

*"The Design Sprint described in this book evolved from within Google and I've seen it work miracles. This book is an excellent resource in learning how to do it yourself."*

— Scott Jenson, Product Lead at Google

# design sprint

Richard Banfield

C.Todd Lombardo

Trace Wax

with a foreword by Dave Gray

A Practical Guidebook for Building Great Digital Products

# design sprint

With more than 500 new apps entering the market every day, what does it take to build a successful digital product? You can greatly reduce your risk of failure with design sprints, a process that enables your team to prototype and test a digital product idea within a week. This practical guide shows you exactly what a design sprint involves and how you can incorporate the process into your organization.

Design sprints not only let you test digital product ideas before you pour too many resources into a project, they also help everyone get on board—whether they're team members, decision makers, or potential users. You'll know within days whether a particular product idea is worth pursuing.

Design sprints enable you to:

- Clarify the problem at hand, and identify the needs of potential users
- Explore solutions through brainstorming and sketching exercises
- Distill your ideas into one or two solutions that you can test
- Prototype your solution and bring it to life
- Test the prototype with people who would use it

**Richard Banfield** is the CEO and Co-Founder of Fresh Tilled Soil, a user experience agency in Boston.

**C. Todd Lombardo** is an Innovation Architect at the Small Business InnoLoft at Constant Contact.

**Trace Wax** is a director at thoughtbot, where he has organized and facilitated many product design sprints.

"I'd hand a copy of *Design Sprint* to any newly-minted UX leader. I'll also keep a copy around for myself—it's a great source of ideas and reference for explaining the 'why' and 'how' of getting the most out of design thinking."

— **Cindy Alvarez**  
Director of UX at Microsoft and  
author of *Lean Customer Development*

"Simply put—*Design Sprint* should be on the desk of every professional working in digital products, because I can guarantee you it will soon be on the desks of their competitors."

— **Andy Miller**  
Chief Innovation Architect  
at Constant Contact



Digital Product Design



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"With *Design Sprint*, Banfield, Lombardo and Wax have created the blueprint for intelligent product design in the 21st century. This power trio of product lays out a groundbreaking new process by which organizations of all sizes can design quickly while also mitigating misfire. *Design Sprint* isn't a book for startups; it's not a book for the Fortune 500; it's a book for every company looking to improve products. Simply put- *Design Sprint* should be on the desk of every professional working in digital products, because I can guarantee you it will soon be on the desks of their competitors."

—Andy Miller,  
*Chief Innovation Architect at Constant Contact*

"I love the Design Sprint method and use it frequently in my work. *Design Sprint* is a concise, practical guide to the technique.»

—Josh Seiden, co-author,  
*"Lean UX: Applying Lean Principles to Improve User Experience."*

"Keeping up with the accelerating pace of innovation requires rethinking how to create successful products. The answer lies in the *Design Sprint*, emphasizing efficiency, effectiveness and organizational buy-in."

—Keith Hopper,  
*Lecturer in Entrepreneurship at Olin College of Engineering*

"Cross-functional collaboration is at the heart of successful product innovation efforts. Design—of products, of processes, of teams and of organizations—is, at its core, a cross-functional practice. This book focuses on bringing elements of the design discipline to a broad swathe of practitioners (not just designers) in a clear, step-by-step way that doesn't intimidate non-designers, but instead motivates them to participate and engage. All of this is in the service of building better products and teams."

—Jeff Gothelf Author,  
*Lean UX*

"Time-to-market is a critical factor in the success of many digital products. With design sprints, you can arrive at the right design, faster. This book provides a clear, easy-to-follow framework that can help your team to implement—and benefit from—design sprints."

—Jorge Arango,  
*Partner at Futuredraft*



# design sprint

A Practical Guidebook for Building Great Digital Products



Richard Banfield, C. Todd Lombardo, and Trace Wax



## A Practical Guidebook for Building Great Digital Products

by Richard Banfield, C. Todd Lombardo, and Trace Wax

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# Foreword

## Why Care About Design Sprints?

These days, few would argue that the pace of change in the business world isn't accelerating—it's generally agreed that every industry faces some kind of disruption in the coming years. This leaves continuous business innovation as the only way to maintain any kind of competitive advantage in the long run.

