The Beginner's Guide

to

Project Management Methodologies

Brought to you by:

Wrike

CONTENTS

Why Should I Read
About Project Management Methodologies?

If you've been hanging around project management circles, you've probably heard heated debates arguing Agile vs. Waterfall, Scrum vs. Kanban, or the merits of PRINCE2. But what are project management methodologies exactly, and how do they help project teams work better? And what makes one methodology better than another?

The truth is there is no one-size-fits-all approach. And if there were, it definitely wouldn't be, "Let's wing it!" Project management methodologies are all about finding the best way to plan and execute a certain project.

Even if you're not a certified project manager, you may be expected to perform — and deliver — like one. This ebook will give you the essentials of 16 common PM methodologies so you can choose the winning approach (and wow your boss) every time.

In this ebook, you'll get:

- Bite-sized explanations of each methodology.

- The pros and cons of each approach to help you weigh your options.

- The details you need to choose the right framework to organize and manage your tasks.

- A deeper confidence and understanding of the project management field.

16 Common Project Management Methodologies

How Should I Choose a Methodology?

Picking a methodology is like deciding which recipe to follow when baking chocolate chip cookies. One recipe might use room-temperature butter while another recommends melted margarine, or call for dark chocolate instead of semi-sweet chips. Each recipe gives you delicious cookies, but the steps, ingredients and techniques are all a little different to suit your tastebuds. You should pick a methodology based on your available ingredients: project constraints, timeline, tools, and people.

With that in mind, here are the 16 methodologies!
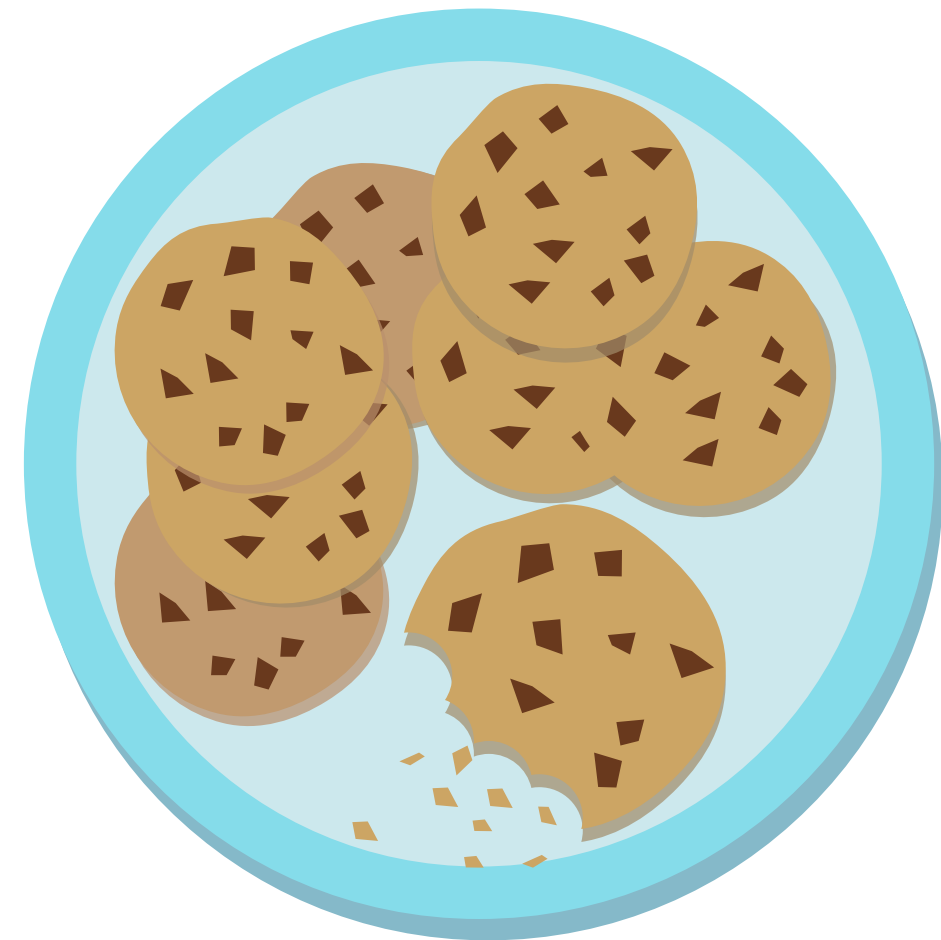
Adaptive Project Framework (APF)

The APF method strives to learn from experience. These projects begin with a Requirements Breakdown Structure to define strategic project goals based on product requirements, functions, sub-functions, and features. As they proceed, teams continually evaluate previous results to improve policies and practices at each stage of the project lifecycle. Clients/stakeholders can change project scope at the start of each stage so the team can create the most business value.

