THE
INNOVATION TOOLKIT
HANDBOOK

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TEAM TOOLKIT PRESS

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INTRODUCTION

Our team's first book, *The Toolbox of Innovation*, was a semi-autobiographical fiction story, told in a choose-your-own-adventure style and written by a team of seven co-authors.[1] It walks the reader through the process of developing an idea, building a team, connecting with users, and other steps in the journey of creating and delivering innovative solutions to hard problems. The book is both funny and practical, and we had a great time writing it.

This handbook is similar to our first literary endeavor in a couple ways. Like all our work, this is a group effort and is based on our direct experience… and once again, we had a blast putting it all together.

However, unlike *Toolbox* this one is solidly in the non-fiction genre (with an occasional foray into fiction, of course).

In the pages that follow, several members of Team Toolkit share our specific practices and processes as clearly and directly as we can, along with some reflections on why we do what we do the way we do it.

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[1] Read all about it— and download the eBook version for free— at bit.ly/itkbook

It’s not exactly a sequel to *Toolbox*. Instead, we think the characters from our first book would have wanted to read this one.

Both books are companion pieces to the online version of MITRE’s Innovation Toolkit[2], where you’ll find information about more than two dozen tools, techniques, and methods designed to help teams work together effectively and deliver innovative solutions to hard problems. The website provides the *what*, *when*, *why*, and *how* for each tool, along with detailed instructions, examples, and downloadable templates. Plus there’s a blog and some other supporting material about the toolkit.

In contrast to our first book, which showed the tools in action, this handbook takes you behind the scenes and fills in some gaps the website and first book don’t cover. Here you’ll find chapters about Team Toolkit’s culture, our certification process for new facilitators, and our method for developing new tools.

You’ll also find usage tips, perspectives on failure, and commentary on a collection of adjacent topics that don’t quite have a home on our website. A few of these topics first appeared on our blog[3], but most of the handbook is new material.

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[2] ITK.MITRE.ORG

[3] ITK.MITRE.ORG/Blog

We wrote this book primarily for the members of MITRE’s ITK community, our colleagues and collaborators who use the toolkit in their daily work. However, we hope it will also be helpful to readers outside our company as well, whether you use ITK or not.

In fact, if you’re interested in building an intrapreneurial little team, are looking for insight into different organizational structures (shared leadership anyone?) or just enjoy exploring examples of how to build and maintain a healthy innovation culture… this is the book for you.

Let’s get started.

The ITK Mission

Team Toolkit's **mission** is straightforward:

> *Help people understand:*
> ***what** innovation is, and*
> ***how** to do it*.[4]

The two primary elements of our mission provide a general overview of our concrete activities, but let's break it down in a little more detail.

We'll start by pointing out that the first two words in our mission are "help people." For all the attention *innovation* gets, that's not the main subject at hand. Our main subject is *people*.

Our effort to help has two parts: what and how. Accordingly, we spend considerable time helping folks understand *what* innovation even is. There's a longer riff on that topic in the next section, but the short version is that we define innovation as "novelty with impact."

Sometimes we change it up a bit and define innovation as "something different that makes a difference." That's because we find that having

[4] An earlier version of the mission was "Democratize innovation."

different ways to say basically the same thing can…make a positive difference.[5]

As for *how* to innovate, well, that's where the tools come in (to say nothing of our books and seminars and workshops and coaching…). The core of ITK is a collection of field-tested techniques and methods that are designed to help teams work together better and deliver innovative solutions to hard problems. Feel free to memorize that previous sentence and use it when you're explaining ITK to someone.

These tools help teams create new solutions, establish new ways of working together, and find new ways to look at the world. They also help us stay focused on making things better, safer, more effective— or whatever measures of merit apply to your project.

While the tools often take center stage in our work, the real magic comes from the team. We're not just building neat tools or a snazzy website or a collection of books. We're building a collaborative community of tool users. We're bringing together people who can coach and mentor each other, people who support each other, learn together, and have fun together.

Remember, our mission statement starts with "**helping people**."

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[5] We also like Henry Petroski's definition: *significant positive change*.

This bears repeating: although many of us are engineers, technologists, and designers, our mission on this project is *not* primarily about doing technical work, creating tools, or establishing processes.

It’s not even really about innovation.

Instead, we’re all about building relationships, trust, equity, communication, collaboration, psychological safety, active listening, generosity, imagination, creativity, and all those other fuzzy-sounding people skills that are so often underrated and underdeveloped during the course of a technical education.

Please keep that in mind on your ITK journey.

What Is Innovation?

Innovation is one of those words that gets used more often than it gets defined. That can be a problem because it ends up being misused, overused, or dismissed as a meaningless buzzword.

We think the word *does* mean something. Or at least, it *can* mean something, if we choose to let it. For any sort of activity, innovative or otherwise, a solid definition can go a long way towards helping us actually do the thing we're talking about. Thus, while recognizing that other folks may legitimately define the term in other ways, Team Toolkit defines **innovation** as:

NOVELTY
WITH
IMPACT.[6]

There are lots of things we like about that definition. First, it's *short* and easy to remember. That makes it way more useful than some run-on sentence full of stacked synonyms that confuse more than clarify (e.g., "*innovation is any process, product, idea, technology, or method that solves a problem, creates*

[6] Inspired by & slightly paraphrased from Scott Anthony's definition in *The Little Black Book of Innovation*.

value, or otherwise improves, enhances, increases, boosts, or advances the performance, function, operations, profits, or activities of an organization, group, process, product, business, or team"— yuck!)

Second, this definition is *broad* enough to be applicable in a wide range of situations. Novelty can refer to new technologies, new processes, new organizational structures, new communication methods… you get the picture. Any sort of newness can fall under the umbrella of Novelty, including things that are only new to our domain but are old hat in some other area. And we don't have to list every one of these things in our definition— we can just say "novelty."

Similarly, impact can broadly refer to lots of things without having to come up with a comprehensive list. Depending on the area you're working in, impact might mean saving time, saving money, or saving lives. It might refer to solving a problem, increasing value, boosting profits, or making a difference in some other dimension. Whatever measures of merit or desirable outcomes you have in mind can all fit under the category of Impact.

And lest there be any confusion, we are definitely talking about a *positive* impact here— novelty that has a negative impact and makes things worse is nobody's idea of good innovation.

Third, this definition is *accurate*. We like to point out that novelty is THE THING that distinguishes an innovative solution from a standard, business-as-usual approach. And impact is THE THING that distinguishes an innovative solution from something that is simply creative and different but doesn't make a difference. Put those two things together, and you've got a solid definition that distinguishes real innovation from innovation theater[7] and other imitators.

As the previous section mentioned, "something different that makes a difference" is a pretty good definition for innovation too, in case you're looking for an alternative to "novelty with impact." Henry Petroski's definition ("significant positive change") works nicely too.

But the thing we like best about the novelty with impact definition is that it points to a pair of **important questions**:

What novelty are you trying to introduce?
What impact are you trying to have?

If we can provide a clear, focused, simple set of answers to those two questions, we can have a truly intelligent conversation about innovation. We'll be able to explain it to our colleagues and customers, partners and collaborators. If we can't answer those questions, we're going to have a hard

[7] Innovation theater tends to be novel but not impactful… and often times, it's not even all that novel.

time turning out innovation dreams into reality, to say nothing of the difficulty we'll have explaining our project to anyone else and bringing them on board.

In the interest of practicing what we preach, here's how Team Toolkit answers those questions:

> *We are introducing new methods and techniques (novelty) that help teams work together to solve hard problems (impact).*

Ok, now it's your turn. How would you answer those questions?

Experimentation

Team Toolkit's approach to innovation is fundamentally experimental, and that means it's time for another short definition. While that word legitimately means different things to other folks, we define an **experiment** as:

AN INTERVENTION
FOLLOWED BY
OBSERVATIONS.

Let's look at this definition one piece at a time.

The first step in an experiment is the *intervention*. This is where we introduce some sort of change into the environment. The change might involve adding something to a design or taking something away. It could involve rearranging or modifying or substituting various pieces in a system (hardware, process, org chart, etc.).

Maybe it's just a different way of using the existing parts, grasping the handle in a new way or twisting left instead of right. It might even involve making changes to the environment itself (hotter, colder, brighter, darker, bigger, smaller).

Changing more than one thing at a time can make it hard to tell which change is responsible for the experiment's result, so it's a good idea to keep the intervention *singular*.

The second part of our experiment is the *observations*. This is where we collect data, take measurements, and generally pay attention to what happened after we introduced the change.

While we tend to keep our intervention singular, observations should generally be *plural*.[8] That is, in an experiment we should expect to measure more than one type of result. One small change can cause a wide range of ripples, so it's important to take a broad perspective in our observations.

By all means, pay close attention to the areas where you expect or hope to see an impact, but don't overlook the second- and third-order effects, which often happen at the margins. That's where the really interesting stuff usually occurs.

And as you collect the data, keep in mind this step is not just about plotting the points on a graph— the observation step also includes reflection and analysis, as we process the data and try to make sense of what we're seeing.

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[8] Similarly, our experiments should also be *plural*. That is, do a series of quick, simple, focused experiments, each of which involves introducing one change and making multiple observations.

Now that we've seen the steps in an experiment, let's think about the different types of experiments we might do. There are lots of ways and places to do experiments, and they come in lots of different flavors.

We might do a *thought-experiment*, imagining our intervention and observing the results in our minds— either as a solitary activity or in discussion with others.

We might do a *lab experiment*, making our interventions and observations in a controlled environment that is sheltered from outside influences.

We might run a *virtual experiment*, using computers to simulate the interventions and to calculate the data for us to observe.

While virtual and mental experiments can be great, Team Toolkit prefers to run our experiments in the real world as much as possible. We find that the data produced in the field tends to be richer and more reliable that imaginary or simulated scenarios. That brings us to the purpose behind all this experimentation, the reason we do it in the first place:

The reason we do experiments
is simply to learn.

That means the only way an experiment can fail is if it doesn't teach us anything. While our experiments may not always teach us the things we want to learn or hoped to learn, it's pretty hard for an experiment to completely fail (i.e., to teach us nothing). In fact, even an experiment that teaches us nothing about the subject in question… might teach us something about the design of experiments.

As long as we're paying attention, we're bound to learn something from the experiment. And if we learn something, then our experiment achieved its objective and is a success.

Sometimes when we do an experiment, our observation is some version of "well, that intervention made things worse." *This is still a successful experiment* because it taught us something. That is the point of an experiment after all— to learn (this bears repeating).

The possibility that our intervention might make things worse is one reason we suggest using *reversable* interventions in our experiments. The experimental change should be temporary, not permanent, particularly when doing experiments in the real world. Instead of thinking of a change as a one-way door that locks behind us, Team Toolkit likes to frame change as a two-way door, metaphorically speaking. In other words, our experiments involve short-term changes that can easily revert to their previous state.

This approach not only makes it easier to recover from changes that make things worse, it also makes it easier to get support for our experiments in the first place. We find that people are more willing to go along with a temporary experiment than a permanent change. This is particularly true in a technical / engineering / scientific environment, where people prefer to make decisions based on demonstrated data and quantifiable results.

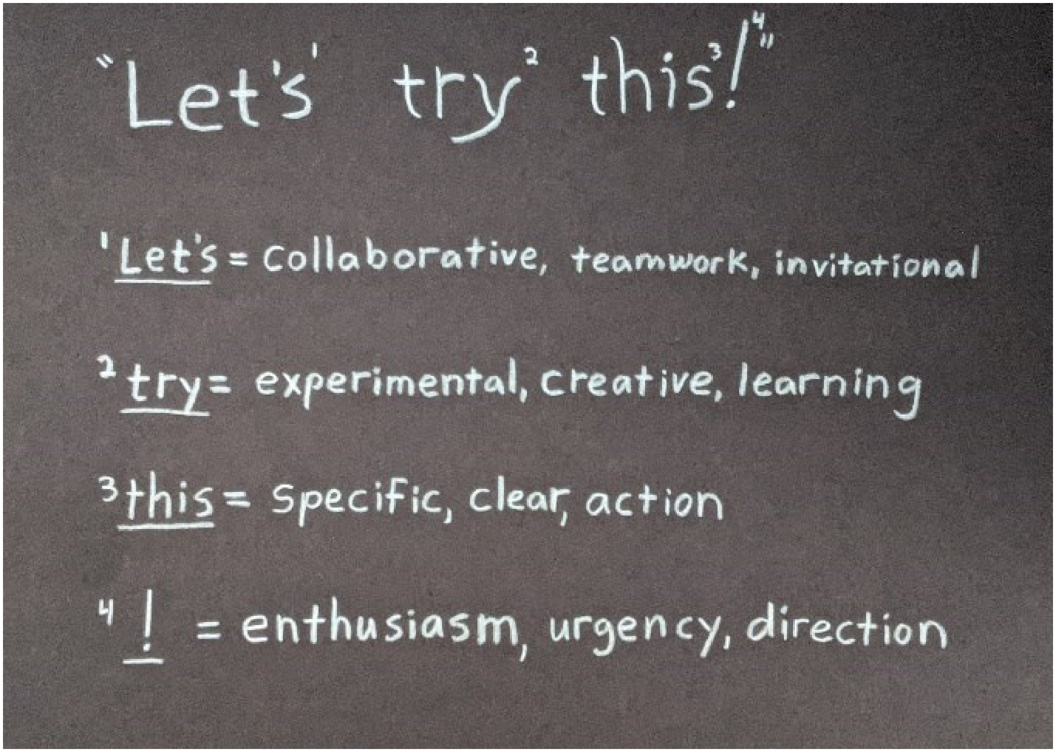
We often pitch an experiment by saying something along the lines of “let’s try this new approach one time and measure the outcome.”

Building on that point, we want to make it clear that experiments are not intended to directly improve anything. That’s not their primary purpose. Instead, we do experiments to produce data we can use when making decisions.

If our observation is that the change produces a desirable effect, we can then decide to make the change permanent. But that is a decision to be made *after* the experiment is complete, not before the data is in.

Doing experiments and making improvements are two distinct activities, so be careful to not get them mixed up.

Now may be a good time to ask yourself what sort of intervention you can make, what sort of (temporary, singular, simple) change you can introduce in your process, organization, technology, etc. And then make a list of the things you'll observe, the (plural, iterative, specific) measurements you'll make.


"Let's[1] try[2] this[3]![4]"
[1] Let's = collaborative, teamwork, invitational
[2] try = experimental, creative, learning
[3] this = specific, clear, action
[4] ! = enthusiasm, urgency, direction

SECTION 1:
THE WORK

Getting Started With ITK

We published the Innovation Toolkit under a Creative Commons License, so users don't need to pay a fee or get any special permission from us to just start using these tools. We're proud to offer ITK as a free product, and we aim to make it as easy as possible for people to use this stuff. It's exciting to know that anyone can download these tools and use them on their projects.

However, we also recognize that mastery of any tool takes time and practice. It can be helpful to have a coach or mentor come alongside and guide you through the nuances of a tool, particularly the first time you use it. That's why we built a team of trained facilitators who can help clients[9] navigate the toolkit, from selecting a tool through applying it and beyond. And that's where the ITK request process comes in.