Innovation in today's connected world doesn't just mean launching new products and services. It also means new business models, which often require different ways of organizing and new forms of organization design.

But most organizations today aren't designed for continuous innovation. Innovation, if it happens at all, happens slowly. Innovation teams must often make do with meager resources as margins shrink in other areas of the business. People in the organization are attached to existing models and ideas. They have formed deeply embedded habits and routines that make it hard to let go of the current mindset or imagine alternatives. If new businesses, or new products and services, make it to launch, there are often problems getting people aligned around new ways of thinking and getting them to take ownership of a new way of working.

Design sprints are an exciting new approach: they get people aligned around new ideas, create more ownership and buy-in, get new ideas to prototype and launch more quickly and efficiently—and with higher quality.

Design sprints create alignment and buy-in because they get more people involved in the design process, working together to co-create new products and prototypes. People are more engaged when they are involved in the creation process.

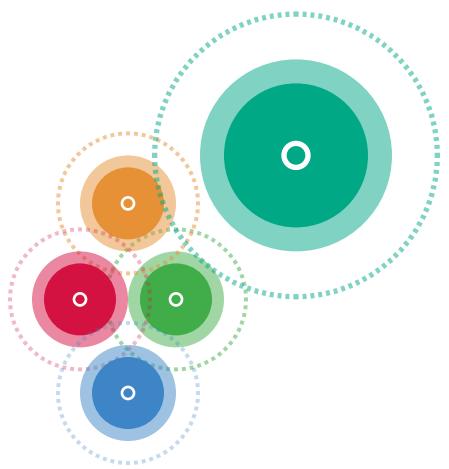
Design sprints are faster and more efficient because they are “timeboxed,” which means they give design teams a way to eliminate distractions, focus their full attention, and get tangible results in short time frames.

Design sprints also increase quality by involving more people from more parts of the organization, including the people who will be tasked with execution and understanding the implementation challenges.

The design sprint is an important new approach and an essential practice for organizations that are serious about innovation. The book you are now holding in your hands was written by pioneers in the field who will guide you, step by step, through this process of running a successful design sprint.

Good luck!

— Dave Gray, coauthor of *Gamestorming* and founder of XPLANE  
May 12, 2015, St. Louis, MO





