1. Going through faces of Project Management

The phases, or steps, of successful project management are (spoilers) initiation, planning, execution, control, and closure. In this lesson, we dive into what that means.

Project management fits neatly into 5 Phases.

Initiation - Pre-planning phase conceptual phase: Should we do this? Can we do this? Is it possible?

Planning - Putting together the logistics of actually carrying out a feasible project.

Execution - The "doing" part of doing a project.

Control - Also known as monitoring, in this part you as a PM make sure everything goes according to your cunning plan.

Closure - Exactly what it sounds like and exactly as necessary as you think.

2.Initiation Phase: With Great Power, Etc...

Let's begin at the beginning: with asking questions of the sponsors and stakeholders behind the project; and with the logistics you have to tame. Plus, the project manager's secret weapon.

The Initiation Phase - Brought to you by Sponsorship.

Sponsors and **Stakeholder(s)** are related entities, but slightly different. Sponsors ask for projects to be initiated and stakeholders benefit from a project's completion. (**Identify them beforehand.**)

The **Sponsor Interview** is crucial to build context for the project, to understand its intention, and to decide how the project can be accomplished as efficiently as possible. Ask all the questions!

The unique position of the project manager allows you to see potential conflicts and support different teams of people on your project. That vision is not a responsibility that comes with red spandex, necessarily, but it is one that allows you to facilitate solutions.

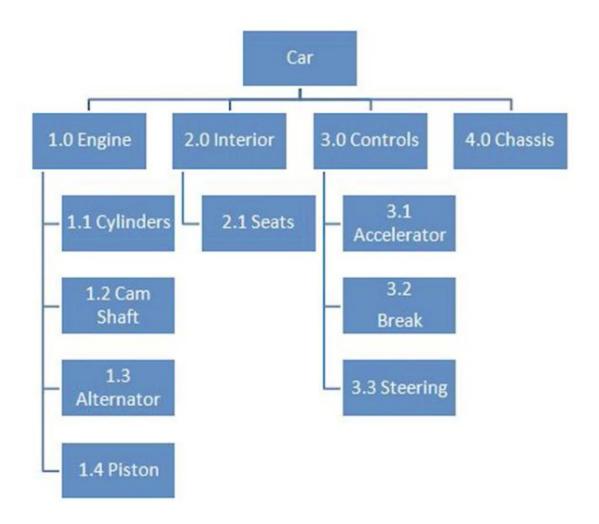
3. Spec-Tacular Planning

Projects fail when you fail to plan - so let's talk about the importance of the planning phase and tools like WBS and scheduling that will help you actually deliver deliverables.

Planning is the largest part of project management.

The first step of planning is to understand the requirements of your project and its specifications. A great tool is the **WBS - Work Breakdown Structure**. Take a complex idea and break it down into all the deliverables that make up the whole of the project. If it works for the Navy, it can work for you.

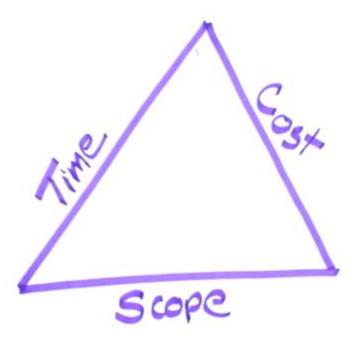
Keep it simple. If you can break down a car into systems, you can breakdown pretty much anything else.



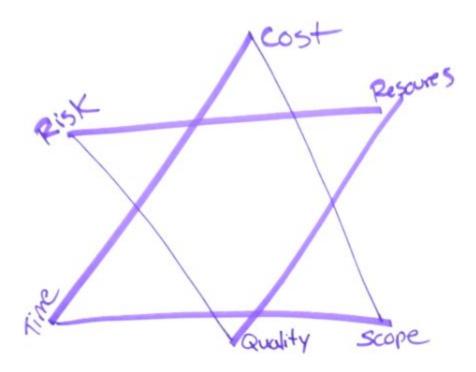
4. The Iron Triangle

In this lesson, we cover all the forces project managers have to bear in mind as they plan: time, cost, and scope. We visualize these constraints with the not-actually-ominous Iron Triangle. Pythagoras would be proud.