The ITK facilitator team gets a lot of requests for support, and they come in all different styles. Some folks ask a broad, general question like "can you help us brainstorm?" while others ask for a specific tool (e.g., "Can you help us do

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[9] We don't actually use the term "client" very much in our ITK work. We tend to refer to anyone who requests our services as "the person who submitted the request" or "the POC" or something similar. That mostly works in conversation, but it looks super clunky in writing. So for the purpose of clarity we refer to them as "clients" in this handbook… even though it feels sorta weird to do that.

a Premortem?”). The most common request we get is something along the lines of “I want to use ITK, can you help us pick the right tool?”

Whether the client has a specific tool in mind or not, our general response is some variant of “Well, what outcome are you trying to achieve?” We know that’s a hard question for some people to answer, but it’s important because the answer will determine which tool is most appropriate.

That means our work as facilitators actually begins waaaaaay before we bring any tools out.

For example, when someone asks for help “brainstorming,” they almost never need to use the group ideation method first defined in Alex F. Osborn’s 1942 book *How To Think Up*. In fact, they may not need to use any ideation methods at all.

Instead, they may simply be using the word “brainstorm” as a synonym for innovation. They may be expressing a desire for something novel and impactful. They may already have a lot of good ideas, and what they need is help sorting and sifting and prioritizing. Maybe they need to design and implement an experiment or two. Maybe they need to have a better understanding of their users’ priorities and pain points. Or maybe something else entirely.

Despite the wording of the initial request, *none* of those situations are about the formal process of brainstorming, so regardless of how the request is phrased, we aim to ask questions and get clarity on what the requester needs.

Other times, we get a request from someone who heard about a cool ITK tool that their friend used on a project, and they want to try it on their project too (the Premortem[10] comes up a lot because it's so much fun). And like with the brainstorming request, just because someone asks for a specific tool doesn't mean it's the right one for them— at least not right away. Quite often, they should use some other tool first or take other steps before getting to the tool they ask for.

For example, if someone asks to use the Trimming tool before they have anything specific to trim, we may direct them to do some Prototyping first.

And then there's the "which tool should I use first?" question. Our response in virtually all these scenarios is still the same ("*Well, what outcome are you trying to achieve?*"), but there are two tools that are often good places to start: the Lotus Blossom and Problem Framing.

If you're not sure which tool to use first, pick one of those.

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[10]https://bit.ly/itk_premortem

Why those two? Well, they are among the easiest tools for a beginner to use. They are straightforward and can produce useful insights almost immediately.

The Lotus Blossom can help at virtually any stage of a project— you can use it to generate ideas about the project, the team, the problem, the solution, etc.

And the Problem Framing tool is a terrific way to make sure the team is all on the same page about the problem to be solved— always an important first step.

There are plenty of other places to get started with ITK, but you really can't go wrong with either of those two.

The Intake Form

In the early days, we took requests for ITK help in a casual way. It usually started with an unstructured conversation (starting with the "*Well, what outcome are you trying to achieve?*" question mentioned in the previous section), and that worked alright… for a while.

We have refined our request process several times over the years, as we've experimented on the best way to handle incoming request for help.

The intake form on the next page is one recent version, showing the range of questions we ask and stuff we need to know as we prepare an ITK event. And we are continuing to iterate on it, so this version may be outdated soon.

Regardless of the specific form, the goal is to build a shared understanding between the facilitator and the client around **roles** and **goals** for the session. That is, we want to make sure all parties are clear about who is responsible for various actions, as well as the desired outcomes of the event.

Event Name

Location

Date and Time

Participants: how many, who are they, location(s)

Key problem(s) you are trying to solve and challenge(s) you're facing

Goal you would like to achieve

What does success of this workshop look like to you? If a sponsor host is involved, will we get the opportunity to meet with them prior?

Project Number (charge code for billing time)

Budget range available for session planning, facilitation, and follow up (1 hour session usually equals 3-6 hours charged)

Can you accommodate two facilitators and/or a notetaker, if appropriate?

How did you hear about us?

Why ITK?

Some of the questions in that form are easier to answer than others (and some can be skipped entirely!). It's not unusual for people to need a little help coming up with a good answer. That's alright! Not being able to answer some of those questions is a useful data point that can help us figure out which tool to use next.[11]

We typically ask folks to answer as many questions as they can on the form, and then we use their response as a starting point for a more detailed conversation.

Our current request intake process is an automated form that asks people to tell us their **story** in a simple fill-in-the blank. It basically goes like this:

> **"As members of <*team / organization* / group >, we want to <*goal / objective*>, so that... <*benefit / result / some reason*>**

We also ask for contact information, then reach out to have a more detailed conversation. And to help folks fill out the form correctly, we even include a little sketch of how WE would answer those questions.

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[11] This is also true when using the tools themselves— when someone says "I don't know" in response to a question on one of our tool canvases, that can be an important moment that helps us define our next step— the next bit of research we need to do, the next data to collect, or the next decision to make.

As members of ITK
we want to help you
collaborate effectively
so that your team can do
something different that
makes a difference!

How to Say Yes

Before accepting a request for ITK support, it is important to make sure the request meets certain criteria. We generally look for the following attributes before agreeing to a request for ITK support:

Funding. ITK is not self-funded and operates on a fee-for-service model. Incoming requests for internal MITRE customers need to include a charge code for our hours.

Incoming requests from entities outside of our company need to provide funding through some appropriate mechanism. That might be an entirely new contract, or a funded task order on an existing project. If you're using ITK (or similar tools) in a different company or different context, you may have a different approach to funding. This is just what works for us.

A clear need for ITK. We focus on workshops and sessions where the toolkit would be helpful. *If you don't need any of the tools, then you don't need our facilitators.* We routinely decline requests to simply help run a meeting, facilitate discussions, take notes, mediate personality conflicts, or to teach basic program management skills.

For example, if a group of people need to share their latest research findings with the members of their department, they don't need ITK for that. They can just give presentations to each other.

Other teams and groups may choose to adopt a more expansive role, but this particular team tends to focus on ITK-specific engagements.

Sufficient preparation time. We find that our most successful sessions require some advance work, and we make a point to only accept requests that give us enough time to make the necessary preparation. We generally decline any urgent requests because we find those seldom turn out well.

There are exceptions, of course. If we get a short-turn request from someone we've worked with previously (and thus is already familiar with ITK), to use a simple tool like the Lotus Blossom, we can often find our way to a positive answer. But as a general rule, we're not available to help anyone this afternoon or tomorrow. Ideally, we try to have two weeks to prepare.

How to Say No[12]

As much as we'd like to, we can't say yes to every request. And even though it's only two letters, "no" can be a hard word to say.

There are lots of reasons it's hard to say no, particularly for members of Team Toolkit. We're an enthusiastic, positive, and curious bunch. We love trying new things and are committed to building a culture of generosity. We love helping people, we sincerely enjoy the work, and we explicitly bring a "Yes, And…" mentality to all our activities. So when a new request comes in, when someone reaches out and asks for our time and attention, our natural inclination is to say yes.

But sometimes, yes is the wrong answer. Sometimes we need to say no. And that's hard.

Difficult or not, it's super important to turn down some requests. A discipline of saying no helps us stay focused on the most important, impactful work, and do it in a sustainable way. It prevents us from getting burned out, overcommitted, or spread too thin, from doing work that is not a good fit, or from being distracted from our actual mission. But even though it's good and important to turn down some opportunities, it's still not easy to do.

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[12] Based on a blog post titled *The Hard No*, published 15 Feb 2021, bit.ly/itk_hard_no

Why is it so challenging? Well, sometimes we feel guilty about saying no, like we're letting people down by not accepting the invitation. Other times we feel scared, because we're not sure how the other person will respond or how the decision might impact our career.

Saying no can feel like a contradiction to our fundamentally positive character. Of course there's also FOMO— the fear of missing out, particularly when the thing we're saying no to sounds like it would be a positive opportunity. It's tough to say no when a big part of you wants to say yes.

Here are five techniques that may help in this area:

Do it quickly. Don't leave the other person hanging for too long— that's not nice to them, and the longer we delay, the more pressure we feel to say yes. Plus, delaying a decision just eats up the time we're trying to protect by saying no in the first place.

Set boundaries in advance. Create a little rubric to help filter incoming requests. Just as a plumber should turn down a customer's request to do electrical work, Team Toolkit members decline invitations that don't require our tools and specialties. For example, if someone asks us to simply run a meeting, we say no. That's not the kind of facilitation we do. We also find that our most effective sessions require considerable preparation, so we tend to decline short-notice requests that don't provide enough time to fully prepare.

Don’t offer a long explanation. “No” is a complete sentence, and it is perfectly legitimate to say, “Sorry, I can’t do that.” Other variations might include “I’m not available” or “That’s not a good fit.” Resist the urge to give a detailed explanation of why you can’t do it, why it’s not a good fit, or what higher-priority activities you’re already committed to. You’re making a decision, not starting a debate.

Do offer an alternative. Depending on the nature of the request we’re declining, we may be able to suggest a different option. Something like “I’m not available tomorrow but I’m free next Thursday.” Or “That’s not the kind of work we do, but if you ever need help with ideation or problem framing…” Or “I’m not available but maybe Rachel is.” Of course, you can still say no even if you don’t have an alternative, but it helps both parties if you can offer a Plan B.

Don’t negotiate against yourself. Avoid saying stuff like “I can’t do it tomorrow unless you really need it ok maybe I can, just hold on while I rearrange my entire calendar at the last minute…”

Before you turn your no into a yes, give the other person a chance to accept your first answer.

Note that offering an alternative (see the fourth technique above) is not the same as negotiating with yourself. It’s perfectly legit to say “I can’t do X, but could do Y.” The thing to avoid is “I can’t do X, ok maybe I can do X, ok sure if you insist I’ll do X…” before the other party has even had a chance to hear the initial answer.

If they do come back and ask again, you can still hold on to your first “no.” You knew what you were doing when you said it the first time.

One final observation: Saying no takes practice. Just like all hard things, we get better at it the more we do it. It also helps to have some support— and we promise, the rest of Team Toolkit has your back when it comes to saying no. In fact, we take a particular type of delight in hearing that someone has declined a request. You’ll get no second-guessing from any of us, just warm approval that you were willing to make the call and say no.

Matching Facilitators to Requests

When a request for support comes in, one of the first things we need to do is match it with a facilitator or two who can further refine the request and follow it through to completion.

Our goal is that "**every request gets addressed**," and that can be super challenging in a community made up entirely of volunteers.

Note that "addressed" doesn't mean "accepted" or "assigned to someone." Similarly, "follow it through to completion" doesn't mean we actually do an ITK workshop. As we mentioned in the previous section, sometimes completion takes the form of "Thanks for requesting our services, but unfortunately we're not able to help at this time." That is a perfectly legit conclusion.

But when a request does go forward, we aim to match facilitators with events based on *interest*, *availability*, and *skill* with the particular tool. For example, one member of the team loves Journey Mapping, so we tend to give her the first shot for any sessions using that tool. That doesn't mean she is the only person who does Journey Mapping, just that generally, she's got the skill and interest.

We are big believers in the buddy system, and so we like to bring in two facilitators as much as possible (more on that in a future section). If a project has a tight budget, we will often suggest one of the less senior / less expensive facilitators take the lead. In contrast, if the event will include a lot of senior folks as participants, we often bring in one or two of ITK's more experienced members.

We continue to experiment with mechanisms for making these matches. At the time of this writing, we've set up an automated mechanism that posts incoming requests for ITK support into a dedicated Microsoft Teams channel. All the facilitators can then see which requests have not been claimed yet and can assign themselves to any that match their interests and availability.

At our recently launched weekly stand-up meetings, we take a quick look at any unmatched requests to see if there are any volunteers. This approach seems to be working at the moment, and we'll continue to adjust it as needed.

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ITK Proposal Writing

Assuming we're able to say Yes to a request, once we have matched the request with a facilitator(s), the next step is to have a discussion with the client and get more details, then write up a specific proposal that describes which tools we'll use and all the relevant logistics information.

While we do not have a formal standard proposal format that everyone uses all the time, ITK proposals generally look something like this:

ITK Proposal for Good Place, Inc.

POC: Eleanor Shellstrop
TIMELINE: Sept 2021
FACILITATOR: Jason Mendoza
LOCATION: The Good Place

Problem Framing: 60 min
This 60-min facilitated discussion will aim to build clarity and consensus around the question "What problem are we trying to solve?" The output will generally be in the form of a "How Might We…?" question (i.e., How might we <take some action> to <achieve some result>?).

The team can use this Problem Framing activity to reduce the confusion and ambiguity around the value their organization provides and to increase a broader awareness among customers and other business leaders of their contributions. It also sets the stage for the second tool we recommend, the Mission / Vision Canvas.

Mission / Vision Canvas: 90 min
This 90-min facilitated discussion builds on the problem statement from the first session and aims to establish a shared understanding of "who are we and what do we do around here?"

This will be documented in a set of draft statements. The draft vision statement will describe an aspirational future the team is working to establish, and the draft mission statement will describe the concrete actions the team will perform in pursuit of that future. Next steps will include additional wordsmithing of the statements, as well as socializing and testing the statements with other interested parties. Like the Problem Framing session, the output of this activity should help increase clarity about roles, responsibilities, and objectives (both within the team and externally).

Persona Development: Three 30-min interviews, one 60-min interview
Once we have established problem, mission, and vision statements, we'll work with a small team to identify a group of individual "customers," to develop an interview strategy, and to support the interviews themselves. After completing the interviews, we will lead a 60-minute persona

development discussion to turn the interview results into a coherent Persona description.

Personas aim to increase understanding of the customer/user's perspectives, priorities, needs, barriers, etc. Persona descriptions often help influence the design of products and services, while the interview process itself helps build relationships and establishes buy-in from users.

We send this proposal to the client, along with an estimate of how many hours we anticipate we'll charge. Preparing for a one-hour session generally takes two hours, and then we typically add an hour for post-session activities (typing up notes, additional consultation, etc.).

So as a general rule of thumb, delivering **a one-hour session involves four hours of work** in total.

Adding to that, we often use the buddy system, and strongly encourage partnering up with a co-facilitator. That does not necessarily double the hours, because some of the prep work can be done by one person. When we involve a second facilitator, a one-hour session may end up requiring a total six hours of facilitators' time.

Actual amounts may vary depending on how complex the request is or how experienced the facilitator is. Use these estimates as a starting point for developing your proposals and estimates.

Toolchains

You may have noticed that the sample ITK proposal in the previous section includes a series of three tools, not just one. This is something that sets ITK apart from other toolkits. Instead of using ITK tools as independent, one-off activities, we recommend using several tools in a series, where each one builds on the output of the previous tool. We call these “toolchains.”

We find that toolchains help maintain a team’s momentum, lead to deeper and more impactful solutions, and reinforce the idea that ITK is all about doing the actual work. These sessions are not just secondary activity that we do for fun, as some kind of break from the “real work” of a project. They *are* the work.

Using a series of tools also helps reinforce our emphasis on strategic work shaping and building long-term relationships. We’re not just here to parachute in and do some quick tactical stuff (although sure, that can be fun). We’re here to change the way work gets done and to help people do the work together more effectively. That doesn’t happen in a one-off engagement. It requires a more enduring connection.

Designing a toolchain is more art than science, but yes, there are good ways and bad ways to build them. A good toolchain has a logical flow to it, where each tool sets the stage for the one that follows.

Our website has several sample toolchains for your consideration, and a couple of blog posts address the topic as well. In this next section, we'll introduce a trio of toolchains, with three tools each, plus some suggested alternatives within each toolchain.