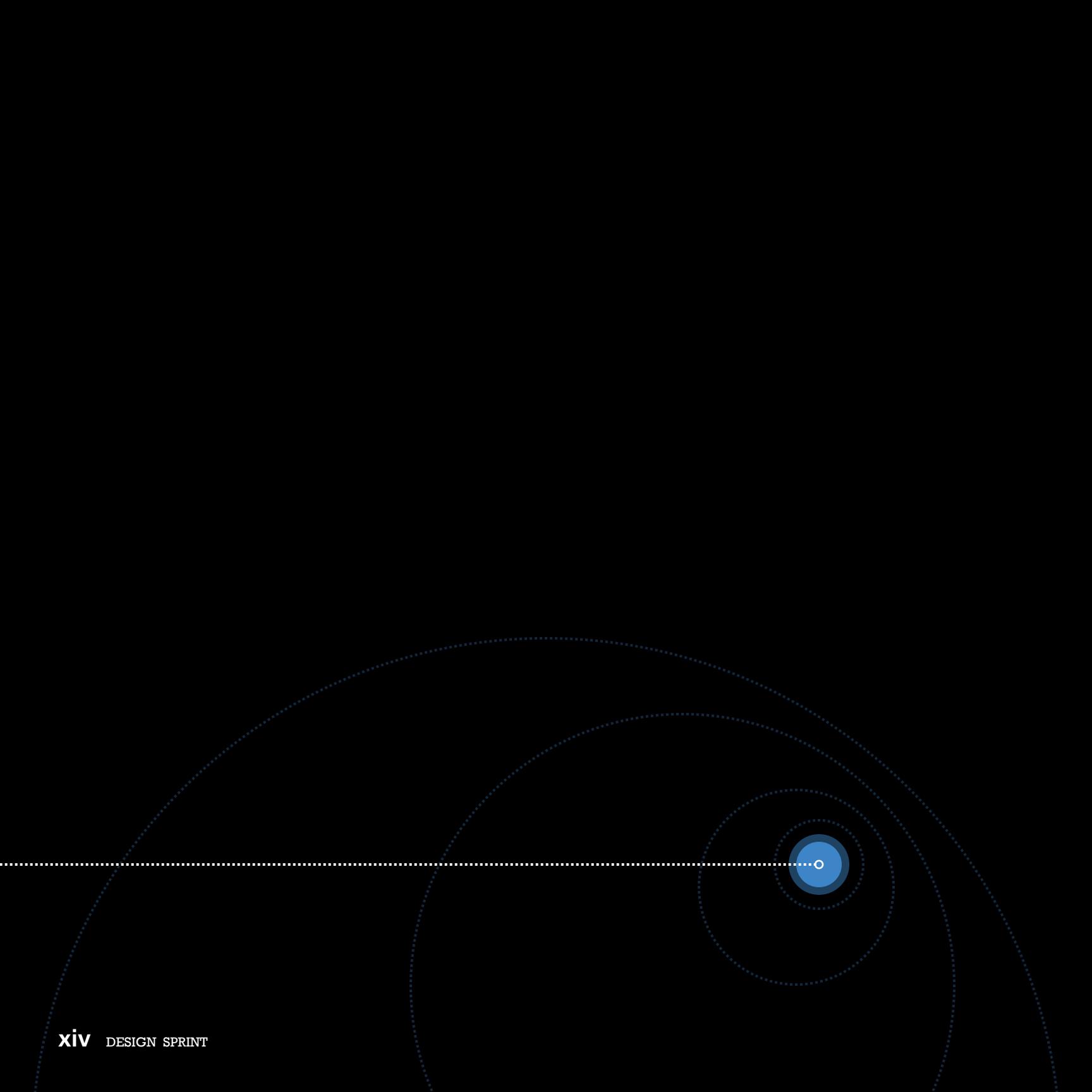
# This book is for you.

You're the product person in your organization. You may have no one reporting to you. You might have 50 people in your product group. You might be responsible for the entire product. Maybe the design team doesn't report to you, nor do the developers or marketing and sales teams. Maybe you're in a startup without all those defined roles, and you wear a lot of hats. Maybe you're in a large enterprise organization that has each one defined to the *n*th degree. Maybe you are a product design freelancer. You might work in an agency as a consultant. You probably have read a blog post about this process. Maybe you even tried one yourself. You're very likely wondering how your unique needs will work with design sprints and are seeking more information than you can find in a few blog posts.

If any of these descriptions sound familiar, then this book was intended for you.







# Preface

There were three things that drove us to create this book—in short, we want to:

- Reduce the number of products built that do not add value
- Provide practical applications to the product design and development process for a range of companies
- Improve the accessibility of design sprints

We're attracted to the design sprint process because it's a simple way for prototyping and testing just about any product in a week or less.

Like many product teams, we've witnessed the creation of far too many products that didn't have a good market fit. These misfires waste money and energy—but worst of all, they waste time. For many startups, getting a product to market quickly is the difference between life and death. For enterprises, getting the resources behind the right ideas is critical—otherwise, you launch products customers do not want. Further, in enterprises, the challenge is often more complicated than just time and cash; there's also organizational politics to deal with, as some in large organizations pursue their own agendas.

Might there be a process out there that helps control costs, reduces the waste of going in the wrong direction, and helps keep the peace? Could such a fabled thing exist in the chaotic world of product design?