The constraints you have to work within are as simple as three sides of a triangle:



Time, Cost, and Scope are what determine how you design any project. You can also factor in some of issues in accomplishing your project:



Risk, Resources, and Quality concern what the project you're going to produce is actually going to look like and who's going to contribute to it.

These are your map-posts your guide-rails, and your bear X-ing signs: everything you have to keep in mind in order to actually accomplish the project you're setting out to do.

Tip: It's important to communicate changes not just to your team, but to sponsors and stakeholders.

Go Deeper:

Trans-Alaska Pipeline wikipedia article - It cost \$8B to complete between 1974-77, which is \$32B in today's money!

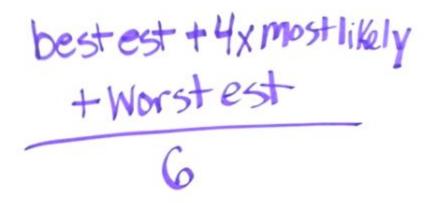
5.A Brief History Of (Estimating) Time

Stay PERT, everyone! Now we get into the grit (and nit?) of estimating your project completion time and developing workable schedules.

There are two steps to master the time constraints on your project: developing estimates and using those estimates to develop a schedule.

Ask for a percentage of certainty on time estimates. That will give you more confidence working with estimates and may help you uncover issues

PERT - Program Evaluation And Review Technique; a formula to average all your estimates to come up with the most realistic idea of how long something will take.



A **schedule** allows everyone to see how they fit into the project, what tasks are interdependent on each other, and how every team fits into a cohesive whole. Try getting everyone on team and discuss it well - get the best estimate possible.

Tip: Eat your frogs first - do the hard part and find answers for the fuzzy question marks and uncertainties.

5. Resource Costs Are People!

Now we turn to cost - the resources and personnel you have available for a given project. Designing a project with cost in mind will make everyone above and below you happy.

The next big factor in organizing a project is cost - which means the salaries of the people working on your project and the resources available to them to do their work.

Is time or budget more important to your sponsor and stakeholders? Something can (and probably should) give based on the specific needs of your project. (As per priority see - if cost is not an issue, expand resources to do work in less time and it's inverse if time is less.)

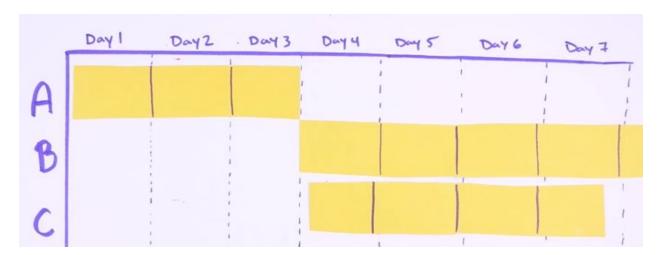
6. Gantt You Break It Down?

What do schedules actually look like? One of the most common and useful tools for schedule creation is the magnificent Gantt Chart.

Gantt Charts illustrate activities and time so that you can have a global view of all the tasks that make up a project and when those tasks ought to occur.

But the most useful aspect of a Gantt Chart is that it shows *dependencies*, or tasks that require other tasks to be completed before they begin.

With a Gantt Chart, it's very easy to determine what needs to happen when, and how to move everything around when you need to.



7. Scoping Out Your Scope

Welcome to our discussion of scope, in which we tell you to (constructively) say no to power, to decide what can and can't be accomplished, and to look at your project with a bird's eye.

Time and cost affect our third constraint - Scope. It's the difference between a Fiat and a Corvette. Understanding the scope helps you understand the priorities of your project and helps you plan its execution accordingly.

The scope of your project is, in many ways, the project itself. So it's important to control it before it controls you. You should confirm the baseline of the scope and question the assumptions of your team and sponsor. It's how you'll be able to find creative solutions.

The Iron Triangle:



9. Challenge - Alice and Her Cake (Example Case Study)

In this challenge, use what you know about the small bakery you project manage to formulate a sponsor interview for Alice and her jaunty scarf.