You can use these toolchains individually or put them together into a mega-sized toolchain consisting of nine tools. And most importantly, you can use these as models for the toolchains you build.

Toolchain #1: Exploring the Problem Space

Suppose your team is in a situation where you don't quite have an idea of what the project entails yet. If you're exploring the problem space, we recommend a toolchain that looks something like this:

LOTUS BLOSSOM

STORMDRAINING

PROBLEM FRAMING

The Lotus Blossom is a great tool to use at the start of just about any toolchain. It's an easy introduction to ITK and can be used at virtually any phase of a project. We find this divergent thinking tool helps teams produce a larger quantity of higher quality ideas than traditional "brainstorming" sessions.

And from a toolchain perspective, a completed Lotus Blossom can serve as a terrific set of material to use for all sorts of other tools.

In this case, the subject of the Lotus Blossom should be focused on describing various facets of the problem space your team is exploring.

An alternative to Lotus Blossom is Mindmapping, which provides a less structured way to visualize information and generate insights into relationships between concepts. It is particularly helpful for anyone who feels overly constrained by the boxes and squares of the Lotus Blossom, or who wants to use sketches and icons instead of words.

Follow up the Lotus Blossom with Stormdraining. This tool helps distill the big list of ideas generated from the Lotus Blossom (or Mindmapping) session into a small number of key ideas and facets of the problem. It is a convergent thinking method to help simplify, streamline, and prioritize the content from the previous divergent thinking activity. Your group should come away with a shared understanding of which ideas from the Lotus Blossom they want to move forward with.

Instead of Stormdraining, you might try “dot voting,” where each participant is given a specific number of dots (three is typical) which they can adhere to whichever ideas they like best. They might choose to distribute their dot votes across three different ideas, or allocate two dots one a single idea, or even put all three votes onto the same idea.

This technique allows the team to identify the most popular ideas and thus produce a prioritized listing. Dot voting is not an ITK tool per se. Instead, we put it in the category of a technique that can be used in conjunction with several tools.

Lastly, Problem Framing wraps up this toolchain, using all the content from the first two sessions to develop a coherent, focused problem statement. Remember, this toolchain is designed for newly formed teams who are exploring a challenge or topic that is generally underdefined.

And now that you have a problem statement, the stage is set for the next toolchain.

Toolchain #2: Exploring the Solution Space

Once your team has a solid problem statement, it is time to explore the solution space. At this phase, you may consider using a toolchain that looks like this:

Any time we are exploring solutions, we like to start with the Persona tool. Focusing on the user helps reinforce the importance of understanding the needs, interests, and priorities of the person who will benefit from your work.

This is a good thing to do before you go too far down the road of solution design. Understanding their pain points, priorities, goals, and motivations helps ensure your proposed solution is valuable to someone. Note that developing a persona generally requires some sort of interview, research, or other direct interaction with users.

As an alternative to Personas, you may want to try the PAINstorming tool. It's a slightly different take on understanding the user, and ITK's template provides a more detailed set of questions. This additional level of guidance is particularly helpful for people who don't have a lot of experience developing Personas.

Once you've got a persona developed, experiment with ways to tell their story using Storyboarding. This basically involves documenting the steps, activities, and use cases that your Persona will go through as they put your solution into practice.

You can make a variety of storyboards to test out different scenarios and use cases. It can be playful and fun— in fact, it SHOULD be playful and fun. It also creates a terrific communication tool to help people understand what your project is all about.

Journey Mapping is a good alternative to Storyboarding. Journey maps tend to be more detailed and require more time and effort to produce, but they can also provide a deeper level of understanding of how the user proceeds through various activities and behaviors.

Once you've done some storyboarding, time to build Prototypes that are based on the stories you just told. Please note that this step is not about building a single prototype. It's about prototypes— plural.

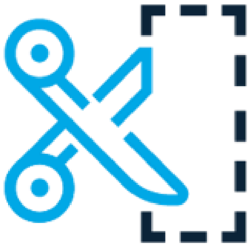
Prototypes are always plural.

Using simple materials that operate at the speed of thought, start creating little mock-ups and demonstrators to explore your ideas in three dimensions (or 2D if it’s on a screen). And of course, these prototypes can facilitate discussions with stakeholders to further develop the idea and the details surrounding the idea and the story. You may want to run through this toolchain multiple times.

Toolchain #3: Evaluate or Improve a Solution

Once your team has a solid grasp of the problem and some prototype solutions, it's time to try some new tools. At this point you should have something significant to work with, and this third toolchain should help you figure out how to move forward and execute.

ROSE BUD THORN



TRIMMING

VALUE PROPOSITION

This toolchain starts off with an analytical tool called Rose, Bud, Thorn. This one is fairly well known, so you may have seen it before. It's deceptively simple but we find it to be a powerful way to get insight into what is good about your mature idea (and thus might be expanded or repeated), which parts are bad or weak (and thus might be improved), and which parts have unrealized potential (and thus might be explored further).

Once you've done your RBT analysis, it's time to use the Trimming tool to remove some of the thorns identified in the previous session.

In general terms, this tool helps you remove or replace some part of the idea, to minimize friction and really refine it to the point where every piece is there for a very specific reason. Just be careful not to snip off too many buds! That's why we do the RBT first— to help the group distinguish between the buds and thorns (which can look similar if we're not careful).

The final step is to take the trimmed idea and build out the Value Proposition Canvas. This tool is pretty involved and takes some significant brainpower, as you identify and express the specific value you're bringing to the table, for a specific beneficiary.

But the good news is, at this point in the toolchain you should have all the material you need to crank out your value proposition much faster (and more accurately) than if you tried to jump into this tool from the start.

A Few Additional Comments About Those Toolchains

As a rule of thumb, if you're not sure which of the previously described toolchains to use, start with the smaller number. That is, if you're not sure whether your team is ready to explore solutions (Toolchain #2), take the time to explore the problem space first (Toolchain #1).

Of course, these are not the only toolchains you might consider. Each toolchain offers some substitution options, and you might go with a completely different set.

For example, if you're having difficulties engaging with stakeholders or prioritizing limited resources, you may want to design a different toolchain to help support that sort of exploration.

Tool Pairs

Now that we've described some complete toolchains, let's look at some common pairings you may want to use when developing your own toolchains. There are lots of ways to pair tools, and these examples may help spark some ideas for your own work. As you continue through your ITK journey, keep an eye out for other common pairings!

Lotus Blossom & Trimming

These two tools go together nicely, because the Lotus Blossom produces a large quantity of ideas… and it's not always clear what to do with that big list once we've made it. That's where Trimming comes in— it helps your team prioritize and streamline the ideas, to create a clearer path forward.

Personas & Storyboards

Personas help us identify and understand our users (and other stakeholders). But a Persona alone is just a static description. To really bring it to life, we like to use the Persona as a character in a story. That's where Storyboarding comes in. Similarly, it can be difficult to create a Storyboard without characters— which is what the Personas tool provides.

Problem Framing & Premortem

Problem Framing and Premortem are sometimes viewed as almost interchangeable. They are both terrific tools to use at the beginning of a project, and they are great ways to introduce a team to ITK, so we'll often debate which one to use with a new team. However, while they share those similarities, they actually answer two different questions. Problem Framing is focused on “What problem are we trying to solve?”, whereas Premortem is focused on “What does success look like?” Clearly, those questions are related, but they are not exactly the same and it can be insightful to tackle them both. Which should you do first? We don’t really have a consensus on that. Sometimes we’ll do Problem Framing first, other times start with a Premortem. But using these tools back-to-back is almost always an insight-filled experience.

Premortem & Rose, Bud, Thorn

The Premortem is a forward-looking tool that helps teams define future success and update project goals. It pairs nicely with the backwards-looking Rose, Bud, Thorn tool, which teams use to analyze their previous efforts. Interestingly, these tools can pair in either order. The team may use RBT first, as a retrospective after the project is completed, which sets the stage for the forward-looking Premortem to assess their next goals and success metrics. Or they can do the Premortem first, casting a vision of future success, then bring in RBT to assess progress once things are underway.

Collaboration Ground Rules

In our ITK sessions, we often find it helpful to establish a few ground rules with the participants. This helps ensure we're all pulling in the same direction and working together in a respectful, effective manner.

The Facilitator will typically propose an initial set of ground rules for the group to consider. The group then has a brief discussion about them to make sure everyone understands and agrees with the list.

These ground rules help create a safe space throughout the workshop. For example, if one participant becomes a dominant voice, the ITK Facilitator can remind them of the agreed-upon ground rule to "Include everyone in the discussion" to create space for the rest of the group.

Throughout the session, the facilitator may need to reiterate the ground rules and encourage the participants to abide by them.

We generally recommend using a subset of the rules listed below, although occasionally teams may choose the entire set or may add additional rules based on the group's structure and membership. As a general principle, a shorter list is easier for people to understand, remember, and follow, so try to keep it tight!

Reference List of Collaboration Ground Rules

- "If you think it, ink it"— use post-its & sharpies or virtual stickies to capture ideas as they come up
- "Yes, and..."— Build on each other's ideas and be supportive rather than judgmental[13]
- Practice grace & respect
- Leave your rank at the door: Everyone's input is equally valued
- Include everyone in the discussion
- Have one conversation at a time: Take turns speaking, and do not interrupt
- Challenge cherished beliefs
- Articulate hidden assumptions
- Encourage wild, crazy ideas— don't censor your ideas
- Be present— Put distractions away
- Share all relevant information and give freely of your experience
- Use a "Parking Lot" space to capture important but off-track topics
- There are no right or wrong answers

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[13] For more information about "Yes, And…", check out these two blog posts:
1) *What is "Yes, And…?!"* bit.ly/itk_YesAnd
2) *7 tips to practice "Yes, And…"* bit.ly/YesAndEveryday

Some of these ground rules will be more helpful and relevant in certain situations and with certain groups than others.

For example, “leave your rank at the door” is an important rule to introduce if there is a mix of ranks in the session, but less important if the participants are all peers.

Some groups very much need to be reminded to “have grace and respect” for each other, while such behaviors come more naturally to other groups. Similarly, some groups need a little extra encouragement to explore “wild and crazy ideas,” while other groups will do that without needing a nudge.

That’s why we recommend getting some basic intel about the group *before* the session, so you’ll know which rules will be most helpful and which would be redundant or unnecessary. Do the participants tend to be conservative and quiet, or energetic and creative? Are there dominant voices you should be aware of? How diverse is the team? Are there certain topics they tend to avoid? Do they tend to be well focused or easily distracted?

And of course, be ready for the group’s behavior to be the opposite of what was predicted.

Clarity and Consensus

When introducing an ITK session, we often describe our desired outcomes in terms of establishing “clarity” and “consensus,” because most of the tools we use are designed to help teams achieve those two goals.

When a group has a shared understanding of the problem they’re trying to solve, or the user’s needs and priorities, or the identities and objectives of their stakeholders, or the value proposition of the work they’re doing… the group is simply more effective.

And so, ITK workshops generally start by helping groups *clarify* something. That clarity often comes in the form of a specific statement or phrase, using carefully selected words that shine a light on some aspect of the work.

When you use the Problem Framing canvas, the group works to develop a clear problem statement, often in the form of “How Might We <take some action> in order to <achieve some objective>?”

If you’re doing a Premortem, the group works together to fill in the blank for the sentence “If the only thing we do is _________, that’s a win,” or “If we don’t do __________, it’s a fail.”

And of course, if you're using the Vision & Mission canvases, the group aims to produce a Vision statement (describing the future in aspirational terms) and a Mission statement (describing present activities in concrete terms).

Sometimes the clarity we seek is best expressed in a thing (physical or virtual), instead of in words. That's the case when we do Prototyping, Bodystorming, or Card Sorting. In each of those tools, the group produces some sort of artifact as a way to get clarity—an early version of a product, a cardboard mockup, a user's story, or a notional information architecture.

Establishing clarity helps teams build consensus… so let's take a moment to clarify (ahem) what we mean by that word.

Consensus does not necessarily mean we have full agreement on every specific item. Instead, consensus is a general agreement about the most important aspects of the topic.[14] It is an acknowledgement of a shared awareness. One variant we often use and which you may find helpful is "lazy consensus," in which "Proposals are presumed to pass in the absence of objections."[15]

Genuine consensus (lazy or otherwise) means all voices have been heard, considered, and included in the conversation, everyone has participated, and

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[14] A parenthetical observation: Clarity is *specific*. Consensus is *general*.

[15] From https://communityrule.info/modules/lazy_consensus/

the group has arrived at a position that all can support. There is an element of mutuality in consensus, where all members can affirm that they are bought-in on the position, even though they may have some areas of difference.

Let's be careful about this point. It's really easy for a group to settle for a cheap, superficial version of consensus, where the participants express agreement without genuine buy-in or commitment. A full treatment of that scenario is beyond the scope of this modest little handbook, but check out Jerry Harvey's brilliant book *The Abilene Paradox* for a more detailed look at that dynamic and how to avoid it or resolve it.[16]

Speaking of being careful, let's also note there is such a thing as too much clarity and consensus. We don't recommend using ITK tools to produce absolute clarity and universal consensus on every aspect of your project. Instead, the clarity and consensus we seek to build tends to be tightly focused on particular questions and courses of action.

In other words, we like clarity and consensus, but we simultaneously embrace uncertainty, exploration, and diversity of opinion as essential elements of healthy organizations.

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[16] For more Team Toolkit book recommendations, turn to the section near the end of this book called "Recommended Reading"!

Frank Barrett explains this dynamic beautifully in his book *Yes to the Mess*, which presents leadership lessons inspired by jazz musicians. Consider these two brief excerpts:

> "*In the spirit of minimal constraints and minimal consensus, keeping such phrases ambivalent actually becomes an organizational strength, because doing so leaves the phrases open to multiple and perhaps contradictory interpretations. There can be too much clarity in organizations*." [pg 75]
>
> *"This means maximizing opportunities for diversity rather than insisting on unity or too much agreement. By hedging against the trap of 'too much consensus,' leaders give subordinates additional freedom to experiment and respond to the sort of hunches in which true innovation is often found*." [pg 77]

This idea of fostering clarity and consensus while simultaneously seeking to minimize clarity and consensus may sound contradictory… because it is. Yup, it totally is, and that is on purpose.

We find this to be a productive type of contradiction, not a paralyzing one, because it encourages a thoughtful engagement with the topic that continues long after the ITK session is complete.

We can perhaps resolve the paradox by noting that clarity and consensus are *starting points*, not final destinations. When we arrive at a point of clarity and consensus, the work is not over. We are not trying to establish a shared understanding of a topic or a design and then never ever let it change. Instead, each ITK session is part of an ongoing, iterative series of experiments and excursions, where our clarity and consensus continue to evolve.

As the work proceeds, we revisit the various points of clarity and consensus, testing to see if the clarity still holds and if the consensus is still true. We keep an eye out for situations where clarity on one topic may obscure other facets of the work, and where consensus may drown out divergent voices.

Along the way, we find things becoming less clear, and we discover points of disagreement where there was once consensus. When you find that consensus and clarity ebb and flow, don't be alarmed. It is all part of the process.

Throughout it all, we work to welcome and embrace the moments of ambiguity, dissensus, confusion, and divergence that inevitably arise. We encourage everyone to lean into the whole cycle, ultimately falling in love with the questions more than the answers.