PRO:

This is a good approach for when you know what your goal is and aren't sure of the best way to get there.

CON:

Due to its flexibility, APF may lead to project delays or increased budgets.

Do you like this book?
Share it!

Agile

Great chefs taste their food as they cook so they can add new ingredients and create the best dish. Agile is like tasting our project as we go and adjusting it accordingly. Planning begins with clients describing how the end product will be used, its benefits, and so on, so the team gets a good understanding of expectations. Once the project begins, teams cycle through a process of planning, executing, and evaluating — which might change the final deliverable. Continuous collaboration is key, both among team members and with project stakeholders, to make fully-informed decisions.

PRO:

This approach is beneficial for creative projects with goals that are flexible and can be modified midway.

CON:

Timelines and budgets are difficult to define, and stakeholders must have the time and desire to be actively involved in the day-to-day work.

What's the Difference Between APF and Agile?

Confused between the two? With APF, your end goal is clear, but your method for achieving that goal will change based on your experience at each stage of the project. With Agile, your end goals are less defined. Each stage brings feedback from stakeholders to help guide your decisions and improve or alter the final product.

Do you like this book?
Share it!
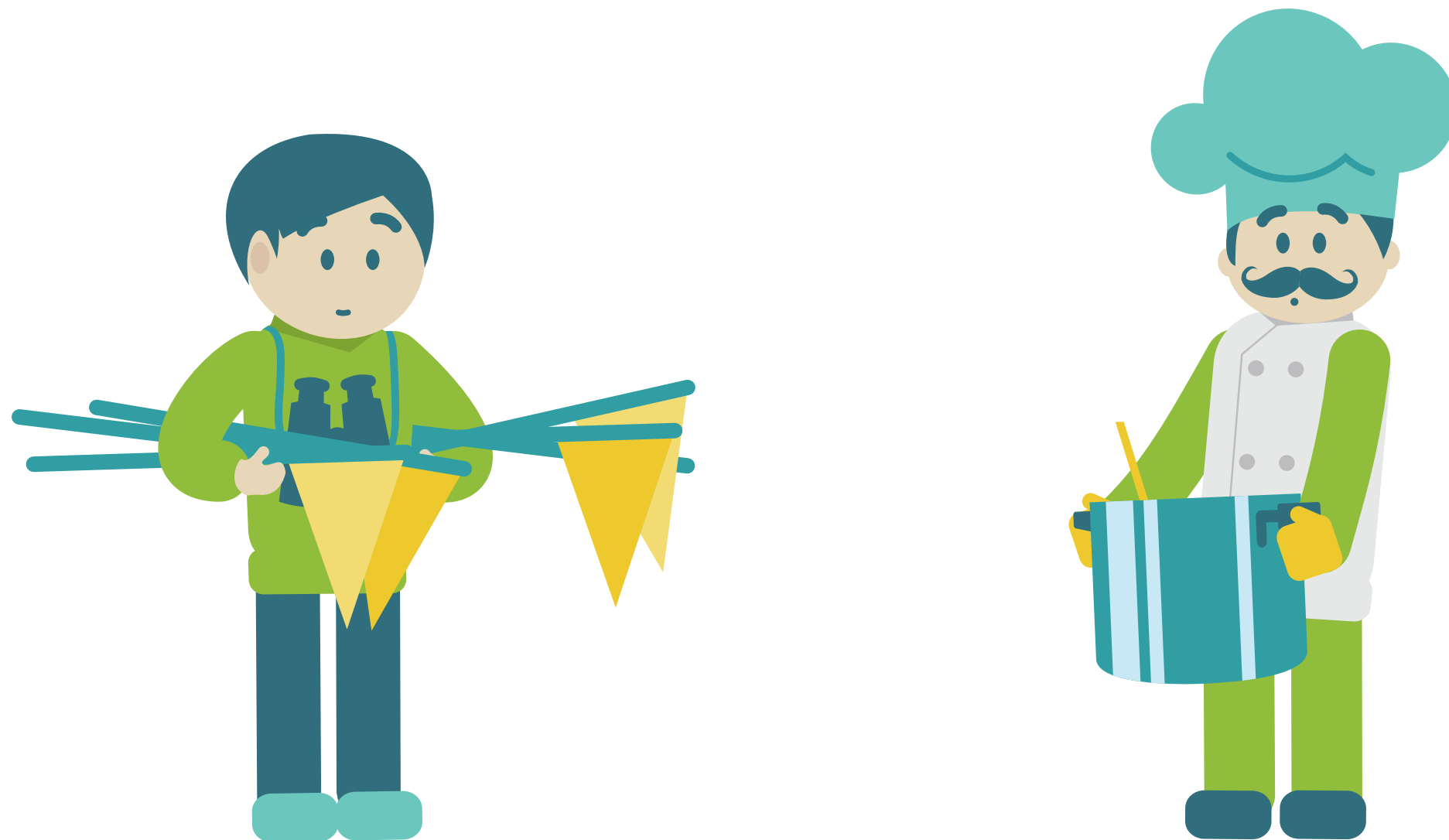
Benefits Realization

