown risks

* procurement

Procedure phrase: Initiating: planning what you need to meet your project goals Selecting: deciding which supplies and vendors to use Contract writing: developing, reviewing, and signing contracts Controlling: making payments and maintaining and ensuring quality Completing: measuring your success

• Non-Disclosure Agreement (NDA)

initiating phase The purpose of an NDA is to keep confidential information within the organization.

• Request For Proposal (RFP)

selecting phase consult with Subject-matter expert a request for proposal or an RFP outlines the details and requirements of an organization's project to be passed on to vendors.

• Statement Of Work (SOW)

contracting phase A statement of work is a document that clearly lays out the products and services a vendor or contractor will provide for the organization.

• Vendor management

Vendor management entails: sourcing vendors, getting quotes for their work, deciphering which vendors will best fulfill your needs, negotiating their contracts, setting deadlines for them, evaluating performance ensuring payments are made.

### risk management plan

A risk management plan is a living document that contains information regarding high-level risks and the mitigation plan for each of those risks.

* risk assessment

single point of failure dependency common risk type: time risks budget risks scope risks external risk type: environmental risk legal risk

• probability and impact matrix

A probability and impact matrix is a tool used to prioritize project risks.

• fish bone diagram

Procedure: Define the problem Identify categories Brainstorm causes Analyze the data

* risk register
* ROAM technique

The ROAM technique is used to help manage actions after risks arise. Resolved: consider this risk to be addressed. It’s no longer a problem. Owned: Assign a team member ownership of the risk and monitor the risk through to completion. Accepted: Understand and accept the risk for that it is, because it can’t be resolved. Mitgated: Formulate a plan to eradicate the risk

### communication plan

A communication plan organizes and documents the process, types, and expectations of communication for the project. A communication plan needs to address these questions: Type of communication: what needs to be communicated (status update, user feedback, a newsletter, or another type of project meeting)? Recipients: who needs to communicate, Frequency / Key dates: when communication needs to happen Goals: why to communicate? Delivery methods: how communicate (email, phone, or in-person)? Resource links: where the information communicated is stored. Tips for effective communication: Recognize and understand individual differences Not making assumptions about your audience’s backgrounds, identities, or experiences. Being mindful of your own biases. Using appropriate, professional, and neutral language. Including, respecting, and being curious about diverse points of view. Brainstorm and craft the appropriate message What channels can your audience use to contact you or the team? Are you conveying information? Are you asking for input? Are you clarifying an issue? Are you resolving a problem? Deliver your message Avoid including any sensitive or potentially private information. Assume everyone at the company will receive the communication. Obtain feedback and incorporate that feedback going forward Checking to make sure your message was clear. Asking them for feedback. Encouraging open communication. Responding to questions quickly.

### documentation storage and sharing

Document: guides manuals meeting notes plans processes Benefits: continuity, visibility accountable Practice: store all document in a centralized place need-to-know basis: summarize the relevant information into a status report for those who need to stay informed of final outcomes

## Execute & complete task

### Tracking method

Method: Roadmap: communicate milestones to a large team Gantt chart: project with multiple dependencies Burndown chart: tracking tasks against your deadline is especially important Benefit of tracking: transparency risk management keep project on track build confidence Common tracked items: project schedule statue of action items, key task, and activity progress toward milestone cost key decision,changes, dependencies, and risk to the project.

* roadmap

A roadmap is best suited for when you need a way to track big milestones in your project. It's useful for illustrating how a project should evolve over time to a team and key stakeholders.

* Gantt chart

A Gantt chart measures tasks against time and includes useful information, like who will own each task and what the order of the tasks should be. For staying on schedule and for projects with many dependencies or tasks or activities or milestones that are reliant on one another. For teams with a lot of people, because ownership and responsibilities are explicitly laid out visually. Commonly used in Waterfall project management.

* burndown chart

Burndown charts are best suited for projects that require a detailed, broken-down review of each task associated with a project, and they're great for projects where finishing on time is the top priority. The y-axis or the vertical axis symbolizes the number of tasks left to complete, and the x-axis or the horizontal axis signifies time. Progress gets tracked from the upper left-hand corner of the chart.

* Project status reports

A project status report gives an overview of all of the project’s common elements and summarizes them in a snapshot. It is an efficient communication tool to convey the latest status in one place for the team and stakeholders.

### Risk management

* change request forms

You and your stakeholders will use these forms in order to stay on top of, and adequately manage, any changes. Since a lot of people with different roles on the project can fill out these forms, it's important for the forms to be self-explanatory and very thorough.

### Escalating issues

* risk communication

For low-level risks, something as simple as an e-mail might suffice. For example, when sending out weekly planning updates to a project stakeholder, you might list a few low-level risks that are relevant to their interests and briefly explain how you'll address these risks if they arise. For medium level risks, you might increase your level of communication to a direct e-mail between yourself and the stakeholder in which you outline the risk with more specifics and provide a detailed explanation of your plan to mitigate the risk. You might also link to your risk management plan to provide them with more information. You might write "urgent" in the subject line to stress the e-mail's importance. The serious nature of high-level risks requires a thorough and direct level of communication.

* escalation standards and practices

A project manager should escalate an issue at the first sign of critical problems in the project.