**A**lthough digital products have only been with us for a few decades, they have become the dominant way we communicate and consume information. At the time of writing this book, there were 500+ new apps being released into the wild every single day! That doesn't even include the related physical products and services that accompany those apps. At that rate, it's hard to grasp the effort and time needed to make so many products, let alone understand the wasted hours and dollars.

You'd think that digital products would be easier to build than physical products. CEOs and founders often can't understand why their investments in digital products aren't paying off. The path to creating digital products appears so much easier: no injection molding, no flying to China to meet suppliers—hardly a whiff of dirty labor at all. Building a digital product is, in fact, relatively cheap and quick. But building the right product to win in the marketplace is as hard and grueling as ever. This is because the key components to digital products are not pixels and code, but rather people, time, and process. And people are always going to be complicated.

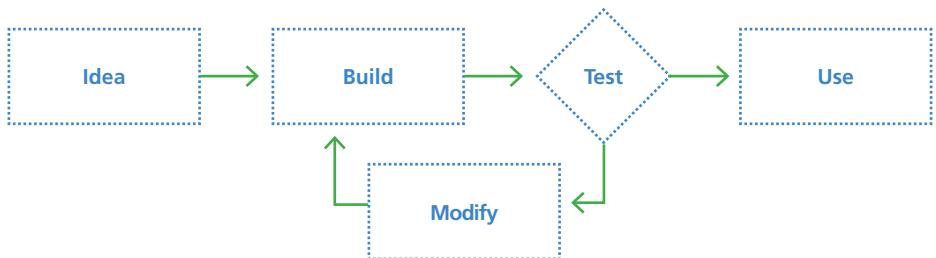
If you're a product lead, time (or lack thereof) is what keeps you up at night. Having collectively worked on over 800 digital products, we feel your pain.

We will focus on the realities of designing digital products, and lay out a practical guide to implementing the design sprint principles and techniques. Knowing full well that there is no single way to create the perfect product, we don't want to sound prescriptive. However, in all cases, having a disciplined and proven process wins out over winging it. This book will help almost anyone working on digital products go from knowledge to action.

Another distinguishing element of this book is that we discuss how design sprints fit into the real world. Unlike in controlled environments or case studies, things don't always align. In the turbulent reality of our lives, it's hard to find five days of uninterrupted time. It's hard to get the attention of the executives. It's hard to find testing subjects who fit your exact target profile. This book was written for the sticky, messy, chaotic world we all live in.

We interviewed dozens of product professionals just like you, and we saw a wide variety in the way design sprints are being used. In fact, no two organizations we spoke with ran them exactly the same way. Google Ventures evangelizes a five-day process, while Intrepid Pursuits does a design sprint over four to six weeks. Agencies like Fresh Tilled Soil have undertaken sprints that take up to two weeks. At the other end of the spectrum, a design sprint can be run in a few hours. But be careful of the desire to shorten it too much! At larger companies like Constant Contact, a design sprint can last from a half day up to nine days, depending on the project. The design sprint is a framework, not a set of rules. We'll show you several ways to tailor a design sprint to meet your specific needs.

As flexible as design sprints are, we like the approach better than most design processes for one simple reason: it's as far from the "gut feeling" approach employed by many product designers as you can get. Patrick Solvabarro, the CEO of Upward Labs, said after going through a design sprint, "These design sprints are a lot like mini science experiments." We like that comparison. The scientific process has successfully given us a model to get our ideas out of our heads (a hypothesis) and test them against the pressures of the big bad world (experimentation) so that we can either validate the hypothesis or figure out what's not working.