It redefines success as not just delivering the package on time and with money to spare, but achieving a desired benefit. Here's an example: say your clients want to increase their sales conversion rate by 15%. They hire you to manage the development of a new CRM software that will help the sales team personalize their communications, track sales data, and determine ideal communication timelines. You deliver a CRM with those features on time and within budget. Success, right? What if your client's sales conversion rates only increase by 5%? With benefits realization, your project isn't successfully completed until the client's desired benefits are achieved — in this case, until the sales conversion rate is up 15%.

PRO:

This approach ensures that your projects contribute real value to the business and deliver the end results your stakeholders care about.

CON:

Benefits aren't always exact, measurable, or scientific, so it can be difficult to know if they've been achieved — or if your project actually contributed to that success. You'll need to put careful thought into developing effective metrics to measure the outcomes of your project, such as ROI, process capability, faster delivery times, or higher customer satisfaction.

Critical Chain Project Management (CCPM)

Project delays are usually caused by resources that aren't available when you need them. CCPM avoids that by building a project schedule that first identifies a "critical chain" of tasks and then reserves resources for those tasks. Your project timeline may be longer, but you've got a higher probability of predicting realistic deadlines.

PRO:

Tasks can be collaborated on because you know that all key players will be available when you need them.

CON:

This approach may not be effective for projects with short deadlines, since CCPM plans build in extra time buffers along the critical chain.

Critical Path Method (CPM)

Determine your project's shortest timeline and adjust to shifting deadlines using CPM. You'll start by looking at all the tasks absolutely necessary to complete your project, and then estimating completion times for each step, including task dependencies, milestones, and final deliverables.

PRO:

Specific dates can be assigned to each task, so managers can compare what *should* be happening with what *is* happening on a daily basis. It's optimal for projects with short deadlines.

CON:

Critics say a major drawback is that CPM doesn't consider resource availability in planning, so you may be left with an overly optimistic plan.

Do you like this book?
Share it!

Event Chain Methodology (ECM)

Most projects don't go exactly according to plan. Risks are difficult to identify and analyze, and project managers may be under pressure by stakeholders to create optimistic timelines, budgets, or deliverables. Event chain methodology helps recognize and plan for potential risks that may lie outside the project scope. By using techniques like Monte Carlo Analysis and Event Chain Diagrams, project managers can see how external events affect project tasks and determine the probability of certain risks occurring.

PRO:

By visualizing the relationship between external events and tasks, managers can create more realistic project plans.

CON:

It's easy to forget that external events aren't just threats to your project — they can also present opportunities. Don't automatically squash all potential risks and fail to capitalize on fortunate circumstances.