* escalation email

Effective escalation emails: Maintain a friendly tone State your connection to the project Explain the problem Explain the consequences Make a request

* timeout

A timeout means taking a moment away from the project in order to take a breath, regroup, and adjust the game plan. A timeout may temporarily disrupt your momentum, but it may be absolutely necessary to set you up for success in the long run. This timeout is a chance for the project team to evaluate the changes so they can adjust the plan as needed. You may want to take a timeout when the client wants to redefine the scope of the project or if team members get reassigned to other projects and you need a plan to backfill them.

### customer relationships

Practice: negotiation, empathetic listening, trust building It's important to ask open-ended questions and actively listen to understand the customer's current state versus their desired state and what might help them get from here to there.

### Quality management plan

the four main concepts of quality management: quality standards (i.e. catogory like: functionality, design, safety, ease of use, productivity, effectiveness.) quality planning quality assurance: reviewing processes to evaluate whether or not your project is delivering an acceptable level of quality. (i.e. type of evaluation: 1) help to make improvements. 2) help to measure and compare?). quality control

* Evaluation
* feedback surveys

Feedback surveys are a survey in which users provide feedback on features of your product that they like or dislike. These surveys can take place as you design, before you launch, in order to find out if people like and understand the product, or after you've launched, if you want to make sure the user experience is even more satisfying.

* user acceptance tests, or beta tests

General procedure: In a typical UAT setting, you'll welcome your users and thank them for participating. Then, you'll present the product to them. This includes discussing testing guidelines and demonstrating how the product works. Next, you'll start your UAT test cases, taking your audience through critical user journeys. Then ask questions to collect feedback from the users on their overall experience, in order to identify edge cases (outliers that the original requirements didn't account for) detail practice: Define and write down your acceptance criteria. (Acceptance criteria are pre-established standards or requirements that a product, service, or process must meet. Write down these requirements for each item that you intend to test. For example, if your project is to create a new employee handbook for your small business, you may set acceptance criteria that the handbook must be a digital PDF that is accessible on mobile devices and desktop.) Create the test cases for each item that you are testing. (A test case is a sequence of steps and its expected results. It usually consists of a series of actions that the user can perform to find out if the product, service, or process behaved the way it was supposed to. Continuing with the employee handbook example, you could create a test case process in which the user would click to download the PDF of the handbook on their mobile device or desktop to ensure that they could access it without issues.) Select your users carefully. It is important to choose users who will actually be the end users of the product, service, or process. Write the UAT scripts based on user stories. These scripts will be delivered to the users during the testing process. A user story is an informal, general explanation of a feature written from the perspective of the end user. In our employee handbook example, a user story might be: As a new employee, I want to be able to use the handbook to easily locate the vacation policy and share it with my team via email. Communicate with users and let them know what to expect. If you can prepare users ahead of time, there will be fewer questions, issues, or delays during the testing process. Prepare the testing environment for UAT. Ensure that the users have proper credentials and access, and try out these credentials ahead of time to ensure they work. Provide a step-by-step plan to help guide users through the testing process. It will be helpful for users to have some clear, easy-to-follow instructions that will help focus their attention on the right places. You can create this plan in a digital document or spreadsheet and share with them ahead of time. Compile notes in a single document and record any issues that are discovered. You can create a digital spreadsheet or document that corresponds to your plan. It can have designated areas to track issues for each item that is tested, including the users’ opinions on the severity of each issue. This will help you prioritize fixes. As the project manager, you can address the different types of feedback as follows: Bugs or issues: Users might report technical issues, also known as bugs, or other types of issues after performing UAT. You can track and monitor these issues in a spreadsheet or equivalent system and prioritize which issues to fix. For instance, critical issues, such as not being able to access, download, or search the employee handbook, need to be prioritized over non-critical issues, such as feedback on the cover art of the handbook. Change requests: Sometimes the user might suggest minor changes to the product, service, or process after UAT. These types of requests or changes should also be managed and prioritized. Depending on the type and volume of the requests, you may want to share this data with your primary stakeholders, and you may also need to adjust your project timeline to implement these new requests.

* Web Content Accessibility Guidelines, WCAG

Oftentimes, incorporating accessible features into a product is overlooked or left to the final stages of a project. and can lead to serious implications, like launch delays, or worse, a product that can't be used by a percentage of the population. Ensure your developers are familiar with accessibility requirements at the start. If they're not, help connect them with appropriate resources or experts. Include testers with various disabilities in your usability testing whenever possible At the very least, have the product tested for adherence to accessibility guidelines.

### Continuous improvement

Continuous improvement is an ongoing effort to improve products or services.

* Process improvement

Process improvement is the practice of identifying, analyzing, and improving existing processes to enhance the performance of your team and to develop best practices or to optimize consumer experiences. The improvement can also be applied to program and even portfolio.

* Data-driven improvement frameworks

General procedures: identify issues, reduce errors, optimize your processes.