Miscellaneous Facilitation Tips

The work we do as part of the ITK community is human, and thus it can get a little messy, a little disorganized, a little bit out of control. We don't want any of that to come as a surprise, nor do we want any facilitator to think they somehow failed just because things went in an unexpected direction or led to an unpredicted result.

Yes, these tools bring repeatable structures to the mess, but they do not boil everything down to a simple checklist or two.

That would be gross.

We want this handbook to reflect that reality. While we tried to lay out the content in a logical framework and with a consistent flow, we also want to bring a degree of playfulness and chaos to the content.[17]

So at this point, we're going to introduce a semi-random collection of miscellaneous facilitation tips for you to wade through and consider. Hopefully this deliberately designed dash of disorder makes sense in the larger context of things, and we hope you find some interesting and useful stuff in the next few pages.

[17] Just like our first book did!

First, we've mentioned the buddy system before, but let's reiterate how helpful it is to **pair up** with a second facilitator. Not only does that make the whole experience more fun, but if the session is virtual then one partner can be watching the chat while the other is running the slides, or one can be taking notes while the other is engaging with the participants.

This also creates an opportunity for one facilitator to say to the other "Did I miss anything?" and thus bring in other perspectives.

Several of us have built enduring partnerships with other facilitators whose style complements our own, the Batman to our Robin, the Ernie to our Bert, the Chakotay to our Janeway, the chocolate to our peanut butter. We strongly encourage you build such partnerships as well.

These partnerships are not exclusive pairings, and we all tend to co-facilitate with a variety of folks, but it is also nice to have a go-to collaborator with whom you have a shared history and a mutual track record of working together. The kind of person you can work with on short notice, because you've already done the forming / norming / storming part of relationship building.

The Five Whys Technique can be used with virtually any of the tools. This is a deceptively simple practice that basically involves asking the question "Why?" five times, but of course there's more to it than that.

The key is to pose these inquiries with nuance and thoughtful empathy, rather than just responding to every statement by simply asking “Why?” You may try repeating back the previous answer, like in this dialogue:

> *Participant: Analyzing this data takes a long time.*
> *Facilitator: Oh, analysis of this data takes a long time? Why does it take so long?*
> *Participant: Because I have to do it all myself!*
> *Facilitator: Yikes, you have to do it all by yourself? Why don’t you have any help?*
> *Participant: I’m the only one with this particular skill set.*
> *Facilitator: Wow, nobody else has this skill set! Why is that, do you think?*
> *Participant: Well, I’m too busy doing the analysis to train anyone.*
> *Facilitator: Sounds like you are very busy. Why…*

At this point in our dialogue, the facilitator and participant probably have a better understanding of the true situation, which seems to be less about how long the analysis takes and more about staffing and training. This may lead to additional questions, like “How did you get your original training on this particular area?”

Phrases to Learn and Use

Over the years, the members of Team Toolkit have built up a collection of handy little phrases and questions that we use in ITK sessions. We encourage you to learn these phrases by heart and use them in the sessions you lead.

<u>If you think it, ink it.</u>

We often use this as an introductory ground rule, encouraging people to write down their ideas in their own words. This way no ideas get lost— if someone gets an idea while someone else is talking, they can write the idea down without interrupting the first speaker. When the “inked” ideas are posted on a shared canvas (either virtual or physical), it also makes each person’s contributions visible to the rest of the group.

Then, if there is a lull in the session, the facilitator can restart the conversation by saying “I see someone wrote X. Could someone say a few words about that?” Or maybe “Is there anything on the canvas that you have a question about?”

Similarly, the facilitator might ask “Does anyone have something they wrote down but haven’t had a chance to share yet?”

And of course, this approach also contributes to filing in the canvas or artifact the group is creating.

Say more about that…

Not sure what to say in response to someone's input? Didn't quite follow what they said? Does the input sound incomplete or confusing? Did the rest of the group respond with silence when someone added their thoughts? In all these situations and more, you may want to respond by saying "Can you say more about that?"

This can be a very encouraging response and keeps the conversation moving. Another way to phrase this is "Tell me more."

Who have we not heard from?

We ask this question in pretty much every ITK session we lead, regardless of the tool or topic. It's a powerful way to ensure everyone gets to contribute. Rather than calling out anyone by name or putting anyone on the spot ("Hey Bob, you've been really quiet today, why don't you stand up in front of the class and do this math problem so we can all watch?"), this phrase creates space for quieter participants to join the conversation and to share their ideas.

It also provides a very gentle signal to dominant voices and over-sharers to step back for a moment and make room for others.

I think what I'm hearing is…

Mirroring and summarizing the group's comments is a powerful way for a facilitator to move the group towards clarity and consensus. Even if the group disagrees with the facilitator's summary, that's still a useful input because it creates an opportunity for them to clarify and correct previous statements, and gives the group something specific to respond to.

There's a 0% chance we got this 100% right on the first try.

This phrase encourages participants to experiment and try things, giving everyone permission to get it a little wrong at first. It's particularly helpful for making perfectionists feel a little more comfortable taking a first step.

This is the beginning of a conversation, not the end of one.

This phrase helps set expectations for the particular session's outcomes, as well as encouraging participants to continue doing the work after the session is over. This is often a useful thing to say at the kick-off, and then to reiterate towards the end as a reminder / send-off.

Yes, and…

We've developed a four-week training series on this topic, but the short version is that this well-known improv technique can go a long way towards building a positive, creative environment for your session. The basic practice here is to respond to other people's ideas in a way that affirms their contribution (Yes!) and builds on it (And…!).

Don't feel limited to those specific words. There are lots of ways to affirm and build on someone's comment, such as "I hear you, and I also think that…".

One tip— saying “Yes” doesn’t necessarily mean you’re agreeing with someone. You’re simply acknowledging their contribution and affirming their participation, then adding to it.

This is a great phrase to introduce to the rest of the group and invite them to use it too.

Great idea, can you please write that down in your own words so we don’t lose it?

This phrase helps facilitators manage a dominant voice, anyone who is “overcontributing” to the session.

Asking someone to write their idea in their own words simultaneously expresses appreciation for their inputs, empowers them to continue contributing, and creates space for others to contribute (because they can’t keep talking while they’re writing). It’s a positive, respectful way to get someone to shut up.

In some cases, they may decline to write anything down, basically admitting / realizing that their contribution is not worth documenting. The nice thing is that’s *their* decision, not something the facilitator has to point out.

If you’ve established the “think it / ink it” ground rule at the beginning, this phrase is simply a continuation / reminder, and it doesn’t feel like anyone is being singled out.

Distill it down...

When talking about simplifying something, we like to use the term “distilling” rather than “boiling.”

The difference is that distillation tends to concentrate and purify a substance, while “boiling it down” is a much less appetizing image. We find it’s just a more apt metaphor.

Post Session Tips

The success of an ITK session is largely determined by the work we do before the session even begins. But while advance preparation matters a lot, ending a session well is also super important.

One question we like to ask after any session, workshop, or ITK event is "*Did we get the outcome we were looking for?*"

For example, if we used the **Rose, Bud, Thorn** tool, we might ask whether we gained some insight into what went well (and thus might be repeated), what went poorly (and thus might be improved in the future), and what potential we identified (and thus might be explored further) for whatever topic we were analyzing.

After a **Problem Framing** session, we might wrap by asking questions like "Did we get agreement and buy-in for the problem statement?" (or we could use the words "clarity and consensus").

Regardless of the tool used, we should also check to make sure everyone's voice was considered in answering all those questions.

In addition to looking back and evaluating the session itself, our post session activities should also look forward and pose the question "Do we know what we're going to do next?"

If we built a toolchain in the first place, we may want to just move on to the next tool in the chain, right? That's often a good idea.

However, sometimes we learn something from a tool that requires a change of plans. We may discover some gaps in our knowledge or some erroneous assumptions that require us to shift our trajectory and try a different tool than the one we'd planned to use. This does happen and is not a bad thing at all—in fact, it's a sign that ITK is helping the group move in the right direction.

So while it's a good idea to build a toolchain, it's also a good idea to hold those plans loosely and be ready to pivot.

Post Session Homework

We often assign a three-step homework assignment after the conclusion of an ITK session. Don't worry, the homework is not difficult (the first part literally includes taking a nap!), and the facilitator does not have to collect and grade it. It's just a way for the group to keep making progress after the facilitation has ended.

The three steps are:

1) **SLEEP ON IT**. Set aside whatever your ITK session produced (the statement, Lotus Blossom, prototype, etc.), get some rest, and come back to it the next day with fresh eyes. Does it still make sense? Do you see any gaps? Do you have any new ideas now that you've stepped away for a bit? Make a note of any changes you may want to make or any points of confusion you discover.

2) **SOCIALIZE IT**. Take the ITK canvas and share it with someone who was not in session. Can you explain it clearly? Does it make sense to them? What questions or reactions do they have? What additions might they suggest?

3) **WORDSMITH IT**. Based on the two previous steps, are there any changes you might make to the statement / canvas / prototype?

Maybe you said "collaborate" but you meant "cooperate," or maybe the prototype has a widget where it should have a gizmo (note that we're using the term "wordsmith" loosely, it could refer to any sort of semantic changes, to include sketches and physical objects).

Once everyone in the team has had a chance to sleep on it, socialize it, and wordsmith it, they can come together to continue the conversation and share the results of their three-step homework. This sets the stage for continuing the conversation and keeping up the momentum from the ITK session.

At some point after the session, it can also be a good idea for the facilitator to share a written overview of what occurred in the session, as well as some next steps that the group can consider taking. The facilitator may choose to pair this with an optional request for a testimonial, which is described more in the next section.

Asking for Testimonials

After a session, we generally ask for some feedback, often in the form of a testimonial. Several of us use an email template that looks something like this:

> Team Toolkit keeps a list of brief testimonials and “success stories” from people who have used ITK and our training sessions. I was wondering if you might be willing to put together a short testimonial about our recent session?
>
> Your story could be something like: “This presentation for ___#___ members of our organization helped them learn ______ and supports our overall effort to __________. ”
>
> Or “The _______ tool helped our team get clarity and consensus around the topic _______…”
>
> Thanks again for your support for and partnership with Team Toolkit.

Not only does this help the session participants think through and summarize exactly how ITK helped them, but later on we can aggregate the testimonials as examples of how ITK achieves its mission. **Win-win.**

SECTION 2:
THE TEAM

About Team Toolkit

We often say the most important thing Team Toolkit built was the team itself. Our team's membership changes over time, as do the specifics of some of our practices, but some elements of our character and values are fairly consistent. Let's take a look at some of this crew's special and unique attributes.

The Volunteer Principle

Author Tom Peters brilliantly observed "only volunteers matter," and Team Toolkit's basic structure rests firmly on that principle. Nobody has ever been directed to join this crew, nobody has ever been involuntarily assigned to the team, and we are committed to making sure that is always the case.

We want everyone who joins the ITK community to do so because they *want* to, not because they *have* to.

This emphasis on autonomy and self-selection goes beyond the team's membership and extends into our daily operations. We are always careful to extend invitations, not obligations. We do not assign tasks to each other, and do not make demands on anyone's time or attention. Instead, we describe opportunities and ideas, then ask "Who is interested in taking this one?" or "Who wants to do this with me?"

Yes, this means some proposals go nowhere, because nobody wants to do the thing. Some ideas remain unfulfilled, or get delayed, for lack of volunteers. *That is more than okay. It's how this team is designed to function.* Any ideas that do not grab our attention or align with our interests are best left for others to pursue (or left unpursued).

The Volunteer Principle ensures that we all spend our time and resources doing work we care about. Work that matters to us. It provides a level of freedom and autonomy which boosts our creativity and quality. Because we volunteered to do the thing, it becomes our thing. This sense of ownership and commitment is wholly incompatible with phoning it in or otherwise making a lackluster effort. And thus, the Volunteer Principle is one of the major keys to ITK's success.

Naturally, this foundation means the team's structure and organization looks quite different than groups of non-volunteers. That leads to the next two topics: intrapreneurism and shared leadership.

Intrapreneurism

While entrepreneurs go out on their own to create new businesses, intrapreneurs apply their creativity and initiative to create new things within the structure of a larger organization. Team Toolkit follows an intrapreneurial structure for our work.

Being an intrapreneur begins with self-selection. Just as nobody was assigned to join Team Toolkit, nobody gets assigned to be an entrepreneur… and nobody should be assigned to be an intrapreneur. That’s not how those things work.

Being an intrapreneur also implies a relatively high level of independence from the larger corporate structure. Maybe someday Team Toolkit will appear on a formal organizational chart, but at the moment, it does not. While we have several supporters, champions, and sources of funding, ITK does not operate under the formal leadership of any particular department or division.

Instead, just like an entrepreneur securing external funding and building an advisory board, we establish relationships with a small number of corporate leaders who supply resources, serve as a sounding board, and provide accountability. Then we go out and do the work, find customers, develop products and services, and report back occasionally.

Finally, being an intrapreneur requires initiative. As a team, we select our projects and activities based on seeing needs and opportunities that line up with our strengths and interests. We’re not seeking permission or approval or guidance. Instead, we’re taking action and doing things we think need to be done.

Shared Leadership Model

We deliberately built a shared leadership model for Team Toolkit. This flat organizational structure means no single person is in charge or responsible for making executive decisions. Nobody assigns tasks or directs behaviors (see the previous two sections). Instead, we have a collegial approach to decision-making that respects the autonomy of each member and relies on personal initiative rather than a command and control approach.

When one of us gets an idea for some new project or initiative, or we receive a request for support, we present it to the group as an invitation, not an obligation. We strenuously avoid creating a situation where one person's idea becomes someone else's tasking. If someone has an idea they don't want to personally pursue, they can offer it to the group for someone else to take on. If nobody wants to take it on, then we simply don't do it.

This turns out to be a very efficient and effective way to run a team. Everyone is empowered to make decisions about what they want to do, and everyone is expected to keep the rest of the crew informed in a relatively timely manner. The team's relatively small size is one of the reasons this works so well, but the team's willingness to trust each other is the real key.

While this can be described as a "leaderless" organization, it is more accurate to call it a "leaderful" organization. Each member of the team functions as a leader, making decisions and taking actions on behalf of the team— not independent of the rest, but in an interconnected way. It's shared leadership, not an absence of leadership.

As the team grew in size, our shared leadership model evolved. When there were just five of us, responsibility for leading this project was genuinely shared by everyone involved. Now that the ITK community is upwards of fifty people, we have a small team of nine people who share responsibility for leading the movement. It's still shared leadership, but shared among a small percentage of the larger ITK community.

We aim to maintain an open, collaborative posture, welcoming ideas and leadership from the whole group, but we don't try to make budget decisions (for example) based on getting consensus from fifty people.

Good Chemistry

The members of Team Toolkit like each other. We're friends. That matters.

It doesn't matter just because having good chemistry makes the work more pleasant. It also makes us *more effective* as a team. We trust and respect each other; we make a point to listen deeply and support each other. This creates space for people to explore creative new ideas that might never see the light of day in a less welcoming environment.

Somewhat paradoxically, you can't force good chemistry… and it also doesn't just happen automatically. That means it is simultaneously a magical mystery and something we all explicitly work towards. Good chemistry requires the group to adopt specific behaviors (listening, supporting, trusting) and to let go of some other behaviors (controlling, directing, dictating).

For example, the founding members of ITK (now the ITK leadership team, aka Team Funfetti) make a point to not only celebrate each other's birthdays, but also to celebrate our individual and collective successes, failures, and differences.