*The trial-and-error method (after E. E. Lewis)*

Many great scientists, artists, and engineers have built their work on the “ideate, build, test, validate” model. E. E. Lewis, professor emeritus of mechanical engineering at Northwestern University, tells the story of how science and engineering came together to create the technological world of the 21st century in his book *Masters of Technology*. He cites the idea-build-test-use cycle that was likely used by many famous innovators.<sup>1</sup> Galileo was one of the famous innovators to use experimentation to prove his ideas valid or not. As part of a now legendary experiment, he dropped two balls of different materials and weights from the leaning Tower of Pisa, and observed that they landed on the ground at the same time, which was in contrast to the conventional thinking of the time. Edison famously iterated over 300 different designs on his way to inventing the lightbulb. Picasso is considered as one of the most prolific artists, not because he produced many artworks, but because he constantly experimented with artistic directions.

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<sup>1</sup> E. E. Lewis, *Masterworks of Technology: The Story of Creative Engineering, Architecture, and Design* (Amherst, NY: Prometheus Books, 2004).

We think it's time that product teams did the same.

This process won't prevent failures, but it'll help your team identify them quickly and move you forward to the next breakthrough. There's no process that will prevent mistakes. In addition, we're not looking to eliminate mistakes entirely. Failing faster is a part of the process. The design sprint process gives you "bounce back" power. By providing almost immediate feedback, the design sprint allows you to determine if a proposed direction is likely to lead to failure, and if so, can help you to find the path to success more quickly. You might fail a few times, but you'll have the tools to get back up and tackle the next challenge.

Design sprints are a great way to make sense of the complicated design considerations. Translating the objectives or problem into a narrative and then physically crafting potential solutions is a powerful way to make customer needs and desires visible and visceral. Connecting these customer stories to practical and emotional user feedback via testing generates a road map that becomes the path for future design and development work.

## Who This Book Is For

We interviewed CEOs and founders of startups, CTOs, product managers, product owners, VPs of product management, and lead designers. We asked them what worked in their product design cycles, and what didn't. They told us how they structure teams and keep people focused. What we learned is that no two design sprints are exactly alike. We have included their perspectives here so you can learn from varied experiences in driving product development using the design sprint approach.

Very often, the person driving the design sprint won't be a senior executive. If you're a product manager trying to get the CEO, CMO, and key stakeholders to give you up

to five dedicated days, you're going to need more than a nice smile. Finding support for a design sprint requires that you communicate the value of the process and outcomes. The three greatest values we often see are the alignment of a team around a product concept, the reduction of resource expenditure, and the validation of an idea from a customer's perspective. By their intense nature, design sprints spur action.

## Who Are We to Tell You?

Well, we've been in your shoes. In many senses, we still are! After many years in product management, C. Todd ran the same sequence of activities during his time as a consultant for design-centric organizational change consultancy XPLANE, as well as his consulting agency, CATALYTIC. In his current role as Innovation Architect at Constant Contact's Small Business Innovation Loft (InnoLoft), C. Todd guides both internal Constant Contact teams and InnoLoft startup residents through design sprints to gain clarity, solicit customer input, and define design direction for their products. He has lost count of how many design sprints he's run to date.

Richard leads a team of senior design strategists and personally runs design sprint sessions with his clients at Fresh Tilled Soil. The team works with clients ranging from Fortune 500 corporations such as Intel and Staples, to venture capital–funded startups and emerging businesses. The design and development team at Fresh Tilled Soil has run over 50 sessions using the design sprint approach.

As a Director at thoughtbot, Trace has led the company's NYC office and has attended and facilitated a large number of product design sprints to ensure projects start with enough initial validation. Collectively, designers and developers at thoughtbot have run hundreds of design sprints, and share their experiences in an open source repository on GitHub.<sup>2</sup>

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<sup>2</sup> <https://github.com/thoughtbot/design-sprint>

## How We Wrote This Book

A book about design sprints should be written...well, like a design sprint! We had to solve a large, complex problem in a timeboxed manner. Creating a book with the tools you're writing about keeps you very in tune with the benefits and flaws of the methodology. The design sprint forces a concept to become a reality in a few intense days, and this book was born from an equally extraordinary multiday session.