Extreme Programming (XP)

Extreme Programming for software development features short development cycles, frequent releases, and constant client collaboration. Productivity is high, and the approach is well-suited to complex or undefined projects. Teams allow for change within their sprints; if work hasn't started on a particular feature, a similar task can be swapped out to replace it. Teams avoid overworking themselves through effective collaboration and by writing the simplest possible code to produce the desired feature.

PRO:

XP is efficient, with a focus on simplicity. Teams work at a sustainable pace, meaning no 80-hour work weeks leading to burnout and low-quality output.

CON:

Critics warn that XP's strength lies too much in the ingenuity and abilities of unique team members rather than with the process itself.

Kanban

If a continuous workflow and outputting a slow and steady stream of deliverables are your main priorities, Kanban is a good fit. Managers create visual representations of the team's workflow (often using a whiteboard or sticky notes) to uncover process problems and prevent tasks from stalling as unending "works in progress." The sticky notes move across the board to tangibly represent project progress.

PRO:

Kanban helps teams understand where their time is really being spent so you can improve efficiency.

CON:

Variations in customer demand — like the start of the holiday season, or a drop-off due to a product recall — can make Kanban inefficient, since it's designed to produce a small but steady output.

Lean

"Waste not, want not!" Lean is all about finding the path of least resistance to get the results you want. Start by creating a full work-process breakdown to find and eliminate bottlenecks, delays, or other waste (called *mura*). Teams focus on the project's true customer value, and on continuous process improvement. The goal is to do more with less: deliver high-value, high-quality work with less manpower, less money, and less time.

PRO:

This approach is especially helpful if you need to cut your budget, meet quick deadlines, or get big results with a small team.

CON:

Since the ultimate goal is to get things done faster and cheaper, stakeholders need to make prompt decisions and be prepared to stick to those decisions — weighing options for weeks interrupts the Lean process.

PRINCE2

Not to be confused with the Prince that sang "When Doves Cry," this methodology is also known as "PRojects IN Controlled Environments." The project must have a business justification, so the first step is identifying a clear need, a target customer, realistic benefits, and a thorough cost assessment. A project board owns the project and is responsible for its success, while a project manager oversees day-to-day activities.

PRO:

The extensive documentation involved in PRINCE2 projects can be very helpful with corporate planning and performance tracking.

CON:

It can be difficult to adapt to project changes, since a lot of effort goes into creating and maintaining those documents and logs at each stage of the process.

PRiSM

Want to go green? PRiSM (PRojects integrating Sustainable Methods) blends project planning with environmental sustainability measures. The aim is to complete projects efficiently, all while reducing a company's negative environmental footprint.

PRO:

Aligning corporate strategy with social responsibility and sustainability goals can bolster a company's reputation, plus you could benefit from reduced energy, waste management, and distribution costs.

CON:

Environmental responsibility must be a priority at every level of the company — from executives to managers — for it to be truly successful.

Process-Based Project Management

It's all about "mission accomplished." Every project is defined by your company mission or vision statement, whether that be "Feed the Homeless" or "Improve Global Collaboration." Before project kick-off, the plan is analyzed to see if it lives up to your mission statement; if it doesn't, then all strategies and goals are adjusted in order to meet that objective.

PRO:

This approach helps ensure that every project aligns with, and adds value to, the organization's strategic vision.

CON:

Adjusting every team's projects and processes to fit the mission can be very time-consuming. And it doesn't allow for side projects, so if your company wants to take on tasks unrelated to your values you'll have to revisit your company mission statement first.