When our opinions or recommendations diverge, we aim to adopt a posture of curiosity and openness to understand other perspectives. We don't always do that perfectly, but it works more often than not.

Like our shared leadership structure, this aspect of Team Toolkit has evolved as the team grew in size. The core leadership team still prioritizes our friendly relationships with each other, and we make a point to build a friendly and welcoming atmosphere with everyone else, but we recognize that a group of 50+ people can't sustain the same level of personal connection as a group of five.

Multi-disciplinary

For a group that's mostly engineers, we're actually a pretty diverse bunch, professionally speaking. In addition to the usual collection of engineering specialties (electrical, mechanical, aerospace, systems, etc.), virtually every member of Team Toolkit's leadership team has had a significant career transition at some point.

Whether it was a former life in HR or design or the military or as a bookstore manager, we each bring perspectives and experiences far beyond our technical credentials.

This is not a coincidence, and we make good use of these different backgrounds. One discipline we particularly emphasize is communication. The ability to express ideas clearly and effectively is a major key to our success, so we put significant effort into developing our writing and speaking abilities. We rehearse our presentations, revise our writing, and do our homework to improve our communication skills.

Diversity

Team Toolkit's demographics look pretty different than the rest of MITRE. While only 33% of MITRE employees are women, seven of the nine members of ITK's core leadership are women and so are 73% of our certified facilitators (at the time of this writing). People of color are also more heavily represented in the ITK community than in MITRE overall, and we tend to skew younger than MITRE's overall demographics.

We didn't set out to build a team that reverses the average MITRE gender ratio (and other demographics!), but we recognize that the things which make Team Toolkit different are the things that make us particularly effective.

This team is strongly committed to building opportunities and equity in the company, making sure doors are opened wide, glass ceilings are busted, seats are available at the table, and bridges are built. Whatever architectural metaphor you prefer, the point is we are committed to ensuring a diverse set of voices are invited, sought-out, included, welcomed, and listened to.

Telegraphing Intent

You have probably heard the old saying "*It's better to ask forgiveness than permission.*" Team Toolkit aims to do neither of those. Instead, we prefer to follow a third way: telegraphing our intent.

Rather than seeking permission to do something we want to do, or apologizing for doing something we thought was right, we simply say what we plan to do – out loud, with clarity.

This is not for the purpose of requesting approval, nor as a way to say "sorry, not sorry." We don't do this with a defiant tone of "try and stop us!" Instead, telegraphing our intent is about being open and transparent about what we are doing and why we are doing it.

We are neither hiding nor apologizing nor asking for authorization. We are taking responsibility for our actions, doing our work out loud, and behaving like trusted professionals. It's lovely.

It also creates an impetus to really think through our proposed course of action, to describe it in a way that is simple and clear, with the purpose and outcome spelled out, along with the proposed set of steps. We find this helps clarify our own understanding.

“If You Want To Be The Noun, Do The Verb”

This line from author Austin Kleon nicely summarizes one of Team Toolkit’s guiding principles. Over the years we’ve been doing this work, we spent relatively little time and energy pursuing organizational *nouns* (i.e., titles and labels), preferring instead to focus on doing the *verbs*— developing tools, performing experiments, building communities, facilitating ITK sessions.

And we’ve found that if you do the verb frequently, you’ll get good enough to earn the noun.

Team Toolkit's Culture

Before we describe Team Toolkit's culture, let's take a moment to define that word. When we say culture, we're referring to "the shared beliefs and behaviors of a group."

For example, we might have a culture of reading. That would involve believing that reading is important. And the behavior might include actually reading… and also buying books… and sharing recommendations with each other. Anyone who doesn't read would be an outlier in that culture.

Author Seth Godin makes a similar point when he talks about culture, saying "people like us do stuff like this." Describing culture in those words really highlights the way culture and identity are connected.

It is important to recognize that culture is pretty much never monolithic or static. That is, in any organization of any size, there will always be co-cultures and sub-cultures… and they will all change over time. So don't be surprised when you encounter people, activities, and decisions within ITK-land that do not line up perfectly and permanently with the description below.

Having said that, let's take a look at some of the main elements of ITK's current primary culture.

Our culture is collaborative.
We believe in the power of working together to make stuff.

We put that belief into practice by partnering up on things, inviting each other to co-facilitate sessions or co-create new tools. We share our drafts with each other and don't just provide feedback— we lend a helping hand.

We have a culture of shared leadership.
We believe in sharing power and influence. We share responsibility and share authority.

We put that belief into practice by building an organization where people make decisions and commitments together, rather than appointing one person as the "ITK Executive". We work to build trust and to be transparent. We encourage autonomy and openness to others' ideas. Nobody in Team Toolkit has the role of assigning tasks or dictating actions to anyone else. We offer *invitations, not obligations*.

As the ITK community has grown in size, the nature of shared leadership has evolved. We now have a small leadership team which is responsible for leading the overall ITK movement, and we exercise shared leadership within that group. We also encourage the larger ITK community to take leadership responsibilities. This is an example of how the specific expression of a cultural value changes over time as the community grows.

We have a culture of initiative.
We believe it is important and valuable to take action and that we each have a responsibility to do so.

We put that into practice by asking questions, creating an understanding of values and priorities, and inviting others to get involved. We don't always wait for direction, permission, or approval before we do something. We assess, manage, and mitigate risk often with a contingency plan or two, but we are a cadre of volunteers and do-ers. We instigate, inspire, and lead change. We try to make our business processes as efficient as possible so we can work dynamically and can adapt as we continue to evolve.

We say stuff like "I care about this thing, who wants to do this project with me?" instead of saying "Am I allowed to do this project?" or waiting around for someone to give us an assignment. There are always more things to fix and improve. As we continue to grow, we are looking to new members with their fresh perspectives to jump in and help the team and others more effectively innovate.

We have a culture of "Yes, And…"
Just like taking initiative, this one's also related to collaboration and shared leadership— we believe in affirming each other and building things together.

We make a regular practice to say "Yes, And…"even if we're not using those specific words. We make a point to respond positively to other people's ideas and thoughts, to value and accept people's initiatives, and to find ways to contribute to those ideas where we can.

We have a culture of experimenting and learning.
We believe that experimenting is an awesome way to learn.

We put that belief into practice by constantly experimenting. So we introduce a lot of changes, whether that be adding, subtracting, modifying, or rearranging. And we do a lot of observation and reflection, which requires paying attention to how those changes affect the world.

We are a Maker culture.
We believe that making stuff is important… and shipping it is too (shipping the thing is how you know you really made it, versus just imagining or thinking about making something)!

We put that into practice by making stuff and sharing it. We make thoughtfully designed workshop flows. We make intuitive and easy to use collaboration spaces, like by using the virtual whiteboard tool MURAL.[18] We make tailored and custom-designed tools.

And we share ALL of this by delivering and facilitating through our ITK workshops! We also build prototypes. We share these with each other and

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[18] https://www.mural.co/

the rest of the world. These prototypes have turned into videos, conference talks, blog posts, artwork, and even a book! And we don't just share our products. We share our progress and our processes with each other. That's how we invite collaboration and create opportunities for more Yes And behaviors.

We have a culture of Failure Cakes.
We believe it is important to create a supportive environment where everyone feels safe as we experiment and learn, as we take risks and try to do new things.

We put that into practice by sharing Failure Cakes together. There's a whole other video and several blog posts about these, but the short version is that a failure cake is a chance to celebrate and learn from an attempt that didn't work out the way we hoped. It aims to destigmatize failure and to take the sting out a little bit. And when we say Failure Cake, we mean eating a literal cake.

If you'd like to explore the topic of culture building in more depth, check out the Culture Building tool on our website. You may also enjoy this 11-min video about Culture Building, available at bit.ly/itk_CultureBuilding

The Certification Process

In 2020, the ITK leadership team launched our Certification process, for three main reasons.

To share the fun. We honestly enjoy doing this work, and wanted to invite more people to join in. As the team grows, we're looking for people who enjoy doing this stuff too!

To expand our capacity. We get a lot of requests for support, so we wanted to train more people who can help bring some ITK magic to the world. Growing our team means we have more people who can respond to requests for ITK support.

To maintain quality. We've been doing this for a couple years now, and a certification process seems like a good way to pass along some of that learning. As the team grows, we want to make sure the lessons from previous years are shared with the newer arrivals.

The requirements listed below are pretty straightforward, but don't let the checklist give you the wrong impression. This isn't about checking a few boxes.

ITK is **never** about just checking a few boxes.

In addition to the steps listed below (which continue to evolve and be modified over time), we're also looking for personal attributes like curiosity, generosity, initiative, kindness, and humility.

We're deeply committed to building MITRE's culture of speed, risk-taking, adaptability, collaboration, and grace and respect. If we're not doing all those things, we're not doing innovation the ITK way. So please don't get the impression that certification is about meeting some minimum number of facilitation events. There's so much more to it than that.

But yes, there are some boxes to check as well, so here they are:

Use one tool three times.
This requirement aims build depth with a specific tool. Using a tool multiple times helps people discover some nuances about the tool, as well as to develop their own individual voice and style as a facilitator.

And of course, you don't have to stop with three. And you don't have to limit yourself to just one tool. You could use four tools seven times each in the course of your training.

What counts as "using" a tool? Lots of things. Filling out a Lotus Blossom on your own could count. So could co-facilitating a Problem Framing conversation with your coach. Leading a group Premortem all by yourself definitely counts.

Basically, if the experience helped you learn something about the tool, that counts. If it helped you feel more confident in your ability to use and explain the tool, that counts. If you'd like it to count, it counts. If you don't want it to count, then it doesn't. Coordinate with your coach on that, and at least one of your sessions should be observed by your coach or another certified facilitator.

Use three tools one time.
This requirement aims to build some breadth across the toolkit. Using a few different tools exposes the trainee to a wider range of capabilities and methods.

Same principle from the previous step applies about what "counts" for this requirement. And feel free to use those three tools more than once… or maybe even try four or five tools.

Create something to share with the larger community.
You could write a post for the ITK blog, but that's not the only option. Other outlets include MITRE's Inside Source news site, some other blog, or an entirely independent outlet. Or maybe a little section for this Handbook!

It doesn’t have to be written— the “something” could be a video, a drawing, a briefing, an interpretive dance, or a song.

So far, nobody has created an interpretive dance, so there’s still time for you to be the first!

The point is to create something useful that contributes to the larger conversation…and then to share it.

Give an ITK 101 Presentation.
We want every member of the ITK community to be able to tell the innovation toolkit story, and giving an “ITK 101” presentation is a good way to do that. Plus, we get a lot of requests to come explain ITK to various groups, so this requirement helps with our “expand our capacity” goal.

Have a meaningful conversation with another coach.
Each trainee will meet with their coach on a regular basis. We’re asking trainees to also meet with someone else from the ITK facilitator team.

Get to know their story and tell them yours. Learn about their favorite tools, their facilitation tips, or their overall perspective on innovation, collaboration, and problem solving. You’ll find the ITK founding team’s names, photos, and bios on the ITK website, or ask your coach for a recommendation and introduction.

Along the way, we encourage trainees to read the ITK blog and familiarize themselves with the website. Check out the tools, watch the videos, explore the toolchains. Trainees will also be added to a Teams channel, where you'll have a chance to interact with the rest of the group, post questions and ideas, and even find ITK support requests that you can use to satisfy the "One tool three times / three tools one time" requirement.

That last bit is pretty important, so let's emphasize it: the process of getting certified includes volunteering to answer incoming requests for ITK support.

Once a trainee has completed those checklist items (and demonstrated the cultural attributes), there's still one more step: meet with your coach and have a chat about whether you're feeling ready to be certified and to start facilitating ITK sessions. Look each other in the eye and have a real conversation about it. If both parties agree, off you go. If not, that's okay too. The trainee can continue practicing, co-facilitating, and learning, then do the certification at some point later.

And of course, once the certification is official, the learning doesn't stop there. Newly certified facilitators are encouraged to continue connecting with and collaborating with their coach and the rest of the ITK community.

Again, don't spend too much time wondering what counts. Focus on what helps you learn and improve. That's what matters. That's what counts.

There is no specified timeline for doing all this. Some trainees will go through it fairly quickly, others will take several months. The pace is entirely up to the trainee, depending on their available time, interest, and other factors.

Learning by Doing… and by Studying

Here on Team Toolkit, we're big fans of "learn by doing." Yes, yes, a thousand times yes, if you want to learn how to do a thing, jumping in and just doing the thing is a terrific way to learn quickly.

That's why the certification / training process we created is so immediately hands-on. That's why we encourage trainees to volunteer to take on opportunities to use the tools and do the facilitation even before they are officially certified.

AND... in addition to the whole "learn by doing" thing, we also embrace the radical notion that it is possible to learn important stuff by reading, studying and observing. Ironically, that is based on our experience (i.e., our "doing") of learning important stuff through channels other than action.

So, while we strongly encourage a fearless posture of volunteering to do something before you feel fully qualified or before you feel like you completely understand the tool, we also believe there is no great virtue in being ignorant of what others have learned through their experiences. So we recommend ITK practitioners do the following:

- Read a book (like this one!). Better yet, read more than one book.
- Ask a question. Ask a bunch of questions. Then ask more.

- Watch someone else do the thing. Watch closely and repeatedly.
- Find coaches, advisors, partners, and mentors.
- Pay attention to someone else's experiences and stories.
- Gather some information BEFORE you start your own activities.

Yes, experience matters, and learning by doing is terrific. But your own experience is not the only source of data in the world. You can learn from someone else's experience too, and those experiences can be shared in a wide range of media.

The Certification Off-Ramp

Before beginning the certification process, we want people to know we've built a highly accessible off-ramp into the system.

If at *any* time the trainee decides they don't want to proceed, for whatever reason (not enough time, doesn't feel like a good fit, not as much fun as it looked, etc.) or no reason at all, they are welcome to bow out gracefully.

We celebrate that decision and take it as a sign of thoughtful self-awareness and trust in your coach. No harm, no foul, it's not a failure on anyone's part. We just hope you enjoyed the experience, however long or short it was, and we hope you learned something along the way.

Similarly, a coach may observe that the certification process is stalled and suggest taking a break. This would most likely be due to a lack of activity, initiative or progress, where the trainee is not engaged and demonstrating the development necessary to get certified. That's alright too.

The decision to end or pause the certification should generally be a mutual one, and should not come as a surprise to either party. Again, it isn't necessarily a failure and it doesn't have to be permanent. The trainee can always decide at some future date to start up again, either with their original coach or with someone new.

SECTION 3:
THE TOOLS

The ITK Tool Development Process[19]

As MITRE's Innovation Toolkit continues to evolve and mature, we've been reflecting on how we create new tools (and update existing tools). The short version is we do it iteratively. For the longer version… read on!

Most of the tools you see on our website are actually version 7 or version 15 or version 382. The point is pretty much all of them went through considerable modifications on their way to the version you see on the website.

Except maybe the Lotus Blossom. Pretty sure that one popped up fully formed, like Athena from the head of Zeus.

Aside from that single exception, all the other tools are the result of an ongoing series of prototypes and experiments. Sometimes we've even used one tool to develop another tool… then updated the first tool based on our experience developing the second one. It gets pretty meta around here sometimes. While that may sound a bit convoluted, we actually have a pretty straightforward way of describing the tool development process. It's built around a theater / TV show metaphor, and it goes something like this:

[19] From the ITK Blog: bit.ly/itk_ToolDev

An idea for a new tool starts in the **Café**, where one or two people begin sketching out a rough idea and produce an initial incomplete draft. Maybe they have a casual chat with someone at the next table over, or maybe they have their headphones on as they draw and sketch and write. In Broadway terms, this is where Lin-Manuel composes that first rap and starts laying out the overall structure of Hamilton.