Lickity-Split Bakery "knowns":

Cake Flavors:

- Red Velvet
- Chocolate**
- Vanilla**
- Pistachio
- Double Chocolate
- Hummingbird

- Carrot
- Cheesecake
- Grasshopper
- Spice**
- Oreo
- Almond
- **Vegan and Gluten Free Option Available

Pricing (all flavors equal):

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8" (8-16 slices) - $40 10"
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(14-28 slices) - \$50 12"

(20-40 slices) - \$70

Cupcakes (1/person)- \$30/dozen

Your Team:

- 1 Junior Baker
- 1 Senior Baker/Decorator
- 2 Transport Team members
- 1 Project Manager (You)

Other information:

- Every cake needs 1 full day to bake and cool and then 1 full day to be decorated (regardless of number of layers)
- Orders are typically placed 2-4 weeks in advance of event (*\$100 Rush fee applies otherwise)
- Each order needs to also have a 1/2 day meeting for taste testing and a 1/2 day meeting for style consultation Can't be the same day.

- Cupcakes and cakes can't be baked on the same day (different temperatures)
- Cakes and cupcakes can be built up to 5 days in advance of an event without sacrificing quality and can be delivered together in the same van.
- No baking happens on the weekend (only deliveries and decorating)
- Taste testing doesn't require any baking

In this next phase of the challenge, the sponsor gives you all the context and requirements for her project. Listen closely.

What Alice Needs: A cake for 75 people a week from today for her wedding. She needs it delivered. She needs it for, she thinks, about \$150. She also needs a gluten-free option for three members of her family. She prefers Almond cake, but her husband likes chocolate. Alice can do a taste-test on Sunday, but her hubby is ONLY available on Monday. Cupcakes are an acceptable alternative.

Good luck!

In this part of the challenge, it's time to create a WBS form and a Gantt chart which addresses all your sponsor's requests.

Remember to highlight interdependencies among tasks and focus on deliverables.

We discuss the constraints, risk, deliverables, and dependencies of the great cake challenge. There's a lot of options and variety for how to solve the problems. But we'll work through a few possible solutions.

In this example, time is a fixed variable and your plan has to accommodate it. But based on the rush factor involved in the project, you can push back on Alice's unrealistic cost estimate. This is how the project manager helps shape the project based on how its constraints interact with each other.

All The Known Knowns:

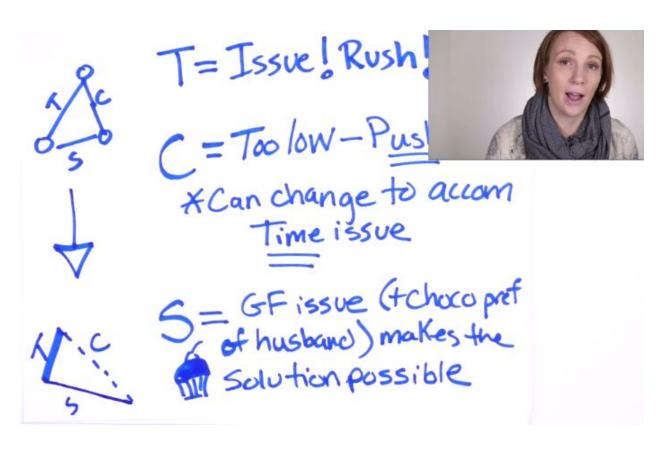
Information From Sponsor Interview (Context)	Bakery Knowns				
The cake is for a wedding (75 ppl)	Every cake needs 1 full day to bake and cool and then 1 full day to be decorated (Regardless of number of layers)				
Her fiancé like chocolate but she likes Almond	Orders are typically placed 2-4 weeks in advance of event (*\$100 Rush fee applies otherwise)				
Her mother and aunts are gluten free	Each order needs to also have a 1/2 day meeting for taste testing and a 1/2 day meeting for style consultation — Can't be the same day.				
	Cupcakes and Cakes can't be baked on the same day (different temperatures)				
	Cakes and Cupcakes can be built up to 5 days in advance of an event without sacrificing quality and can be delivered together in the same van.				
	No baking happens on the weekend (only deliveries and decorating)				
	Taste testing doesn't require any baking.				