• DMAIC

Define the business problem, goals, resources, project scope, and project timeline. Measure. Here, you'll conduct performance metrics and data collection to establish baselines and measure success. Analyze. Work to find the root causes of problems and understand their impact. Improve. This means implementing a reasonable solution to the problem. Control. This is where you'll implement the changes and stay on top of monitoring the updated processes you've established

• PDCA

PDCA is a four-step process that focuses on: Plan: Identifying a problem. Here, you'll identify the issue and root cause and brainstorm solutions to the problem. Do: fixing that issue, Check: assessing whether the fix was successful, Act: fine-tuning the final fix

### Data analysis

Data analysis is the process of collecting and organizing information to help draw conclusions. It's used to solve problems, make informed decisions, support goals. Procedure: ask: defining the problem by asking key questions to help frame your analysis prepare: collect and store the data process: enter your data into a spreadsheet, or another tool of your choice, and eliminate any inconsistencies and inaccuracies that can get in the way of results analyze: take a close look at your data to draw conclusions, make predictions, and decide on next steps share: use data visualization to organize your data in a format that is clear and digestible for your audience act: the business takes all of the insights you have provided and puts them into action to solve the original business problem

* Available metrics

• Productivity metrics

Productivity metrics allow you to track the effectiveness and efficiency of your project : Milestone Tasks Projection Duration

• Quality metrics

Quality metrics relates to achieving acceptable outcomes: number of changes issues, cost variance

* Data ethics

Businesses apply data ethics practices so they can: Comply with regulations Show that they are trustworthy Ensure fair and reasonable data usage Minimize biases Develop a positive public perception

• Data privacy

As a project manager, it is your responsibility to protect the data you collect. You can help ensure the privacy of data collected from users, stakeholders, and others for your projects by: Increasing data privacy awareness. Make sure every member of your project team—plus the vendors, contractors, and other stakeholders from outside of your company—are made aware of your organization's data security and privacy protocols. Using security tools. Free security tools, like encrypted storage solutions and password managers, can decrease your project’s vulnerability to a data breach. In a lot of applications, like ones that are part of Google Workspace and Microsoft OneDrive, privacy settings can be adjusted to only give access to specific individuals. Anonymizing data. Data anonymization refers to one or more techniques such as blanking, hashing, or masking personal and identifying information to protect the identities of people included in the data. This helps protect individuals’ personal information by keeping them anonymous. Once the information has been anonymized, it can then be used and shared freely. Types of data that should be anonymized include names, telephone numbers, social security numbers, email addresses, photographs, and account numbers.

• Data bias

Another important data ethics practice is making sure that the data you collect does not indicate any biases. Data bias is a type of error that tends to skew results in a certain direction. Types of biases: Sampling bias is when a sample is not representative of the population as a whole. For example, maybe your sample did not include people above the age of 65. Or maybe you excluded people from certain socioeconomic groups. Observer bias is the tendency for different people to observe things differently. For example, stakeholders from different parts of the world might view the same data differently and draw different conclusions from it. Interpretation bias is the tendency to always interpret situations that don’t have obvious answers in a strictly positive or negative way, when, in fact there is more than one way to understand the data. Data that does not provide an obvious set of conclusions makes some people feel anxious, which can lead to interpretation bias. For example, a team member might interpret inconclusive survey results negatively, while other team members might be able to think more carefully and assess the data from different angles. Confirmation bias is the tendency to search for or interpret information in a way that confirms pre-existing beliefs. For example, you might ask only specific stakeholders for feedback on parts of your project because you know they are the most likely to have the same perspective as you.

* storytellers

storytellers using information and experiences to share ideas with others. General procedure: define your audience. collect the data. filter and analyze the data. choose a visual representation. shape the story. gather your feedback.

* Dashboard

Dashboards display a tight summary of metrics, stats, KPIs: launch countdown, burndown chart, status of task

* Effective presentation techniques

Your job is to present your findings effectively. Three ways to help you give an effective presentation: precise, flexible, memorable.

• designing for five seconds

The idea is that your audience should be able to understand a slide within five seconds. So I keep my presentation slides simple, including only the most relevant data points, to avoid overloading my audience with text they don't have time to read.

### Leading teams

Five factors that have an impact on team effectiveness： psychological safety: they believe it's safe to take risks within their team and they don't risk being labeled as ignorant, incompetent, negative or disruptive. (be direct and kind) dependability: members are reliable and complete their work on time. (You as a project manager have to be able to clearly communicate expectations and ensure that the team feels comfortable negotiating with you when needed.) structure and clarity: Each team member has a clear sense of their individual role, plans and goals. (Let team have a sense of how their work affects the group.) meaning: finding a sense of purpose either in the work itself or in the results of that work. impact: the belief that the results of one's work matters and creates change. Part of your role as the project manager, is to help individual teammates identify how they drive impact both within the team and beyond it. (Project tracking can be a helpful tool for visualizing progress and impact.)

* Workflows and processes

Team create systems that turn chaos into order: creating, implementing, and improving standardize, measurable, repeatable and scalable workflows and processes for your team.

* Emails and meetings

Team communicate and listen: daily or weekly status update emails regular team meetings:

* Team atmosphere

Team promote trust and psychological safety: You should encourage contributions from all team members regardless of role or rank. You make clear that critiques of the project and plans are welcomed and valued no matter who they come from.

* Empathy and motivation

Team demonstrate empathy and create motivation: You can demonstrate empathy for your teammates by being present, listening, and asking questions. During one on one conversations, avoid making assumptions about what the other person is thinking and feeling. If you're quiet and curious, there's always more to learn. create motivation by recognizing a job well done through public forums. Like in a meeting or a group email. Be sure to recognize good work, and not just heroic efforts.

* Delegation and prioritizing

Team delegate responsibility and prioritize: mentorship: By delegating responsibility for specific tasks to individuals on your team, you provide your teammates with the opportunity to add value using their particular set of skills. You also give yourself space to focus on the project as a whole. sponsorship: Work with your team to build consensus around priorities, explaining your rationale can help you get their buy-in and increase their commitment to the work.