Next, we move to the **Writers' Room**. This is where a group gathers to co-create the tool and further develop it from the Café version. They play with phrases and formats, identify and address gaps in the tool. The idea is for the initial instigator to bring in some collaborators who help transform the incomplete idea into the first complete draft. In the world of musical theater, this might be where a lyricist brings in a composer (or vice versa), or a writer brings in a co-author.

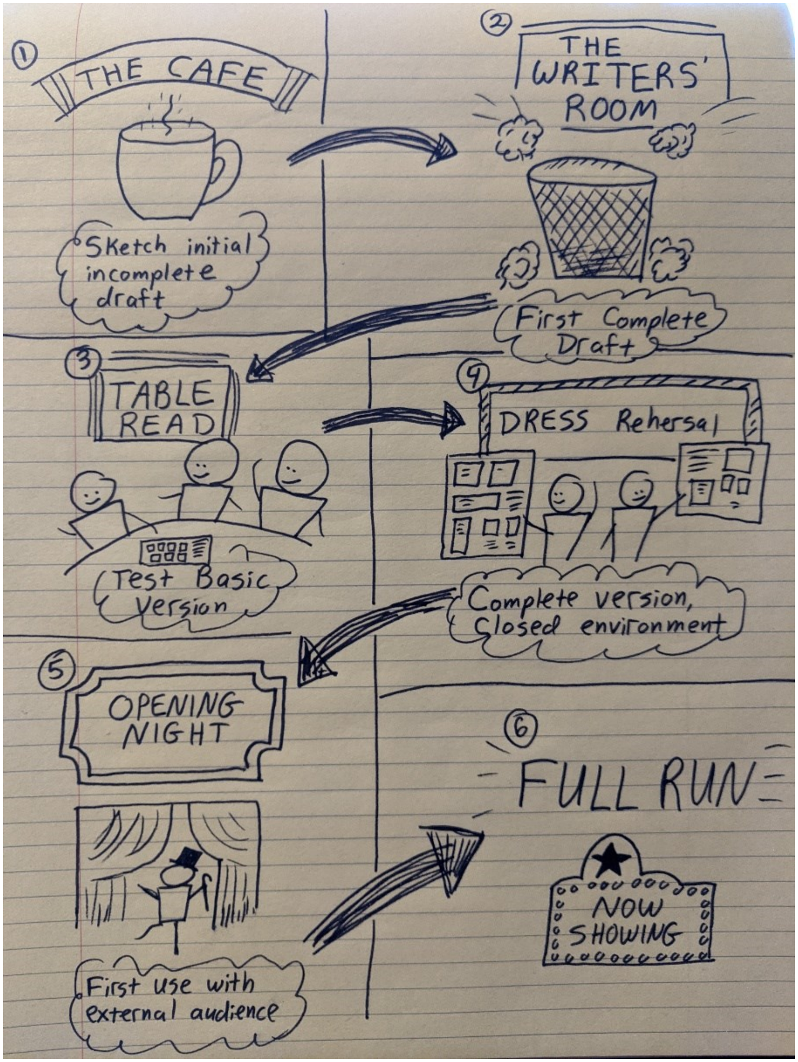
Next is a special type of casual rehearsal called a **Table Read**, where we test a basic version of the tool with people who weren't involved in creating it. The point here is to invite new perspectives and contributors. To use Hamilton terms again, this is where Leslie Odom Jr shows up and the writers get to see how the lines actually sound when the actor says them (and continue to rewrite the lines based on that observation & discussion).

Eventually we get to the **Dress Rehearsal**, where a complete version of the tool is used in a closed environment, to really put it through its paces… without an audience. Unlike the table read, in our dress rehearsal our focus goes beyond the tool itself and now includes facilitation techniques and logistics. In our theater metaphor, this is where the script is basically locked down and the director confirms the lighting, blocking, and choreography.

Then we come to **Opening Night**, the first time the tool is used with an external group, sponsor, etc. This is still an opportunity to test, evaluate, and further modify the tool, so we're all watching and taking notes about changes to make in the next version.

The **Full Run** means the tool is field-tested, polished, and proven. We might make some small tweaks at this point, adjust the choreography slightly or make little tweaks to the dialogue, but by now the thing is pretty much solid and we can do 8 shows a week. As an added bonus, the understudies get opportunities to step on stage… and the writer goes back to the café.

As you see, like a Broadway show, developing a new ITK tool is generally an iterative, collaborative process. One person can instigate and take a certain degree of ownership over a tool, one person can shepherd it through the whole process, pick co-authors and hold own auditions, etc. But nobody has to write / produce / sing / dance / etc in a one-person performance. There are plenty of people available to lend a hand and help transform the spark of an idea into a big hit, so if you have an idea about a new tool, we hope this helps you get the show started…


① THE CAFE
Sketch initial incomplete draft
② THE WRITERS' ROOM
First Complete Draft
③ TABLE READ
Test Basic Version
④ DRESS Rehersal
Complete version, closed environment
⑤ OPENING NIGHT
First use with external audience
⑥ FULL RUN
NOW SHOWING

ITK Tools: And The Winners Are…

There are quite a few tools in our little toolbox. At the time of this writing, there are 26 tools, to be exact. Especially if you're new to ITK, it can be tricky to figure out where you should start. To complement everything that's provided on the ITK website, let's go out on a whim here and assign some of the tools the equivalent of "yearbook superlatives."

It's time for some Most Likely To *(fill in the blank)* descriptions! Not only is this an effective method for you to learn more about some of the tools, but it allows us to categorize them in a unique way.

What will we conclude? Let's turn the metaphorical yearbook page to find out.

1. Most Popular: Lotus Blossom. This 9x9 grid tool is incredibly versatile and straightforward to use, so it is popular for good reason. It's like Mindmapping but a bit more structured. For someone who has heard of only a few of the ITK tools before, it's likely this is one of them!

2. Most Simple: Rose Bud Thorn. At its core, the Rose Bud Thorn tool has three columns— for positives, opportunities, and negatives— and you fill them in for a particular topic. It's as simple, yet useful, as that.

3. Best Well-Named: Premortem. Before you fail, let's assess what your worst future failure looks like, so that we can prevent it. That's what this tool enables. Scary to think about? Absolutely. Worth it? Without a doubt.

4. Most Underutilized: System Map or Service Blueprint. The System Map tool helps you better understand a "system" and then pinpoint opportunities for "disruption". The Service Blueprint tool helps you connect the frontstage user end with the backstage service end. Both of these tools can be extremely useful in the right scenarios.

5. Newest: Stakeholder Power Categories. This tool can be used to delve into the power dynamics within a group of stakeholders. It helps you better understand the power and impact of different stakeholders as well as the appropriate next steps to take, based on an embedded equity lens. It is the newest tool, but it won't be the last!

6. Best Opposites: Personas and PersNOnas. The Personas tool helps you understand user needs by building out common user personas. On the other hand, PersNOnas helps you identify the qualities of users or members who you *don't* want to work with. (Note: PersNOnas is not an official ITK tool but it was described in our first book!)

7. Biggest Hill to Climb: Culture Building Canvas. Culture is a critical part of any work environment, and it can take time to change for the better. The Culture Building tool doesn't often result in immediate impact, but it helps you build an action plan as a first step. And the view once you eventually climb the hill is going to be beautiful.

8. Most Likely to Give a Bird's Eye View: Mission and Vision Canvas. This tool helps you establish or refine a long-term vision as well as a mission that describes how you get there. It often takes a fair amount of work to obtain statements that look simple in hindsight, but the clarity they provide is worth the effort.

9. Most Widely Applicable: Problem Framing. This tool helps you identify and define a problem you are trying to solve, which applies to pretty much any situation. This tool is one of many that embodies what ITK is all about.

10. Most Fun: ________. Which tool do you nominate for this final category? Fill in the blank— you tell us!

ITK Shopping Mall Map

To help you become more familiar with the names of many of the ITK tools[20], we thought it would be fun to arrange them as stores in a shopping mall! These fictional business names also serve as an excellent exemplar of unprompted creativity and innovation from within the ITK team.

Of all places, while on the couch watching basketball, a teammate was reflecting on his habit of asking several questions. He thought of the 5 whys exercise, an iterative questioning technique aimed at finding the underlying relationships in a problem.

He said to himself, “Hey I’m a 5 whys guy, if I got together with like-minded individuals we could create ‘5 Why Guys’ à la the burgers and fries chain Five Guys.”

Realizing Five Guys probably wouldn’t endorse a business parodying its name, he pivoted and wondered what it would look like if ITK tools inspired shopping mall business names. The next two pages explore the mall concept and show the basic layout, as put together by another team member.[21] We think it’s fun!

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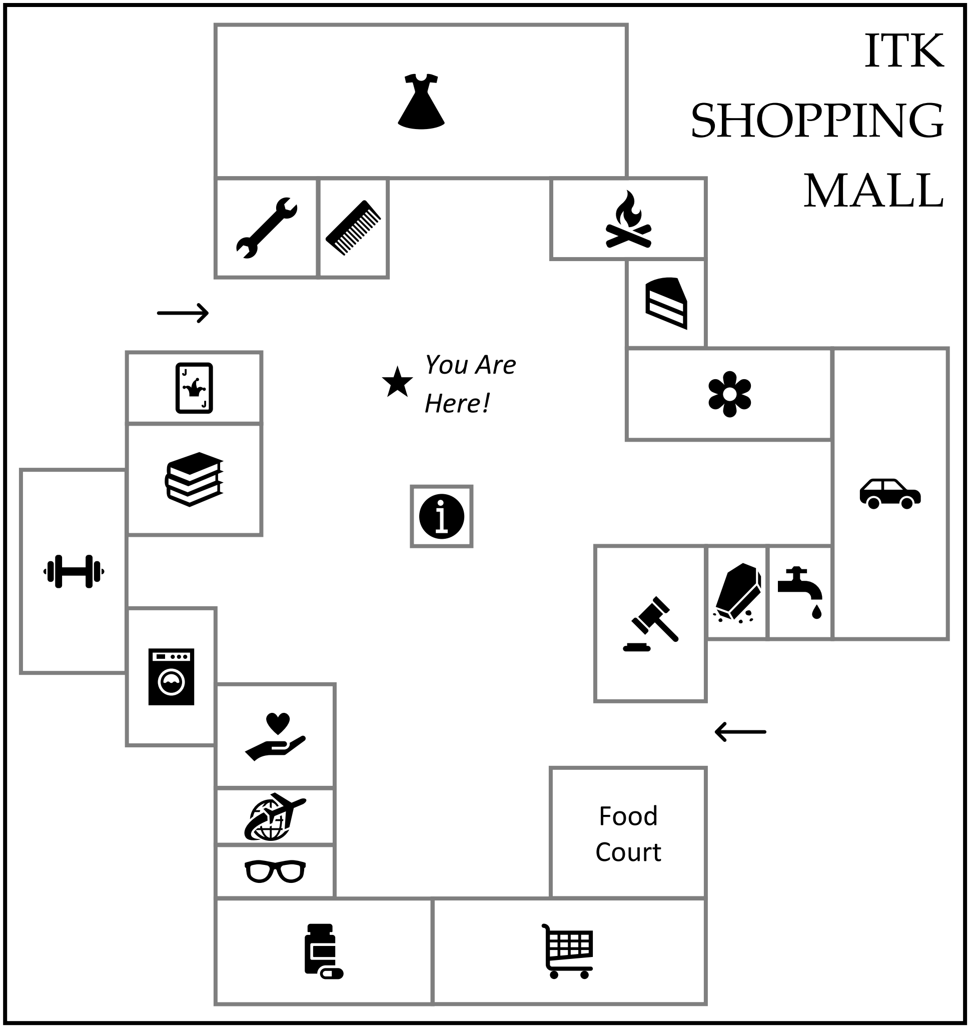
[20] Check them all out at bit.ly/itk_Tools

[21] For a behind-the-scenes look into the shopping mall map design process, visit https://bit.ly/itk_mall

Legend

- Best *Value Proposition* Grocery
- *Bodystorming* Gymnasium
- *Card Sorting* Toys & Games
- Global *Journey Mapping* Travel Agency
- Gutter Glen's *Stormdraining* and Plumbing
- *Lotus Blossom* Bakery (best known for its Failure Cakes)
- *Mission & Vision* Eyewear
- *PAINstorming* Chiropractic and Wellness
- Penelope et Pierre's *Personas* Prêt-à-porter
- *Premortem* Funeral Home
- Priscilla's *Prototyping* Shop
- *Problem Framing* Legal Aide
- *Rose Bud Thorn* Floral Arrangements
- *Service Blueprint* Auto Parts
- *Simplicity Cycle* Laundromat
- *Stakeholder Map & Matrix* BBQ
- *Storyboarding* Books & Biscuits Baristas
- Stylish *Trimming* Barbershop
- *System Map* Information Kiosk
- *TRIZ Prism* Generics Pharmaceutical


ITK
SHOPPING
MALL
You Are
Here!
Food
Court

The Barrier Petal
A Lotus Blossom Best Practice[22]

No two Lotus Blossoms sessions are alike, because that particular tool is designed for maximum flexibility and broad applicability. You can do a Lotus Blossom around a problem statement or to explore solutions. You can use it to design an organization, outline a research paper, or define a business process. I’ve even been known to plan out my New Year’s Resolutions in a Lotus Blossom. The options truly are endless, and so is the variety.

But for all the different ways to use a Lotus Blossom, there is one consistent practice I apply almost every time. It’s a particular petal that seems to fit every situation, regardless of topic or situation. I call it… the Barriers Petal.

It’s a pretty simple concept— just write the word Barriers in one of the petals around the central blossom. I tend to use the lower-left petal of the central blossom, for no particular reason other than that box tends to be available. Plus, having a consistent location helps me remember to do it.

Oddly, one of the things I like about this is the way this brings a slightly negative tone to the conversation, an off note to the composition. While the rest of the blossoms are typically full of possibilities and sparkly ideas, the

[22] From the ITK Blog: https://bit.ly/itk_Barrier

Barriers blossom helps us anticipate the things that might undermine our plans or interfere with our goals.

This contrast sends a subtle signal to go beyond the obvious, front-of-mind ideas, and to dig a little deeper. Plus, virtually every topic has some sort of barriers associated with it, and it's better to think about them and anticipate them in advance than to be surprised when one smacks us in the face.

Mise En Place
A Facilitation Best Practice[23]

If you've ever watched an instructional cooking show, you have probably seen the chef or host say something along the lines of "Now we add two tablespoons of cinnamon…" as they reach for a small conveniently placed bowl that contains just the right amount of the necessary ingredient.

What you don't see is the production assistant hunting through cupboards and measuring out all the ingredients before the camera starts rolling. The prep work is the essential step that makes those shows watchable and makes the recipes look a lot easier and faster than they are in my kitchen.

Those little bowls of pre-measured ingredients are part of a culinary technique called mise en place, which is French for "everything in its place." It turns out, mise en place does more than make cooking shows easier to watch. It can also make your ITK session more effective.