Sample Gantt Chart:

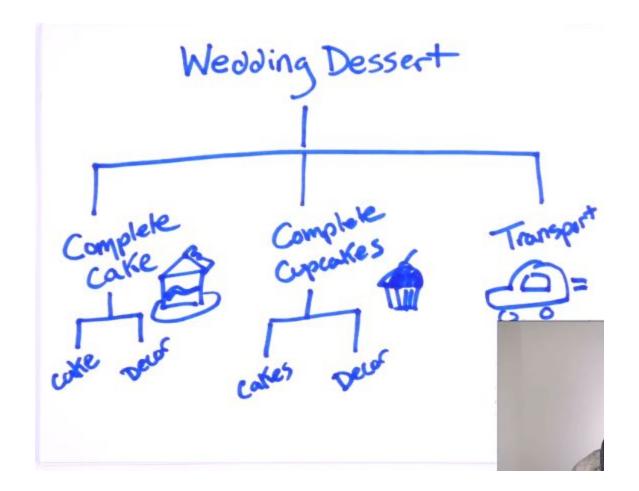
Activity	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (Wedding!)
Initial Consult	Initial Consult							
Taste Testing			Taste Testing (Jr Baker)					
Decor Consult				Decor Consult (Sr Baker)				
Bake (Cake)				Bake Cake (Jr Baker)				
Cool (Cake)					Cool Cake			
Decorate (Cake)						Decorate Cake (Sr Baker)		
Bake (Cupcakes)					Bake Cupcakes (Jr Baker)			
Cool (Cupcakes)						Cool Cupcakes		
Decorate (Cupcakes)							Decorate Cupcakes (Sr Baker)	
Deliver Cake and Cupcakes								Deliver Cake and Cupcakes (Transport Team)

Team Gant!

You can check out the Team Gantt software here.



(Time was a fixed constraint here - cost was fluid and scope adjusted somewhat to the other two.)



10. About Task Managers

As we enter the execution phase, it's time to talk about task management systems. We're going to go through several in detail, but this lesson gives you some important ideas to keep in mind about them.

What's important to bear in mind about task managers is that there is no one perfect, magical platform. We'll go through several and you should choose the one that resonates the most with your team and best supports all the pre-work you've done.

11. Trello

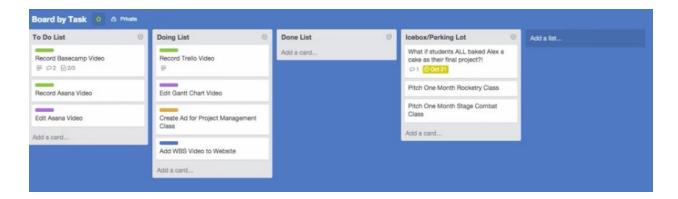
Welcome to Trello, a flexible and open source task-manager. Its boards, lists, and cards are perfect for organizing your projects, deliverables, and tasks.

Trello is a free, open platform that caters both to professional and non-professional projects.

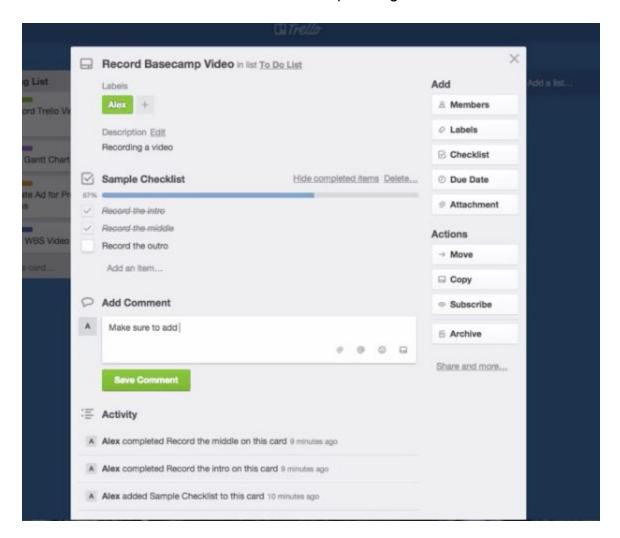
Boards: These feature projects



Lists: These house all your deliverables for a given project.



Cards: These detail the tasks needed to complete a given deliverable.