Do you like this book?
Share it!
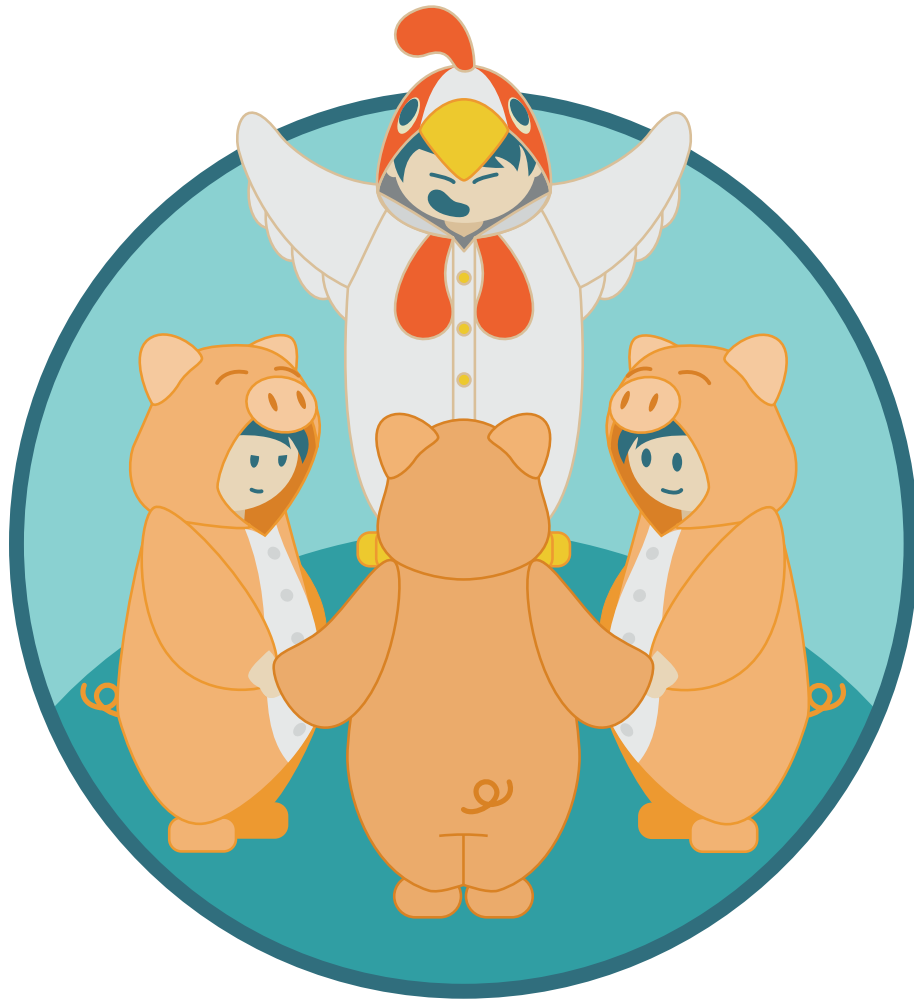
Scrum

"Productivity" is the name of the game. Small teams are facilitated by a scrum master, whose job is to remove any barriers to team progress. Work is typically done in a series of two-week sprints, and team members are in constant communication through daily scrum meetings. Within the team, members are assigned roles as either pigs or chickens. A pig is responsible for the completion of a specific task. (They're the ones "risking their bacon.") Chickens may be involved in the task, but are not ultimately responsible.

PRO:
New developments can be tested quickly and mistakes are fixed right away.

CON:
Scrum projects are prone to scope creep. And because the team is a close unit, one member leaving can disrupt the whole project.

What's the Difference Between Scrum and Extreme Programming?

XP teams tackle tasks in a strict customer-determined order, whereas Scrum teams can determine their own timeline. Additionally, XP allows similar tasks to be swapped within a sprint, but Scrum tasks are meant to be set in stone until the end of the sprint.

Six Sigma

What's your sigma rating? Six Sigma is a statistics-based quality improvement process aimed at reducing the number of defects (in manufacturing and industrial sectors), or bugs (in software development). A rating of "six sigma" indicates that 99.99966% of what is produced is defect-free.

PRO:

Six Sigma is a very proactive methodology, and it examines the entire production process to identify improvements even before defects appear.

CON:

This holistic approach may also lead to less flexibility after the planning process, which could limit your team's creativity and innovation.

Do you like this book?
Share it!

Lean Six Sigma

It combines Lean's efficiency with Six Sigma's statistics-based process improvement. It corrects workflow problems and eliminates waste by helping you understand how work gets done and identify which aspects of your project are most valuable to the client or customer.

PRO:

In addition to making your projects more efficient and cost effective, Lean Six Sigma keeps employees actively engaged in process improvement, leading to a sense of ownership and accountability.

CON:

Lean Six Sigma usually involves major change to the way work gets done, so make sure you — and company execs, stakeholders, and other managers — are prepared for the amount of time, effort, and resources needed to be successful with this method.