* Celabration

they celebrate team's success: a group lunch, a small gift a congratulatory email a Simple gestures

* Air cover

Air cover: prioritize the needs of your team over the wants of your stakeholders. The ability to effectively provide air cover requires: a trusting relationship between a project manager and their stakeholders. The project manager aims to: demonstrate their abilities to lead a team and communicate effectively. Avoiding risk involved in providing air cover. When preparing to defend your team against out-of-scope requests, be sure that you are confident in your team’s progress toward the project goal. Method of air cover: Saying “No” without explicitly saying “No”: You can gently push back with a polite explanation that their request won’t be possible to complete under the current constraints—the scope, time, and/or cost—of the project. Saying “No” without explicitly saying “No”: You can politely offer to get back to the stakeholder with your response and/or alternative solutions. This gives you time to better understand the request and to consult with trusted team members to lay out the benefits and costs of this request. And, if you are lucky, this might even give the stakeholder the opportunity to reconsider their request or forget about it entirely. Intervening from behind the scenes: Instead of calling a team meeting to discuss the stakeholder’s request for a new flavor, you consult with only two trusted members of your team to help brainstorm solutions.

* team dynamics

team dynamics helps to: create a collaborative and psychologically safe environment. understand how to motivate your team. the psychologist Bruce Tuckman's five stages of team development illustrate how teams grow from a disparate group of people into a high functioning unit: Forming:(feels shiny and new) project manager should clarify project goals, roles, and context about the project. storming: (feels frustration) project manager focus on conflict resolution. Listen as the team addresses problems to solve and share insights on how the team might better function as a unit. resolve some of its internal conflict by establishing new norms. Like processes and workflows norming: (feels better equipped to work together efficiently and effectively) the project manager should codify the team norms, ensuring that the team is aware of those norms and reinforce them when needed. performing: (feel seamlessly) the project manager should focus on delegating, motivating and providing feedback to keep up the team's momentum. adjourning: (bittersweet) the project manager should set up time to celebrate the final milestones and success of the project as a group. And be sure each member of your team knows what's next for them.

* Ethical & Inclusive leadership

Ethical leadership is a form of leadership that promotes and values honesty, justice, respect, community integrity. Inclusive leadership is when everyone's unique identity, background and experiences are respected, valued and integrated into how the team operates.

* influencing

Influencing is the ability to alter another person's thinking or behaviors. Leadership expert, Dr. Jay A Conger identifies the steps to effective influencing as: established credibility, frame for common ground, provide evidence connect emotionally. As you build your career, try to identify your own superpowers. The personal sources of power to influence: knowledge: the power that you draw from your expertise in certain subjects, your unique abilities, and skill sets, and even your ability to learn new things. expressiveness: the ability to communicate with others. i.e. great storyteller, connecting emotionally with people. history: the level of personal history there is between yourself and another person. character: other people's view of the qualities that make you 'you'. Organizational sources of power to influence: your role: your position within an organization, or team. information: your level of access, and control over information. network: people you're connected with professionally and personally. reputation: how others perceive you overall Dr. Conger also identified four common mistakes that people make when attempting to influence others: Approach the audience aggressively Resist compromise Fail to establish credibility, frame for common ground, provide evidence, or connect emotionally (Conger’s four steps of effective influencing) Assume one conversation is enough to come to an agreement

### project management meetings

Four elements do effective meetings: structured intentional collaborative inclusive

* project kick-off

project kick-off: the official beginning of a project and serves as a way to align the team's understanding of the project goals with actual plans and procedures.

* status updates

status updates: includes regular team meetings where the primary goal is to align the team on updates, progress, challenges, and next steps. (task updates, schedule status, budget status, current issues, anticipated issues, action items.)

* stakeholder reviews

stakeholder reviews: (one-on-one basis) get buy-in and support. Stakeholders, each have their own set of tools, know-how, and expertise. Understanding a stakeholder's challenges or problems before hand.

* project reviews

## Closing a project

How to complete a project: assure all work is done ensure that all agreed upon project management processes are executed need formal recognition and agreement that the project is completed by key stakeholders Types of project want to avoid: the never-ending project: for whatever reason, the project deliverables and tasks cannot be completed. the abandoned project: the final deliverable never makes it to your customer.

### milestone closing process

Step to conducting a closing process after each phase or milestone: Review documentation and put together closing documentation: statement of work (was all of the required work in the elapsed phase done?) request for proposal, risk register (Were all identified issues addressed? ) RACI chart (Did every team member complete their assigned tasks?) build and review that documentation with team members notes from any retrospectives conduct administrative closure of the procurement process: Close any contracts necessary, deliver the payments to vendors, retrieve all final deliverables from contracted workers formally recognize the completion of the phase, sending out an email notifying them that you've achieved this milestone or may want a larger meeting complete any necessary follow-up work. gathering final feedback conducting closing surveys.