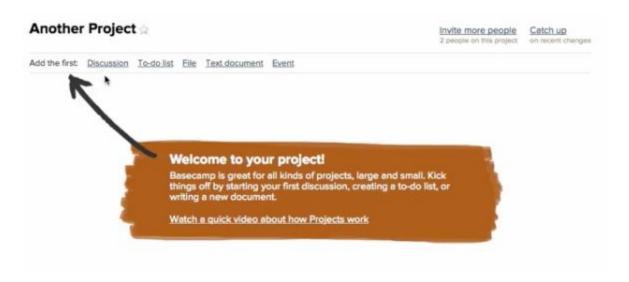
Check out Trello's inspiring boards here.

12. Basecamp

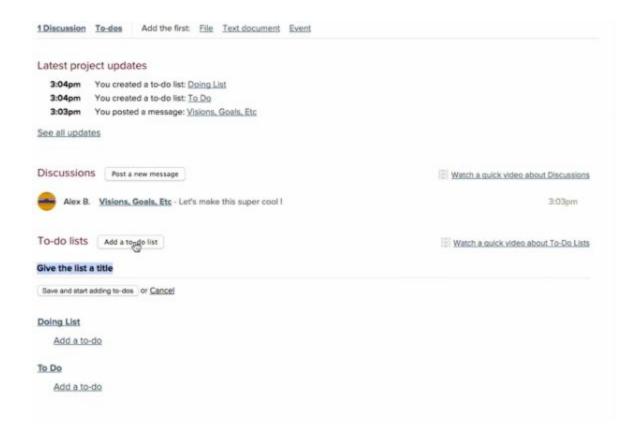
The next task management system we examine is Basecamp. While it's more geared towards professional project management, it's customizable for an infinite variety of projects.

Basecamp's structure is slightly different and more professional-oriented than Trello. You can add clients, view tasks in calendar format, and top-level context like visions and goals for given projects.

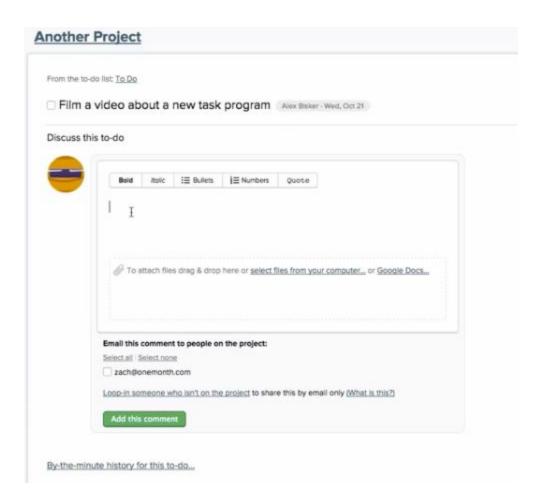
Projects: Allows for discussion and easy updates.



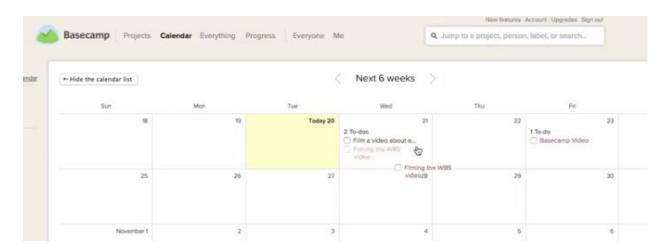
To-Do Lists: Where most of the tasks live.



Task-Specific Comments: Basecamp allows you to communicate specific information about given tasks among team members.



Calendar: have drag-and-drop functionality. It's a different way of looking at your project.