For example, when I'm preparing to lead a Lotus Blossom session, I might fill in a few of the boxes to get things started, like in the accompanying image. Think of it as a seeded Lotus Blossom. This helps accelerate the discussion in

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[23] From the ITK Blog: bit.ly/itk_MEP

several ways. First, it demonstrates how to use the tool by providing some examples of the types of things participants might put in the various petals.

It also begins to plant some ideas and gives the group a starting point. I don't fill in much— usually just two or three petals, enough to convey the basic practice and to help get the conversation started.

And of course, if any of the seed ideas are worth keeping, then we've already got some materials before the session formally starts.

Similarly, when I lead a Premortem, I like to do a little pre-Premortem. I'll go through the canvas and answer some of the questions a few days before the event begins, maybe with the organizer of the event. If the group organizer has not done a premortem before, this gives me a chance to explain it to them in advance. They also get to put some of their ideas together in advance of the session, which can help the whole group hit the ground running.

So give it a try. The next time you're going to use one of the ITK tools, do a little prep work and measure out a few of your ingredients. I think you'll find it helps make the whole experience move along smoothly.

Disaster Recovery[24]

So your recent session was a bust. You tried to do something but it crashed and burned. Let me be the first to say "Congratulations, and welcome to the club!"

This situation is pretty much inevitable. Stick around in the innovation space long enough, and eventually something going to go pearshaped. And by "long enough," I mean a day or two. Or less.

See, when the work you're doing involves introducing novelty that has impact, some of that novelty is pretty much guaranteed to not have the impact you anticipated. It might even impact you right in the face.

For the Innovation Toolkit in particular, every facilitator has led a session or used a tool where the result ended up in the Crummy column instead of the Awesome column. It's sort of a rite of passage around here. We've all had our flops and flubs and disasters, where the participants didn't participate, the tool didn't fit, the metaphorical souffle didn't rise. It happens to the best of us.

Like I said, welcome to the club.

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[24] From the ITK Blog: bit.ly/itk_Recovery

But I also said congratulations, and that's important. In order to have a failed attempt, you must first make an attempt. So if you failed, that means at the very least you tried something… and that's worth celebrating. In fact, it probably means you tried something new, which is very celebration-worthy in my book. We need people who are willing to try new stuff— stuff that might not work— and so we celebrate those who take the leap.

Then again, maybe your latest failure is because you got lazy and phoned it in. Maybe your failure was entirely your own fault. That may sound like a dubious thing to celebrate, and it's frankly my eleventh-least favorite type of failure, but upon closer inspection we may discover something to celebrate there too.

Maybe the reason you didn't put in the effort is because you've put in so much previous effort, you've had so much previous success, that you got a little complacent. Resting on your laurels may not be admirable, but it does mean that at some point you earned some laurels. So that's cool. And let me tell you, those post-success-failures can be a really helpful wake-up call… and that's why I say congrats on noticing the problem and waking up. You are now more aware of what you need to do than you were before. Congratulations.

The other thing to keep in mind is that virtually no failure is completely worthless. You probably created some value, even if it's not as much value as you'd hoped to create. You probably learned something, even if it wasn't what you wanted to learn. And there’s a really good chance you helped someone, even if it’s not quite in the way you wanted to help.

At the very least, you survived, so that’s something. Congratulations… and welcome to the club.

Collaboration Tips[25]

By now we have all felt the pain of trying to collaborate and communicate with others remotely. Messages go unseen or unanswered, a train of thought is interrupted by a constant stream of notifications, and collaboratively iterating on ideas requires more intentionality. The online environment completely transforms how ideas can be shared, how they are communicated, and how they are understood.

Different mechanisms for online communication impact the extent and ways in which a group works and makes progress. Sometimes a quick chat message is enough, while other situations require a more in-depth video call. Intentionally designing the way participants communicate and collaborate online can make it easier for groups to work together on a task.

Here are some tips for three types of online communication for collaborative environments: text-based, audio-only, and video + audio.

Text-based

What are some examples?

Email, Slack, Teams chat, message boards

[25] From the ITK Blog: bit.ly/itk_Collab

What are the advantages?

It doesn't require that all participants are contributing at the same time, so coordinating schedules becomes less of an issue. People also get more time to reflect on the ideas of others and formulate their own ideas.

What are the challenges?

When communication is totally text-based, it becomes more time-consuming to both generate contributions and understand contributions. Typing requires more upfront effort: you type, you read, you re-read, you edit, you add, you delete, etc. In a large enough group, many contributions may be added to the discussion from the time you start typing an idea to the time you are ready to send it. Monitoring and understanding the conversation can become more difficult as the sequence of the conversation can become jumbled. Also, tone of voice and non-verbal cues are lost with this form of communication. It becomes more difficult to know if others agree, are listening, noticed your message, and so on.

How do I mitigate these issues?

Organize the conversation into threads. It will become easier to monitor the space and also easier to retroactively understand the train of thought the group went through to arrive at a given conclusion.

Slow down the pace. Some people will want to curate their response before sending it to the group. This can result in them spending a long time thinking through what they want to say. By slowing down the pace of the conversation, these individuals can find the time and opportunity to also make their thoughts heard.

Use emojis to express that you’re paying attention. Keep in mind that the person on the other side of the screen does not know if you’re paying attention and noticing their messages unless you actively respond in some way. Adding a quick thumbs up or thumbs down can help others know where you stand on a topic of discussion. Responding with short messages to convey that a message was received and understood also can help to mitigate this issue.

Audio-only

What are some examples?

Phone calls, Teams (without video), Zoom (without video), Skype calls

What are the advantages?

Vocal intonation comes across, so you can tell if someone is being genuine, sarcastic, engaged, or uninterested.

What are the challenges?

Depending on group size, it can be difficult for everyone to have an opportunity to contribute. Determining whose “turn” it is to speak isn’t obvious and participants who are shy might feel uncomfortable contributing.

How do I mitigate these issues?
Set up expectations for the flow of conversation. This may look different from one meeting to the next, depending on group size, hierarchy among participants, and other factors. For some situations it may make sense to have a moderator who manages turn-taking within the conversation. For other situations, setting up an agenda with a timeframe for each topic of discussion may suffice.

Make space for quieter participants to contribute. If you are hosting a conference call with audio only and notice that some participants are taking over the conversation while others are quietly listening, gently asking those on the call who haven't spoken in a while if they have anything to contribute on the current topic opens up the space for more points of view to be expressed.

Video + Audio chat
What are some examples?
Teams, Zoom

What are the advantages?
With video chats, both vocal intonation and some non-verbal cues can be expressed. You can see what participants are nodding along or shaking their heads, who is distracted by notifications elsewhere on the screen, and so on. This can help to make speakers feel that there are others actually present with them, which can make the space feel more comfortable.

What are the challenges?

Video calls can be intimidating for some compared to other online avenues of communication. After a long day of video calls, people start to experience "Zoom fatigue," making it more difficult to stay attentive and focused.

The video feed can also invite in many distractions, with people focusing more on someone's artwork on the wall behind them instead of what the person is saying.

How do I mitigate these issues?

Not everyone needs their video on at all times. Setting up some recommendations for participants, such as turning on video when they want to contribute or having only a subset of the group keep their video on, can leverage some of the benefits of video calls while mitigating some of the challenges. Being strategic about when you share your camera can help to combat "Zoom fatigue" and make the space feel less intimidating.

Use custom backgrounds. Most of the meeting software now will allow users to set custom backgrounds that will blur out or replace their background so the focus will be on the speaker themselves. A good background will be simple: a solid color, a generic conference room, or a simple background blur are all great options. This can help to minimize distractions.

Background distractions aren’t a negative in all cases. In some circumstances, building rapport within the team is an important element of the online meeting. Meeting with others online can feel distant and impersonal. Being able to see their space behind them can help to make them more “real”. For example, seeing a guitar in the background of another participant’s video feed can spark social conversations about music or learning an instrument that ultimately help participants feel more connected. In the long run, this can help the group feel more comfortable discussing their ideas, which boosts the potential for productive collaboration.

The best method for online communication will vary from one collaborative situation to the next. The key is to be thoughtful when deciding how to organize your team’s online collaborative sessions.

Lotus Blossom Tips[26]

The Lotus Blossom ideation tool is one of the most popular in the toolkit, and it's also one of the simplest. This is a great way to help a team quickly come up with a large quantity of high quality ideas, in a format that is structured, binned, and categorized. A complete Lotus Blossom, with all the petals filled in, can be a really useful artifact for the team to refer to as the work progresses.

But don't let the simplicity of the tool fool you. There are some subtle nuances and non-obvious applications & implications hidden in this tool, and it can be a challenging one to use well. Let's take a closer look at some common patterns and missteps.

When a team is filling out a Lotus Blossom, I often notice that one blossom has a lot of blank petals while another is fully populated or even overstuffed with more than eight. As a facilitator I like to direct the team's attention to the blank blossom and encourage them to explore that idea in more depth. Is there a reason we're not filling that one out? Is it a good reason?

I might also point out that if we're focusing (and overfilling) on one blossom, that might indicate a high level of interest in that area so it's worth pursuing,

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[26] From the ITK Blog: https://bit.ly/itk_LBtips

maybe even using it as the core for a whole new Lotus Blossom canvas. Alternatively, all those ideas might indicate a high level of comfort and familiarity with that topic. Maybe we're only filling it in so completely because it's easy to do so. If that's the case, perhaps we should move on and do the more challenging work of exploring less familiar ground. Either course of action is fine— the trick is to be deliberate in our decision to either pursue it or pivot.

Another thing to watch for is the phrase "I have this idea but I'm not sure where to put it in the Lotus Blossom." Now, the point of this tool is to develop ideas that are connected to each other. If the team is just coming up with random unconnected ideas that genuinely don't fit into any of the petals or blossoms, they are just brainstorming and not really using the Lotus Blossom tool. In that case, I try to redirect them towards the empty petals and blossoms that do have labels, encouraging them to build on these ideas by getting more specific and granular.

But sometimes the phrase "I'm not sure where to put this" means you've come up with an idea that genuinely fits in multiple places. If that's the case, it's possible you discovered a relationship between the ideas that is not currently reflected in the Lotus Blossom layout. At this point you may want to rearrange and combine the related ideas into a single blossom. This is easier to do with a digital canvas than it is on paper, of course.

Another strategy for the “not sure where to put it” situation is to label one of the blossoms OTHER and put all the random stuff there. It’s not optimal, but this strategy can serve as a useful parking lot or holding place for ideas that may find a more connected home later.

Innovator's Vitamin C[27]

Ah, summertime. The season of sunny skies, warm temperatures, and for fellow ocean lovers, the regular pilgrimage to the coastline to fill up on much-needed Vitamin "Sea".

Although mountain and countryside enthusiasts may not understand, plunging oneself into the cool saltwater is a literal refresh that provides invigoration and renewed energy. Experiencing the moon's gravitational pull via the changing tides reminds us that there are unseen forces larger than us, which invites a valuable shift in perspective.

Science has even shown that when humans look out at the ocean, this activates our "blue mind" and triggers a calming effect. Ask any ocean lover, and they will tell you how critical this Vitamin Sea is for their wellbeing.

Of course, Vitamin Sea is a play off of the term Vitamin "C," which is an essential nutrient for human health. Without Vitamin C, our bodies weaken, our limbs degrade, and our smiles worsen. In extreme cases, a lack of Vitamin C can even become fatal (remember all those 18th century sailors who suffered from scurvy?).

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[27] From the ITK Blog: bit.ly/itk_VitaminC

But this is a blog about innovation, so let's get to the point: Vitamin Sea is not the only metaphorical Vitamin C that's out there… Have you heard of the Innovator's Vitamin "C"?

The **Innovator's Vitamin C** is comprised of three essential characteristics:

Creativity
Curiosity
Courage

CREATIVITY IS OUR ABILITY TO PRODUCE OR USE ORIGINAL IDEAS.[28]
Given that Team Toolkit's straightforward definition of Innovation is "novelty with impact" and that "novelty" means something new or original, then the ability to create or use something original is a must for an Innovator. Creativity is a critical prerequisite for innovation.

CURIOSITY IS AN EAGER WISH TO LEARN OR KNOW SOMETHING.[29]
When we are eager to learn about the world around us, we start paying attention. This attention leads us to observations and problem-spotting. We'll also start seeing opportunities for something new to be created or for something to be used in a different way. These scenarios are the gateways to

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[28] https://dictionary.cambridge.org/us/dictionary/english/creativity

[29] https://dictionary.cambridge.org/us/dictionary/english/curiosity

innovation, and curiosity compels us to keep going, to keep digging deeper until the learner in us is satisfied.

Curiosity is also a powerful tool for shifting our mindsets. When situations do not go as we expect or our new effort fails, we can use curiosity to shift from a negative, blaming mindset into a more constructive, learner's mindset. Rather than investigating "Who did wrong?" and fault-finding, curiosity prompts us to ask, "How might we have done this differently?" so that we can learn from our mistakes and improve for next time.

COURAGE IS THE ABILITY TO CONTROL YOUR FEAR IN A DIFFICULT SITUATION.[30]

Bringing forth an innovation inherently requires change since it introduces novelty. However, humans are biologically predisposed to resist change which means that when we're introducing our innovative idea or solution for the first time, our audience's default mode isn't exactly to embrace it.

This is where calling upon our courage becomes critical, and courage is what differentiates the innovators from the armchair dreamers. Innovators are aware of their fear, but they're not halted by it. Instead, we tap into our courage to persevere and bring forth the change we want to see in the world.

[30] https://dictionary.cambridge.org/us/dictionary/english/courage

CREATIVITY, CURIOSITY, AND COURAGE ARE A MUST FOR INNOVATORS.

Our bodies cannot naturally produce Vitamin C, so we must consume it via external means such as pineapples, oranges, and other citrus fruits. Similar to true Vitamin C, the Innovator's Vitamin C may not be something we naturally produce or have abundant stores of.

Fortunately, there are many practices and exercises that can help us cultivate these characteristics of creativity, curiosity, and courage (stay tuned for more blog articles on this!). By creating a daily practice of "taking" our Innovator's Vitamin C and regularly practicing these exercises, eventually these characteristics will become habitual and our default attitudes.

Creativity, curiosity, and courage are a must for innovators, so set yourself up for innovation success and take your daily Innovator's Vitamin C!

Customizing Tools[31]

Early in our life as a team, one of our facilitators received an interesting request from a potential user. They said they were open to the idea of using the Rose, Bud, Thorn with their team, but only if we could create a militarized, hypermasculine version. They said the floral imagery inherent in this tool was too feminine and made them uncomfortable. They suggested perhaps something like "Gun, Knife, Bomb" might work better.

Um, that's a big nope. We're not doing that. I believe the phrase "sorry not sorry" was coined for this precise situation.

As a general practice, Team Toolkit aims to meet people where they are. We customize tools all the time, to make sure they fit well with the specific language, preferences, and inclinations of the people we are trying to help. We think it's good to modify our vocabulary and make sure our language choice is as clear as possible. If a word has different meanings in different domains, we make every effort to ensure we're using the right one for the environment.

For example, with some folks we might talk about mission and purpose rather than objectives and goals. Similarly, when working with military organizations

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[31] From the ITK Blog: bit.ly/itk_Custom

we tend to not use terms like “profit,” or “customer,” or “sales,” because those terms aren’t generally relevant within DoD organizations.