Our initial hypothesis was that product people need a guidebook to design sprints. After all, if we heard rumblings from our peers, partners, and clients, then this would be worth the investigation. We included as many viewpoints as possible from those who manage digital products and/or consult for them, including product managers, product owners, product designers, CEOs, CTOs, and vice presidents. Four intense days of writing produced a prototype draft of the book that we were able to share with our peers. That prototype was the first iteration of the book you are reading today.

After that initial four-day effort, we reviewed, revised, and continued with our interviews. We secured a contract with O'Reilly to bring this knowledge to the masses. Richard and C. Todd even arm-twisted Trace to visit Boston a few times. We wrote, ate, drank, wrote, slept, and wrote some more. We then held remote pair-writing sessions to refine the output and had one final "book sprint" to finish it all off. And really, is it ever finished?

## How This Book Is Organized

This book is divided into two parts: the first three chapters cover the basics, including

some background information, and the benefits and limitations of design sprints. This part also looks at a few different ways to incorporate a design sprint in your organization by showing many ways we, or others, have implemented them. The next chapters in the second part cover the details of how to run a design sprint yourself, with each chapter outlining the crucial steps from planning to execution to follow up.

Part I, The What, Why, and How of Design Sprints, includes the following chapters:

### **Chapter 1, What Is a Design Sprint?**

Before we get into it, let's define what it is, and talk about where it came from.

### **Chapter 2, When (and When Not) to Do a Design Sprint**

Here we'll review the reasons to do a design sprint (as well as reasons not to do one).

### **Chapter 3, How to Approach Design Sprints**

We'll address the flexibility of this framework by showing you variations on the typical five-day design sprint, including sprints as short as three hours and up to as long as four weeks.

Part II, How to Design Sprint, includes the following chapters:

### **Chapter 4, Before the Design Sprint: Make a Plan**

We'll get you ready to go with topics such as: What information will you need? Who should be there? Where will the design sprint happen? How long should it be?

### **Chapter 5, Phase 1: Understand**

This phase is about identifying and clarifying the problem at hand. You'll get the background on your users and identify their needs and workflows, so that you can set yourself up to create a solution.

### **Chapter 6, Phase 2: Diverge**

Through collaborative brainstorming and sketching exercises, you'll explore a range of possibilities that solve the problem you've identified.

### **Chapter 7, Phase 3: Converge**

You'll distill your large number of ideas into one or two solutions to move forward with and test.

### **Chapter 8, Phase 4: Prototype**

We'll talk about a number of ways to bring your solution to life and get it in front of your users.

### **Chapter 9, Phase 5: Test**

Here's where the rubber meets the road and you test what you've created with people who would use it. We'll talk about how to run your test and interpret the results.

### **Chapter 10, After the Design Sprint: Capture, Iterate, and Continue**

You're done with the design sprint, so what's next? We'll talk about ways to integrate the output and outcome into follow-on workflows such as Agile/Scrum, follow-on design exercises, or other methods.

## Acknowledgments

We'd like to thank everyone at O'Reilly: Nick Lombardi for bringing us into the mix, Angela Rufino for editing the heck out of us, Edie Freedman for her design direction, and Dellaena Maliszewski for all her marketing help.