13. Asana

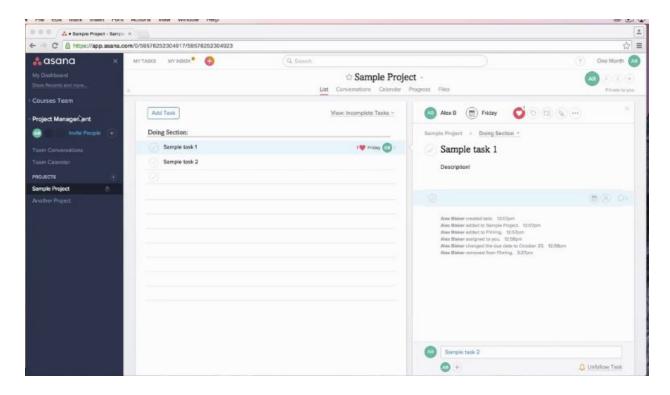
Welcome to the third task manager on our tour: Asana. It has similar functionality to Trello and Basecamp, but a lot of customization, and circle icons, all its own.

Asana has similar functionality to Trello and Basecamp, but allows you to create teams who can focus on multiple projects at once.

Team View: Like Basecamp's master project view, or a Trello board.

Tasks: Also allow for conversation and comments among team members. Asana also allows you to link comments and information to different tasks.

Customizable Views: Asana lets you customize what information you see.



14. Other Tools - Screen Sharing Is Caring

As you move through your project, screen sharing problems can facilitate meetings and check-ups with remote contractors, freelancers, or coworkers across the office.

Screen sharing is perfect for teams that work remotely and doing the most important thing during the execution phase - communication with all the teams on your project.

Update: Appear.in has changed its name to Whereby.com

(Many other are also there - do search as needed.)

15.Other Tools - Go Team Gantt

While Google Spreadsheets and Excel are perfectly find for scheduling and project management, Team Gantt has a lot of power and flexibility specifically for project management. Let's go through it.

Team Gantt allows you to allocate resources and tasks, and schedule based on dependencies. It also includes milestones, which can help you track the progression and keep the project anchored as it rolls on. It's a great way of looking at and adjusting especially large projects.

Find it here.

16. Other Tools - Avoid A Failure To Communicate

What other tools do you have to help execute a project? Everything. Everything that helps you communicate with your team is a valuable tool.

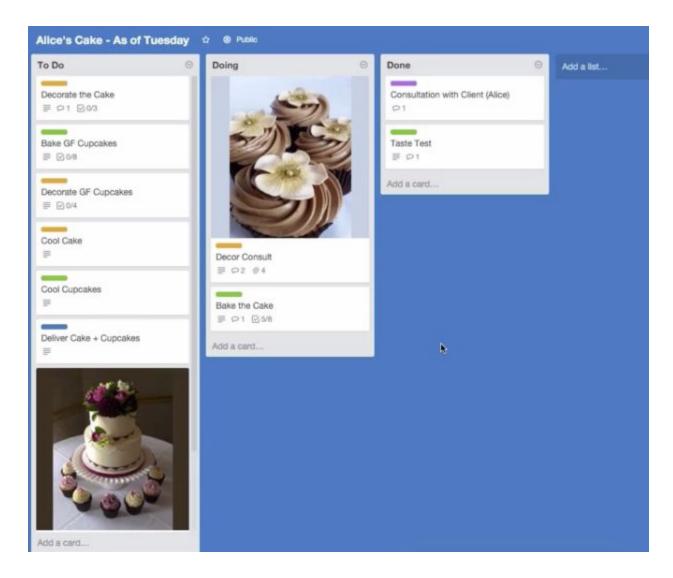
Other, unexpected, and obvious tools are often the top tools you have. Phones, water cooler conversations and Excel are all incredibly valuable.

Remember, project communication is like a toilet: above all else, you want it to keep flowing.

17. Example Answer - On-Trello-Boarding Our Cake (Alice Cake Challenge Expansion)

Trello again! In this next project management exercise, we look an example of how a task manager can display all the deliverables you need and the schedule in which you need to roll them out.

An example of how Alice's Cake project could look on Trello:



Notice the addition of reference photos and color-coding so that each member of the team knows their specific tasks, and how each task fits into the whole project.

18. How To Win Friends And Make Them Keep To A Schedule

As a project manager, you need to both active listen and be listened to. So how does that work? We talk about the monitoring or control phase, which is really all about effective leadership.

The monitoring or control phase is all about relationships. Your goal is to make sure the reality of any team's execution matches the plan you've set up - and if it stops matching, to take action to steer things back on course.