### project closing process

provide the necessary training tools, documentation, and capabilities to use your product. manuals how-to guides ensure that the project has satisfied its goals and desired outcomes. document acceptance from all stakeholders like clients and sponsors review all contracts and documentation with your project team: SOW, RFP, RACI chart, risk register, the procurement documents conducting a formal retrospective. disband and thank the project team

### metrics to showcase

Improvement in schedule performance Revenue growth Positive return on investment (ROI) Increased external user counts Increased percentage of internal users Cost vs. margins High percentage of customer satisfaction Reduction in overhead Reduction in technical issues Time saved

### retrospective meeting

A retrospective focuses on identifying the contributing causes of an incident or pattern of incidents without blaming one individual. It has to be: blameless reflect both positive and negative aspect Advantage: First, they encourage team building, because they allow team members to understand different perspectives within their team. Second, they facilitate improved collaboration on future projects. Third, they promote positive changes in future procedures and processes. When to hold a retrospective: Missed deadlines or expectations Miscommunication between stockholder Reached the end of a sprint Product launched and landings Record key lessons that other people can learn from What to discuss (Find out what risk is materialized at when and why, then how next time): What happened during the planning stage? What could have gone better? Where did your team get lucky? How about during the execution stage? Was there a large gap between the original plan and its execution? How did the team feel about it?

* techniques to encourage participation

establish a safe environment for the team, model the kind of participation you'd like to elicit from your team, pose a group question and ask for individual responses, review the project timeline.

* techniques to encourage accountability

come prepared with specific challenges to discuss as a group Turn team complaints into SMART action items Push the team to identify its role in creating a given challenge, Detach the challenge being discussed from any specific person in the room.

* techniques to address negativity

you can aim to set a positive tone at the start of the meeting, determine how you'll set the tone of the meeting, Consider asking individual team members to share their thoughts rather than posing questions to the group, call a meeting break.

### project closeout report

A project closeout report is a document created by project managers for project managers. A project closeout report serves three major purposes. it's a blueprint to document what the team did, how they did it, and what they delivered. it provides an evaluation of the quality of work. it evaluates the project's performance with respect to budget and schedule. When writing a project closeout, make sure to include the following: project summary, methodology, performance baseline, outcomes, lessons learned next steps a project documentation archive.

### Impact reporting

Impact reporting is a presentation that's given at the end of a project for key stakeholders, which typically includes the stakeholders you had in the initial kick-off meeting. The purpose of impact reporting is to demonstrate how the project went and discuss the impact of your product or service. It's important for the project manager because you'll be able to demonstrate the success of your project on your terms and present the work you did to add value to the business.

# Agile

## 4 Agile values

Individuals and interactions over processes and tools Working software over comprehensive documentation Customer collaboration over contract negotiation Responding to change over following a plan

## 12 principles

“Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.” Whether you are working to create a product for your company or for a customer, chances are that someone is awaiting its delivery. If that delivery is delayed, the result is that the customer, user, or organization is left waiting for that added value to their lives and workflows. Agile emphasizes that delivering value to users early and often creates a steady value stream, increasing you and your customer’s success. This will build trust and confidence through continuous feedback as well as early business value realization. “Welcome changing requirements, even late in development. Agile processes harness change for the customer’s competitive advantage.” When working in Agile, it’s important to be agile. That means being able to move swiftly, shifting direction whenever necessary. That also means that you and your team are constantly scanning your environment to make sure necessary changes are factored into the plans. Acknowledging and embracing that your plans may change (once, twice, or several times) ensures that you and your customers are maximizing your success. “Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.” Delivering your product in small, frequent increments is important because it allows time and regular opportunities for stakeholders—including customers—to give feedback on its progress. This ensures that the team never spends too much time going down the wrong path. “Business people and developers must work together daily throughout the project.” Removing barriers between developers and people focused on the business side of the project, builds trust and understanding and ensures that the developers, or those building the solution, are in tune with the needs of the users. “Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.” A successful Agile team includes team members that not only trust each other to get the work done but are also trusted by their sponsors and executives to get the work done. Teams build better solutions when they are empowered and motivated to deliver difficult projects. “The most efficient and effective method of information to and within a development is face-to-face conversation.” There isn’t anything quite like face-to-face communication. Face-to-face communication allows us to catch certain cues, body language, and facial expressions that are sometimes lost when using forms of communication like email, chat, or the phone. However, we can’t always be face-to-face. Establishing effective communication norms—no matter the format—is essential to effective teams. “Working software is the primary measure of progress.” In Agile teams, the main way to demonstrate meaningful completion of work is to show a working piece of the solution. In software teams, that might mean a functional piece of software. In non-software teams, that might mean a critical portion of the solution that is ready to be demonstrated to users or their representatives in order to collect feedback. This is in contrast to traditional or Waterfall projects, where the completion of project documents could be used to measure progress. In Agile project management, it is not enough to say that the team is 80% done with an activity if there is no working, demonstrable artifact available to review. “Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.” Maintaining a steady but careful pace will prevent errors along the way. Also, you never want your team to feel overworked or overwhelmed. On the flip side, a team that is underutilized may become bored and lose the creative spark to innovate. The Agile ideal is to achieve a steady pace of effort for the team that avoids overtime and burnout. “Continuous attention to technical excellence and good design enhances agility.” This principle conveys that just because the team is working fast doesn’t mean they sacrifice quality. By emphasizing quality and design throughout the project development phase, the agility, efficiency, and speed of the team will be increased. When a team delivers a well-built solution, they can quickly respond to user feedback and new information. However, if the product is low quality, implementing changes can become problematic, complex, and slow down the entire team. “Simplicity—the art of maximizing the amount of work not done—is essential.” The team should avoid implementing extra features into the solution that weren’t explicitly requested by the user or product owner. This includes removing procedures that are no longer necessary, and reducing unnecessary documentation. “The best architectures, requirements, and designs emerge from self-organizing teams.” Team members should be able to get their work done by designing their own work processes and practices, without a manager dictating how they operate. Team members should also feel empowered to speak up with questions, concerns, or feedback. “At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.” In Agile, it is important to acknowledge that learning from successes and failures is continuous. No team is perfect. There will be mistakes, challenges, trials, and triumphs. Teams should reflect on all of these different aspects of their activities so that they can make necessary adjustments.