However, changing a tool’s name to accommodate narrow biases and insecurities does not do anyone any favors. And to be quite clear, this team was not asking to rename RBT because they come from a post-agrarian society and can’t relate to botanical metaphors.

They asked for the change because they explicitly felt flowers aren’t manly enough.

That’s a bad reason to make a change. Not only is it misogynistic (which is reason enough to decline), it also undermines the main point of this work, which is to bring innovative thinking to bear on hard problems. If someone can’t handle a flower-based metaphor because it seems too girly, they are going to have a really hard time doing anything innovative.

I promise, accommodating this team’s request would have limited their ability to be innovative, not enhanced it.

Team Toolkit works hard to democratize innovation and to make these tools accessible to everyone. We are here to help people understand what innovation is and how to do it. This necessarily involves expanding people’s horizons, introducing new metaphors, building new connections, and taking teams beyond business-as-usual methods and symbols. Allowing teams to stay in their narrow comfort zone is the very definition of non-innovation.

So yes, we love to customize our tools, but not if those changes make the tools less effective. Not if the changes narrow people's mental aperture rather than expanding their horizons. And definitely not if the change reinforces lame and toxic stereotypes.

And for those of you who ARE open to a flower-based innovation tool, can I suggest also checking out the Lotus Blossom?

X-Blossoms and the Time Blossom[32]

As the Lotus Blossom is such a popular tool, it seems almost inevitable that tool variations would be created. Well, "X-Blossoms" filled this gap. X-Blossoms are specially themed variations of the Lotus Blossom, including: the PTwist Blossom (the P is psilent, like in psych), Question Blossom, Time Blossom, Why Who What Blossom, and Yes Blossom. The best part is that more X-Blossoms can always be created: all you need to do is select a focus area and block off a short period of time to brainstorm. Speaking of time…

Let's take a look at the *Time Blossom*!

The Time Blossom is an innovation tool that can be used to help you better manage your time on a project. Time management was selected as the underlying theme for the Time Blossom because of how pivotal a role it plays in our busy world today.

First, a refresher— to use the Lotus Blossom, start by labeling its center box with a problem or topic of your choice. From there, leverage the tool's grid structure to brainstorm ideas and propagate them outward to the surrounding blossoms. These ideas may be characteristics, categories, or solutions related to your central topic, but the key is that you'll generate many of them in a rapid manner.

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[32] From the ITK Blog: bit.ly/itk_Time

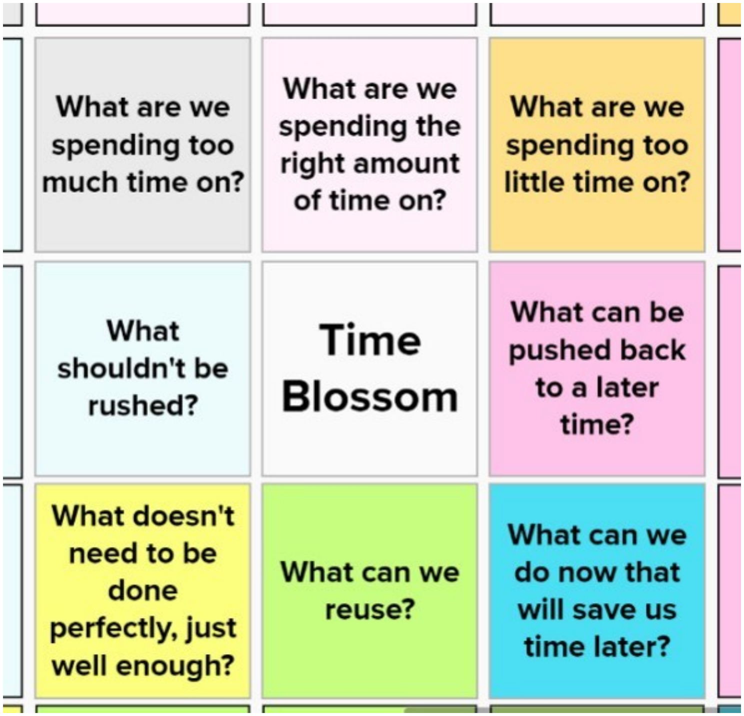
The Time Blossom has the same structure as its parent tool, but it is pre-populated with eight open-ended questions that revolve around time management and prioritization. Thus, to use the tool, select a project or subject area to focus on, and then fill in the outer blossoms with your answers in the context of your project.

It’s as simple as that.

In particular, consider the top row of questions in the Time Blossom. Think of these as the “Goldilocks” questions, but in units of time: they ask you to identify tasks that are running “too hot,” “too cold,” or “just right.” In fact, the question, “What are we spending the right amount of time on?” was not included in an older version of the Time Blossom; only after early testing was its importance discovered.

Recognizing what we’re doing right is just as valuable as recognizing what we can do better, after all!

Let’s walk through a Time Blossom example. Imagine a fictional scenario where you and your team— Alisha, Gabe, Kai, Liz, Pat, and Stacy— are holding a brainstorming session on the development of your product. (Without getting too meta, this realistic premise stems from our first book *The Toolbox of Innovation*!)



THE TIME BLOSSOM

If you populated the Time Blossom, what might you conclude about how effectively you are managing your time?

Perhaps your team would conclude that your product development is going well but could still be improved by the reprioritization of certain tasks. For instance, you might plan to spend more time with users or set up a meeting to uncover any hidden assumptions about your product. Boxes on the filled-out Lotus Blossom with thumbs-up symbols could indicate the ideas that especially resonate with the team.

Down the line, you might even hold Lotus Blossom sessions for some of the more complex ideas that should be further explored.

Overall, improving your time management skills is as much about increasing your self-awareness as it is about working efficiently. Knowing which tasks you're prioritizing, and why, can give you a sense of clarity that is hard to find otherwise. Tools are just one way to help with that. The Time Blossom is by no means the first— nor will it be the last— time management tool, but if it prompts you to reflect on these topics, it is time well spent.

Other X-Blossoms

If you liked the *Time Blossom*, you may also be interested in some of the other X-Blossoms shown below, starting with the *Yes Blossom*.

THE YES BLOSSOM

The *Yes Blossom* is basically an extension of the Yes, And… practice mentioned in an earlier section. It aims to help teams explore positive action around a proposed idea or activity. The upper left petal even says “Yes, And…” which is an invitation to affirm and build on the topic.

The upper right petal says “Yes, But…” and that’s where participants might identify hesitations or cautions.

The “Yes, When…” petal creates space for identifying any preconditions or prerequisites that might be required, such as “Yes, when we have funding…” or “Yes, when I’m done with my current project.” We might even go with “Yes, when pigs fly…”

And lest we get too wrapped up in positivity, there’s even a petal labeled with a dubious “Yesssss…?” That’s where people can share their doubts, hesitations, and skeptical questions.

QUESTION BLOSSOM

While the Lotus Blossom is primarily an ideation tool, the *Question Blossom* introduces an analytical posture. It presents a set of open ended and deliberately ambiguous questions. Participants are invited to complete the questions (that's the ideation part), and then answer those questions (that's the analysis).

THE QUESTION BLOSSOM

This variation aims to encourage groups to explore questions that might otherwise go unasked.

So, in the “What If?” petal, we might come up with “What if it rains?” and then explore contingencies for bad weather. Or we might ask “What if the funding gets cut by 20%?” (or increased by 20%!).

Each petal is deliberately under-defined. For the “When might…?” petal, we could finish that sentence by asking “When might we call this done?” or “When might we be ready to bring in a new partner?” Have fun with these question prompts, and aim to come up with creative variations for each petal… then go answer them!

FAIL BLOSSOM

We discussed Failure Cakes in an earlier chapter, and Team Toolkit's approach to failure is one of the more distinctive aspects of our culture. The *Fail Blossom* is another approach you may want to try out the next time things go sideways (perhaps with a slice or two of Red Velvet).

THE FAIL BLOSSOM

As with the other X-Blossoms, this one presents some questions and prompts designed to elicit some creative collaboration. And like the Question Blossom, this one brings an analytical flavor to the task.

It begins in the upper left petal, where participants describe the situation in the "What did we try?" This upper left blossom might include a description of activities as well as desired outcomes. The upper middle petal ("What worked?") highlights the fact that failures are almost never the whole story– most failures contain some partial successes and some incremental progress.

And perhaps the most important petal is the lower right corner, which asks "What's next?"

We hope these X-Blossoms provide inspiration for your own Lotus Blossom variations!

SECTION 4:
THE PATH AHEAD

Commercial Break: Sponsored by *The Toolbox of Innovation*

You and the team— Liz, Alisha, Kai, Gabe, Pat, and Stacy— sit around a conference room table, reminiscing about your progress over the last year.

“You know,” says Liz, “we’ve been at this innovation thing for a while. It feels like so long ago when we started.”

“It does,” you laugh. “We’ve come a long way!”

“We’re also still quite busy when everything,” says Kai. “Like how we’re writing this Innovation Toolkit handbook to help current and future users. That one was your idea, wasn’t it, Pat?”

“It sure was!” says Pat. “My first and last big idea,” he jokes.

“Not at all,” counters Gabe.

“Thanks Gabe,” says Pat, a bit suspiciously.

“In fact,” continues Gabe, “you still have yet to *get* your first big idea. This was just a normal-sized one.”

Used to Gabe's jokes by now, Pat and the rest of you let out a halfhearted chuckle. Gabe grins and takes out a bag of chocolate-covered pretzels from his backpack. "Chips were so last year," Gabe begins conversationally. "Am I right?"

Stacey eyes the pretzels before pulling out a bag of chips. "Speak for yourself," she says, taking a giant bite of chips.

"Back to our previous topic," says Liz, clearing her throat, "I'm pretty proud of us for where we are today. I love how we've been working to spread the innovation culture and grow our community, among so many other things."

"Agreed," you say. "We just need to keep making the time in our schedules, asking for support, sharing and implementing new ideas…"

"Actually, I have a lot of ideas about where to go next," says Alisha, excited. She stares off into space. "But now you got me thinking more about how we started, with our first book *The Toolbox of Innovation*. This lively, playful gamebook— written in a choose-your-own-adventure style— puts the reader in the driver's seat and takes you on an imaginary journey of exploration. As the story unfolds—"

"What?" ask Kai, Pat, and Liz at the same time.

"There's a book about us? Cool!" says Gabe, unfazed.

Alisha sits up in her chair, blinking rapidly. “Sorry, I don’t know what got into me! It’s like someone took over what I was saying to do their publicity. Just forget I said anything.” She shrugs.

Everyone hesitantly laughs. Soon the team moves on to identifying remaining action items for the Innovation Toolkit handbook, which leads into an impromptu Lotus Blossom session.

You laugh too and push up your sleeves as you dive into the session, but you can’t help thinking about what it might be like if there *were* a book telling your team’s story. It would cover all your experiences with the product development process, including when you used different innovation tools, handled team dynamics, and adapted to user needs. And surely the book would start out when the team was only just forming, and Liz approached you with an idea…

To begin reading *The Toolbox of Innovation,* obtain a physical or electronic copy[33] and turn to the first page.

If you are undecided about reading *The Toolbox of Innovation*, mull it over and in the meantime grab a bag of chips or chocolate-covered pretzels— or both.

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[33] Get your copy here: bit.ly/itkbook

Looking Towards the Future

Now that you have learned about the work, the team, and the tools, where will you go from here?

Well, you **start somewhere**. You try something out. You implement some of the work, you emulate some of the team practices, you use some of the tools, and you apply what you learned to your current projects.

By no means should your first step be a giant one. You can start small. You should start small.

Perhaps you will say "Yes, And…" in one of your work meetings, and you will inspire someone else to do the same. Perhaps you will share collaboration tips with a coworker who has been looking for advice, or you will create and distribute a two-minute video on an innovation topic of your choice. Perhaps you will say yes to an opportunity, and another time, you will say no. Perhaps you will utterly fail at something and eat a whopping helping of some Failure Cake as a result.

Maybe you will facilitate a Premortem session and it will go splendidly. Or maybe it will go so-so but now you know firsthand how to make it even better next time. Maybe you'll hold your own Lotus Blossom session, which will help you identify some barriers holding back your project team. In fact, maybe you're now interested in becoming a certified facilitator. Maybe you'll even start your own innovation group if you're at another organization and you'll draw upon lessons learned here as you build it out.

The options are endless. What matters is that you tried. You experimented. You branched out.

And you learned.

Your path may be full of missteps and forks, but the most important thing is that it exists. You can— and should— count all these steps as wins. All it takes is one to get started.

This is really the spirit of the Innovation Toolkit and what we hope to imbue in you.

So, again— where will you go from here?

Recommended Reading

Team Toolkit got started as a spinoff of a little co-mentoring group called the Green Pen Squad (GPS). At most GPS meetings, we took a few minutes to invite people to say a few words about whatever books they were reading that month.

The members of Team Toolkit all value reading and learning, and so here is a short list of books we've found useful and might recommended for your professional development, particularly in the arena of innovation.

1. **Zilch: The Power of Zero in Business**, by Nancy Lublin

2. **Yes to the Mess: Surprising Leadership Lessons from Jazz**, by Frank Barrett

3. **Build Better Products: A Modern Approach to Building Successful User-Centered Products**, by Laura Klein

4. **The Abilene Paradox and Other Meditations on Management**, by Jerry Harvey

5. **Orbiting The Giant Hairball: A Corporate Fool's Guide to Surviving with Grace**, by Gordon MacKenzie

6. **Disrupters: Success Strategies from Women Who Break the Mold**, by Patti Fletcher

7. **Art Thinking: How to Carve Out Creative Space in a World of Schedules, Budgets, and Bosses**, by Amy Whitaker

8. **The Culture Code: The Secrets of Highly Successful Groups**, by Daniel Coyle

9. **The Simplicity Cycle: A Field Guide to Making Things Better Without Making Them Worse**, by Dan Ward

10. **Range: Why Generalists Triumph in a Specialized World**, by David Epstein

About The Authors & Contributors To This Book

Jen Choi is an engineer, a surfer, and a voyager with the Polynesian Voyaging Society. She is working to build a more equitable world and contributed to *The Toolbox of Innovation.*

Lynne Cuppernull is focused on leadership development and organizational transformation. She works with health professionals to find innovative solutions to some of health care's toughest problems.

Allison Khaw is a systems engineer with expertise in model-based engineering and operations research. She believes in maximizing the potential of multidisciplinary teams and is a writer with a deep interest in worldbuilding in fiction. She contributed to *The Toolbox of Innovation* and was excited to work on this next one.

Gabby Raymond is a computer scientist and an accomplished knitter. She is the chief architect and Map Master for our first book, *The Toolbox of Innovation.*

Karim Thompson is trained in geography to analyze locations to uncover hidden patterns and improve predictive modeling. As a scrum master and group facilitator he helps teams work together to deliver novel solutions to difficult problems.

Dan Ward is a military technologist who served in the US Air Force for over 20 years and specializes in rapid innovation. He is the author of three books, contributed to ITK's first book (*The Toolbox of Innovation*), and is one of the founding members of Team Toolkit.

The people listed here are part of a much larger group of folks who have contributed to the creation, evolution, growth, and proliferation of the Innovation Toolkit. We'd like to acknowledge that this book only exists because the larger community exists. Their contributions to this book may have been indirect, but those contributions were nevertheless essential.

While we're talking about the group, let's also mention that the members of Team Toolkit received a ***Program Recognition Award*** *in 2020, which is MITRE's highest award, given annually for our most impactful work.*