This is a function of leadership. You need to make sure you're following through on your promises, being a person your team trusts, and a securing them the best possible conditions to do their work. Be honest. Be transparent.

You can find *Making Things Happen* here.

19. Another Post On The Wall: Communication

Talking about talking: we cover some best practices for communicating with your team, active listening, and some of the pitfalls of ineffective communication all project managers should watch out for.

There are tons of fancy (and analog) tools to help facilitate communication. But it can be a challenge. What's more important than the platform you're communicating on is that you're heard, understood, and that any call to action is clear.

Tip: It can be useful to have a couple metaphors, analogies, or stories in your pocket to help explain technical concepts and dispel confusion.

The pitfalls of effective communication are assumption and ambiguity.

With assumptions, small misunderstandings can lead to bigger ones down the line. And with any ambiguity, not understanding the specifics of what's going on can lead you or someone else very far afield, wasting time and resources you need to stay on schedule.

The best way to avoid these pitfalls is to practice and encourage **Active Listening.** Make sure you're focused on the speaker, subtly restate or reinforce their points, and phrase problems and action steps in ways that keep the conversation going. Ask, don't tell.

20. Emails Are The Worst

You have 175 new ways people ignore their emails! In this lesson, we discuss strategies to keep information you send via email clear, concise, and out of the spam folder.

A method to help ensure your emails are clear, readable, and ready to be responded to is ONA - Optimize, Name, Action.

Optimize - This means concise, clear communication. The context for whatever information you're conveying should only be necessary for the task that needs to be undertaken.

Names are important! Not only so that people can immediately understand what you're talking about, but also that the information is easy to find later.

A good naming protocol is: Date_Client_Issue or Date_Client_Project.

But the most important pieces of information is the action your team needs to take and the timeline for that action step.

Tip: Fewer emails elicit better responses. FYI info can be communicated in other ways.

From Alex PM
To Baking Staff
Subject change
Attachment pic1 img



Hey Team,

We have a MAJOR issue with the cupcakes for the Alice project. We need to assess this and decide how to handle. Before we dive into that, I do want to say thanks for all the hard work this week. I know the turnaround on this one is crazy. but it's coming together nicely. Also, this is probably an opertunity for us to open a new market in last minute rush business — like, where do people turn when no one else can do it? Lickey Split Bakery!" The Afice case will be a good test. see if we can all come together for this. So, the changes. Basically, after the initial interview we discovered that the elent (Alice) wanted an Almond cake and that her husband wanted chocolate. With the GF issue raised we had them taste test the GF chocolate and when the husband was pkay with that, decided that doing a dozen GF chocofate cupcakes in addition to a havic Almond would cover us. So we made the Almond cake and it's decorated and we are slated to decorate the sepcakes tomorrow morning. But the client called this afternoon and wants the cake and cupcakes to tie together more than they do currently based on the references. We are only scheduled to be decorating the cupcakes tomorrow -- the cake is supposed to be finished EEEK. She wasn't like "redecorate it" or anything, but liked the idea of getting some flowers on the cake or something else to tie things together more. Is there any way we can do this? Of course this needs to be done ahead of the actual wedding on Saturday, but not sure how this fits in

Also, in the future.

- Ask about design be ins with separate dessert pieces in the decor consult.
- Maybe have a change fee. We did't mention this to the client so can't do it.
- We need more decorators having only one puts us put in a tight spot

Make senee? Let me know.

Thanks, Alex



From Alex PM To Senior Baker

- Subject Alice | Cake Decoration Change (Flower Update)
- Attachment: Alice_FondantFlowerDesign.jpg

Hi Team.

Thanks for the hard work on this tight turnaround project! One more change we need to take into account. Alice wants the design of the cupcakes and the cake to tie together more closely. Specifically, she asked to have a cluster of the fondant flowers that will top the cupcakes on top of the cake as well (please see attached reference photo for design).

Knowing that only the cupcakes were slated to be decorated tomorrow (Friday), @Senior Baker, are you able to create additional fondant flowers and add them to the cake before Friday at 5 00 PM?

Please respond to this email with confirmation (or alternate suggestion) by 6:00 PM today

Thank you, Alex X NOT AN EMATL

21. Be The Leader You Want To See In The Meeting

Meetings don't have to play out like a Dilbert comic. We cover how project managers can make them concise, comprehensive, and, dare we say it, useful.