## VUCA factors

VUCA is an acronym that defines the conditions that affect organizations in a changing and complex world. It was designed to help us factor in the forces of change and uncertainty in our projects and businesses: volatility, uncertainty, complexity, ambiguity.

## methodology

### Scrum

The Scrum Guide defines Scrum as a framework for developing, delivering, and sustaining complex products. Scrum uses an iterative and incremental approach.

* three pillar

Empiricism is built on three foundational pillars. they're also the three pillars of Scrum. transparency, inspection, adaptation

* five core values

Scrum Teams work and behave according to five core values: commitment, courage, focus, openness, respect.

* roles

Scrum Master: responsible for ensuring that the team lives Agile values and principles, follows the processes and practices that the team agreed to, sharing information to the larger project team, and they also help the team focus on doing their best work. Product Owner: responsible for maximizing the value of the product and the work of the team. Development Team: responsible for how a team will deliver that product

• Scrum Master

facilitate, coach, and manage stakeholders.

• Product Owner

customer-focused, decisive, flexible, optimistic, available, and collaborative.

• Development Team

* product Backlog

The Backlog is the central artifact in Scrum, where all possible ideas, deliverables, features, or tasks are captured for the team to work on. Three key features: living artifact owned and adjusted by the product owner a prioritized list of features best practices and pieces of data to capture: description value (added value/ profit) order estimate (cost estimation)

* User stories

User stories: "As a <user role>, I want this <action> so that I can get this <value>." Each user story should meet six different criteria, represented by the acronym I.N.V.E.S.T., or invest: Independent Negotiation Valuable Estimable Small Testable

* Five Scrum Event

• Sprint

The Sprint is the name of the time-boxed period in Scrum where work is done. How to determine the timebox: the frequency of changes to be how much focus time your solution developers might need to build a Backlog item how much overhead goes into a delivery of your product

• Sprint Planning

• Daily Scrum (Stand-up)

there's a practice called the Daily Scrum, also called the Stand-up. This is where the team meets for 15 minutes or less every day of the Sprint to inspect their progress toward their goal.

• Sprint Review

• Sprint Retrospective

* burndown chart

### KanBan

Kanban boards or charts display the progress of a project as to do in progress done The advantage of Kanban method: ensures that the project team only accepts a sustainable amount of in-progress work. provides transparent visual feedback to everyone who might be interested about the status of work in progress. By focusing on work-in-progress limit or WIP limit, the work gets done faster. This goal of trying to maximize efficiency is called flow, and is a core principle of Kanban.

### XP

XP activity: design: simplicity coding: clear and concise Testing: more is better listening:

### Lean Six Sigma

Lean methodology consists of: value map value stream create flow established pull pursue perfection.

# Governance and Change management

Governance in business is the management framework within which decisions are made and accountability and responsibility are determined. In simple terms, governance is understanding who is in charge. Effective project governance ensures that an organization’s projects are aligned to the organization’s larger objectives, are delivered efficiently, and are sustainable. This includes: Considering the long- and short-term interests of your organization Making thoughtful decisions about which projects to take on and avoiding projects if you do not have sufficient resources Providing timely, relevant, and reliable information to the board of directors and other major stakeholders Eliciting the input and buy-in of senior managers since they are the decision-makers During the initiation phase, prioritizing clear, reachable, and sustainable goals in order to reduce confusion and conflict During the planning phase, assigning ownership and accountability to an experienced team to deliver, monitor, and control the process During the execution phase, learning from mistakes and adapting to new or improved knowledge Change management is the process of delivering your completed project and getting people to adopt it is called change management. Change management is a structured approach for dealing with change within an organization. how will the organization react to change? Which influencers can affect change? What are the best means of communication? What change management practices will lead to the successful implementation of my project and so on?

## Be proactive

Be proactive: Incorporate change management into your project management steps. For example, you can schedule documentation reviews periodically to ensure that your team members know there is a place to voice their suggestions and concerns. You can also plan steps towards the end of your project to introduce the deliverable to users in the form of demonstrations, question and answer forums, or marketing videos. You can factor all of these decisions into your plan so that any potential changes are less likely to impact your timeline. If these steps have not been built into your plan, you can escalate and stress the importance of a change management plan to your stakeholders. Proactive and inclusive change management planning can help keep any potentially impacted stakeholders aware of the upcoming changes.

## Communicate

Communicate: Maintaining communication about upcoming changes are vital to ensuring successful change management. Communication should occur regularly among impacted stakeholders, the change management team, and the project team.

## Follow a consistent process

Follow a consistent process: Following a clear change management process helps maintain consistency each time there is a change. The change management process should be established and documented early on in your project to guide how the project will handle change. Your organization may also have an overarching change management plan that can be adopted for your project. This may include when the promotion of the change should happen, when training should occur, when the launch or release will occur, and corresponding steps for each phase of the process.

## Use tools

Use tools: Incorporating tools to assist in the adoption of a change can be very helpful. Let's examine a few examples you can use on your next project. Feedback mechanisms, such as surveys, can capture input from stakeholders. Flowcharts can visualize the project's development process. Culture mapping can illustrate the company's culture and how the company's values, norms, and employees behavior may be affected by the change.