Waterfall

Imagine the path of a waterfall: The river runs from the top and flows down to the bottom without steering away from the main course. It's the same in project management. With clearly defined goals and a set timeline, teams work through tasks in sequence, completing one task before moving on to the next in line.

PRO:

Extensive planning goes into this approach, and this thoroughness often results in more accurate timelines and budgets.

CON:

It's difficult to adapt to any project changes — or modify and correct previous steps (water can't run backwards!) — so you'll need to be proactive in anticipating problems before they can affect your flow.

Congrats!

Now you have the knowledge you need to confidently lead your team to success.
Decide which methodology is best suited for your projects, check out the Appendix
to expand your knowledge with a little extra research, and go get things done!

This ebook is brought to you by Wrike.

Every project manager needs a powerful collaboration and management
tool to coordinate team efforts, adjust to changing priorities,
and keep every project organized.

With Wrike, your team can:

• manage multiple projects in one workspace

• collaborate in real-time and boost productivity through improved communications

• track project progress with visual analytics, including an interactive Gantt chart

Start a free trial ›
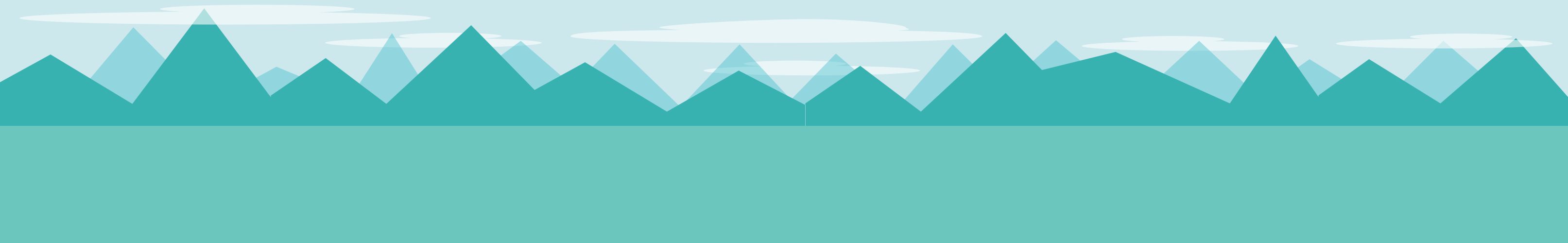
Additional Resources

Have a few of these methodologies piqued your interest?
If you think you've found the perfect choice for your next project, expand your
knowledge with some in-depth research and articles on each approach. Peruse
the resources on this list and you'll be a project management expert in no time.

Adaptive Project Framework (APF)

Agile

Benefits Realization

Critical Chain Project Management (CCPM)

Critical Path Method (CPM)

Event Chain Methodology (ECM)

Extreme Programming (XP)

Kanban

Lean

PRINCE2

PRiSM

Process-Based Project Management

Scrum

Six Sigma

Lean Six Sigma

Waterfall

Project Management Essentials

Project Management Basics: A Quickstart Glossary for Newbies (Part 1)

Project Management Basics: A Quickstart Glossary for Newbies (Part 2)

Project Management Basics: A Beginner's Guide to Gantt Charts

What is a Gantt Chart? (Infographic)

Fundamentals of the Scrum Methodology

8 Attitudes Guaranteed to Sink Your Agile Projects

Startups Should Lean on Lean Project Management

Ultimate Guide to Project Risk:
Risk Assessment (Part 1) and Risk Management (Part 2)

Don't forget to subscribe to the Wrike blog for more project management resources!

Project Management Tips

5 Project Management Lessons to Learn from Superheroes

20 #Project Management Gurus to Follow on Twitter

5 Project Management Groups to Join on LinkedIn

12 Useful Project Management Boards on Pinterest

15 Project Management Quotes to Live By [Infographic]

5 Project Management Ideas that Should be Extinct

How Neuroscience Can Make You a Better Project Manager

4 Lessons Hockey Has Taught Me About Project Management

10 Phrases That Can Ruin Your Project Kickoff Meeting

15 Books Every Manager Should Read

20 Online Training Resources for Project Managers

Teamwork Across Borders: Secrets of Remote Collaboration [Recorded Webinar]

5 Strategies for Forming Team Productivity Habits [Recorded Webinar]