You've probably heard about a meeting agenda before, but what that really means is that you need a plan - a list of items not just to cover but conquer.

Make sure you're using yours (and everyone else's) time most effectively. Imagine condensing the time of your meeting by half. This helps you see what you could get done outside of a meeting, and what's absolutely essential to discuss in a meeting setting.

Once you're in a meeting, you need to make sure it's the environment that's most effective for you to convey your information. So step up and lead it! Cultivate respect and facilitate active listening.

If people are usually on their phones or laptops, don't allow laptops or phones. You set the terms.

The most important thing to keep in mind about making meetings productive is that they should end with action. Go over steps in the room and make sure your team are all on the same page.

22. When Everything is On Fire

Your job as a project manager entails a lot of damage control. Here we talk about steps you can take to put out whatever fires you can't prevent.

Stay calm. It's more important to appear calm and solution-oriented than anything else.

The big step is to assess and define the problem. How is it going to affect your constraints? How can you work within your framework to solve the issues? What are you options? Is it time for the blame game? No. No it isn't.

Keep your team in the loop. Communication doesn't stop because something went wrong. Put all possible solutions out on the table, and hone in on the best ones which will keep the project on its feet. Always move forward until the problem is solved.

23. What Could Possibly Go Wrong? (A Lot).

In this lesson, we cover some of the types of problems - from scope creep and schedules to stupidity - you're likely to encounter. Watch for what to watch out for.

Scope Creep: when a project slowly gets bigger or more ambiguous. Prevent it with pre-plan and call it out to your team and your sponsors when you see it.

Schedules: are the most likely thing to break down, so have some flexibility built into them when planning. You need to assess changes and honestly put it out there if you need help.

Lack Of Resources/Change In Resources: this is especially a risk for long term projects. It'll be your job to come up with contingencies when this happens.

Disagreements: whether they're between sponsors, stakeholders, or members of your team, it's your job to help smooth these out and find the compromises that will keep everyone on track. Always project the integrity of the project.

Stupid Or Impossible Demands: these happen. And while you can't fix stupid, you at least have to do your best to find a sensical solution.

24.Spare Some Change

Change we can believe in. Here's how to handle it and have protocols in place so that whatever change occurs, it never derails your project.

The best way to deal with change is to plan for it. When it's unexpected, assess what the change is and how it will go into effect, taking constraints into consideration.

CRs - Change Requests. Can be more or less formal. But it's important before the project begins your team understands how the change process will work. Before a change is implemented, always double-check its feasibility with your team.

Keep the project's lifespan in mind. Change is always harder the closer you are to completion.

(At end or later stage of project - difficult to accommodate change - either leave some space for change or say it can't be added for now.)

25.Closing Time

What do you do when you're done? We cover how to effectively close out a project, and learn from it for the next one.

Make sure you review the final deliverables, as these may have changed from your original conception. A close-out WBS is helpful. Look for gaps or entities that have been overlooked, especially in a more long-term process. Also make sure you keep a list of later features which might need to be added.

Do post-mortem reviews of the project: with your team, with your sponsors, and with yourself. This is a huge learning opportunity. Find out how whatever went wrong happened, but also find successes as well. This process is valuable to your team - to know that they have the opportunity to affect the process for the next project.

26. Ask Your Sponsor Anything

Begin at the beginning with a sponsor interview! This will help you as a project manager to head off risk and develop the version of your project any high school yearbook would vote Most Likely To Succeed.

First, check out our Sample Sponsor Interview.

Your sponsor interview is the time to ask anything and everything, and to really help the sponsor articulate what they actually want the project to achieve. That will, in turn, help you craft the most successful project you can.

Remember the difference between goals and solutions. Thinking about or tackling a project from a different perspective may help you stay within your constraints and achieve the success your sponsor really wants.

If you're working as both the sponsor and the project manager, try to compartmentalize those positions and really think like a project manager when you need to start planning out your project. Maybe buy some hats, so that you can take them on and off. We hear fezzes are cool.

You can also always run potential sponsor questions and project goals by the community. Check out the forums.