# Organizational culture

## Ask questions

### Atmosphere

What is the company’s dress code? How do people typically share credit at this company? Is risk-taking encouraged, and what happens when people fail? How do managers support and motivate their team? How do people in this role interact with customers and users? When and how do team members give feedback to one another? What are some workplace traditions? What are some of the ways the company celebrates success?

### Policies

What are the policies around sick days and vacation? Does the company allow for employee flexibility (e.g., working from home, flexible working hours)? What policies are in place that support employees sharing their identity in the workplace?

### Processes

What is the company’s onboarding process? How do employees measure the impact of their work?

### Values

What are the company’s mission and value statements? How might the person in this role contribute to the organization’s mission? How does the organization support professional development and career growth?

## Listen to people’s stories

What were employees' experiences with similar projects in the past? What can they tell you about key stakeholders and customers?

## Take note of company rituals

How are birthdays and holidays celebrated? Do employees generally eat lunch at the same time and in the same place? Watch employee interactions: Observing how employees interact can help you tailor your interaction style to the company norm. Are employee interactions more formal or informal in nature? Are ideas solicited from employees in different roles?

## Effect

### Identity

Identity: An organization’s culture defines its identity. Its identity essentially describes the way the company conducts business, both internally and externally. A company’s values and organizational culture go hand-in-hand; its values are part of its identity. You can almost think of an organization’s culture as its personality. That is why it is important to learn your company’s (or target company’s) mission and value statements. The mission and value statements will help you understand why the company exists and will give you insight into what the company believes in and how it will behave.

### People

People: Strong, positive organizational culture helps retain a company’s best employees. People who feel valued, engaged, and challenged are more likely to give their best and want to drive for success. An organization’s culture can help keep talented employees at a company, and it can attract great people too! On the other hand, a toxic culture can have the opposite effect. It is important to find an organization with a culture that fits your personality. One way to find out more about an organization's culture is to talk to the people who work there. You can also take note of the current employees’ attire, expressions, and overall behavior.

### Processes

Processes: Organizational culture can have direct impacts on a company's processes, and ultimately, its productivity. The organization’s culture is instilled throughout the company—from its employees to how its employees do their job. For example, a company that values feedback and employee involvement might have that reflected in their processes by including many opportunities for employees to comment. By allowing employees to feel their voices are heard, this company is adhering to its culture.

# Organizational structures

## Classic

The Classic organizational structure is a top-down hierarchy system, where a Chief Executive Officer (CEO) has direct authority over several department managers. The department manager has direct authority over several other sections of employees. This system requires communication both up and down the ladder. In a Classic structure, authority comes from the top and filters to the bottom. Frequent reporting of project status updates may be required to pass up through management levels to keep higher leaders informed. Classic organizations are also referred to as functional organizations because the organization is divided into departments based on function. Each department is led by a functional manager, and employees are grouped according to the functions of their role. For example, the main function of Friendly Skies Airlines, an airline company, is to fly airplanes. There are typically departments logically arranged to fulfill other important company functions, such as Marketing, Human Resources, and Strategy. Employees usually have a specialty within the organization and may not work within other areas during normal everyday operations.

### Less authority and a tighter scope

### go through a chain of approval to advocate for more resources

## Matrix

The Matrix structure differs from the Classic structure in that the employees have two or more managers. In Matrix structures, you still have people above you, but you also have people in adjacent departments with whom you will need to communicate on your work progress. Functional areas tend to cross paths more frequently, and depending on the nature of the work, the responsible manager for each area has the most authority. As a project manager in a Matrix organization, your team will essentially have at least two chains of command, or managers. You can think of the project manager as being a temporary manager while the employee is assigned to the team, whereas the functional manager is consistent regardless of which project the employee is supporting. The visual below illustrates what the Friendly Skies Airlines would look like if it had a Matrix organizational structure.

### direct authority and a boarder scope

### share resources and negotiate priorities

## Project Management Office

A Project Management Office, or PMO, is a group within an organization that defines, sets, and helps maintain project management standards and processes throughout that organization. It often acts as a coordinated center for all of the organization’s projects, helping them run more smoothly and efficiently. PMOs support their organizations in managing large numbers of projects and help keep all employees working in the same direction towards the organization’s goals. A Project Management Office is a team of project managers. We are a group that coordinates all of the different parts of a project together, including folks who work on our product, engineers, and many business functions, and we help bring all of those ideas to life.

### Strategic planning and governance

### Best practices

### Common project culture

### Resource management

### Creation of project documentation, archives, and tools

# Methodologies

## Waterfall (linear)

Waterfall is a traditional methodology in which tasks and phases are completed in a linear, sequential manner, and each stage of the project must be completed before the next begins. The project manager is responsible for prioritizing and assigning tasks to team members. In Waterfall, the criteria used to measure quality is clearly defined at the beginning of the project.

### prioritizing and assigning tasks

## Agile (iterative)

Agile involves short phases of collaborative, iterative work with frequent testing and regularly-implemented improvements. Some phases and tasks happen at the same time as others. In Agile projects, teams share responsibility for managing their own work. Scrum and Kanban are examples of Agile frameworks, which are specific development approaches based on the Agile philosophy.

### share responsibility for managing their own work

## Scrum (iterative)

Scrum focuses on developing, delivering, and sustaining complex project and products through collaboration, accountability, and an iterative process. Like many Agile frameworks, work is often completed by smaller, cross-functional teams and divided into short “Sprints” with a set list of deliverables.

### collaboration, accountability, and an iterative process

## Kanban

Kanban is both an approach and a tool that provides visual feedback about the status of the work in progress through the use of Kanban boards or charts. With Kanban, project managers use sticky notes or note cards on a physical or digital Kanban board to represent the team’s tasks with categories like “To do,” “In progress,” and “Done.”

### feedback about the status of the work in progress

## Lean

Lean focuses on efficiency, applying core principles to maximize value and minimize waste. Lean’s principles state that you can do more with less by addressing dysfunctions that create waste.

### minimize waste

## Six Sigma

Six Sigma involves reducing variations by ensuring that quality processes are followed every time. The Six Sigma method follows a process-improvement approach called DMAIC, which stands for define, measure, analyze, improve, and control.

### reducing variations

## Lean Six Sigma

Lean Six Sigma is a combination of Lean and Six Sigma approaches. It uses the 5S quality tool to eliminate eight areas of waste, save money, improve quality, and streamline processes. Lean Six Sigma uses Kanban boards to manage production and is ideal for solving complex or high-risk problems.

### eliminate eight areas of waste, save money, improve quality, and streamline processes

# Interpersonal skills

## enabling decision-making

You can help team members feel empowered from the start of your project by making the decision-making process collaborative. For example, state the goals of specific deliverables and elicit input from your team on how to achieve those goals. You may have an idea of how you would like certain tasks to be accomplished, but your team members may have more creative or efficient approaches. Empowering your team to express their opinions and make their own decisions allows you to focus on the overarching management tasks and prioritize them in order of importance. Additionally, when you allow team members to have a voice in decisions, it helps foster an environment of responsibility, accountability, and team closeness.

## communicating and escalating

Project management requires clearly communicating project goals and expectations, team member roles and responsibilities, and constructive feedback. Knowing how to effectively communicate and when to escalate issues to management is key to keeping you, your team, and your organization on the path to success. When escalation is required, try to approach management with both the problem and the potential solution or suggestions. This will show that you’re taking initiative as a project manager.

## flexibility

All project managers need the ability to adapt and overcome changes and challenges. Let’s further explore why flexibility is such a critical project management skill and discuss how it can help prepare your team for change, mitigate risks, and handle ambiguity.

### Assess external constraints

### Plan for risks and challenges

### Calculate “float” in your schedule

## strong organizational skills

### Planning and scheduling software (templates, workflows, calendars)

### Collaboration tools (email, collaboration software, dashboards)

### Documentation (files, plans, spreadsheets)

### Quality assurance tools (evaluations, productivity trackers, reports)

## Handling ambiguity

Ambiguity can be a big challenge in managing projects. Project managers often face ambiguity in goals, requirements, schedules, vision, or other areas related to the project. Your team will look to you to lead during times of ambiguity and change, and flexibility is especially important during these instances. Here are some different ways to help your team deal with ambiguity:

### Keep calm

### Express empathy

### Communicate what you know clearly

### Make decisions and stick to them

### Trust the expertise of your team.

# Hard skills

responsible for guiding your team and making sure that they have the support that they need in order to complete the projec

## Planning and Organizing

makes use of productivity tools and creates processes. create and maintain plans, schedules, and other forms of documentation to track project completion

### Clarify goals

### Timeline

### Evaluation metric

### sharing imformation

## Budgeting and controlling factor

oversees the financial component of a project and mitigates project issues and risks as they come up

### Monitor and manage the budget

### track issues and risks

### manage quality

### remove unforeseen barriers

## Managing tasks

complete activities within a set period of time

### start

* articulate the desired outcome
* identify constraints and boundaries

Wait to be told what to do? Ask what to do? Recommend what should be done, and then act? Act, and then report results immediately? Initiate action, and then report periodically

* Build motivation and commitment

Discuss how success will impact financial rewards, future opportunities, informal recognition, other desirable consequences. Provide recognition where deserved.

* Build escalation path

The escalation is generally a formal process to highlight the issue at hand to a higher authority as per the escalation mechanism defined for the project That include: project objectives, resource and inter-group conflicts, ambiguous roles and responsibilities, scope disagreements, third party dependencies

### during

* Organized task
* Establish and maintain control

Discuss timelines and deadlines. Agree on a schedule of checkpoints at which you'll review project progress. Make adjustments as necessary. Take time to review all submitted work.

* Provide adequate support
* Avoid upward delegation

ask for recommended solutions; don't simply provide an answer

### end

* Focus on results

Concern yourself with what is accomplished, rather than detailing how the work should be done

* recognize and reward the effort

# Project life cycle

## Initiate the project

### define project goals and deliverables

### the stakeholders involved in your project

### identify the skills, resources, budge

### any other details that can impact

### document all this information in one place to showcase the project's value

### get approval

## Make a plan

### create a budget

### set a schedule of milestones and tasks.

### establish your team

### determine team roles and responsibilities

### plan for risk and change

### communicate the plan with team

## Execute & complete task

### track and mange the progress

### keep your team motivated

### make adjustment

### remove any obstacles that might come up

## Close the project

### ensure all task is completed

### confirm acceptance of project outcome

### reflect on lessons learned

### communicate result with stakholder

### celebrate the completion of project

### formally move on from the project