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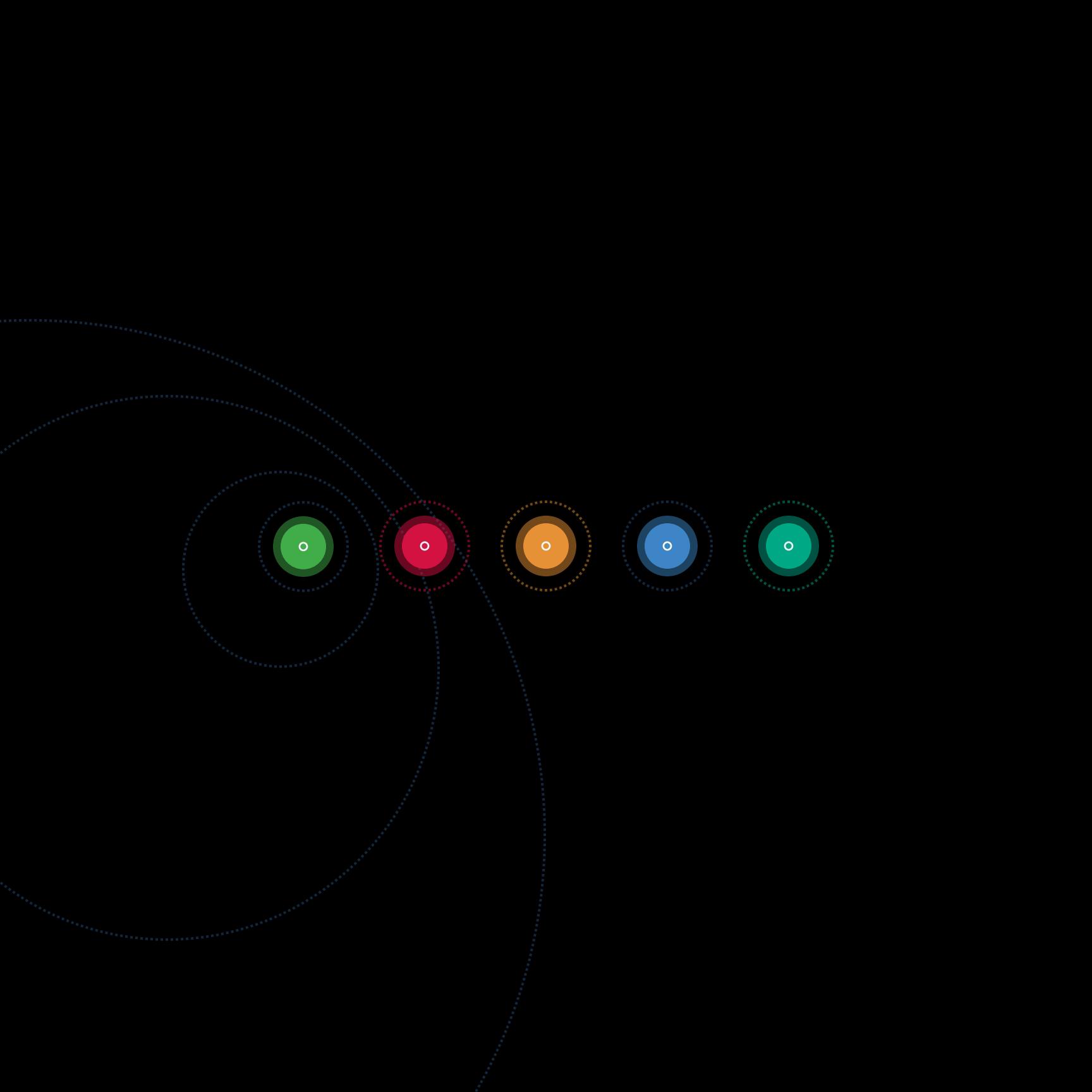
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And finally finally, we'd like to thank the Academy. We don't exactly know who or what this Academy is, but we hear them thanked all the time. So thank you, Academy!



# The What, Why, and How of Design Sprints

The chapters in this part explain what a design sprint is and why the current approach to design might not work for today's product designers. We'll take a look at challenges with existing design paths and compare them to design sprints. There is no one-size-fits-all design process, but a design sprint can adapt to meet the needs of many projects. Specifically, we'll look at the ways you and your team can benefit from running a design sprint for your current projects to increase the opportunity for a positive outcome. You'll hear from design leaders about their experiences and how they have used this flexible approach to increase productivity and reduce the risks associated with product design. By the end of this part, we'll have lifted the veil on this relatively new process to give you a better understanding of what makes a design sprint work.





VALIDATE

Constant Co

DO WE NEED  
TO CHANGE ANYTHING?  
WHAT'S THE POINT?

DO OUR CURRENT  
ENABLEMENT MATERIALS  
MEET THESE NEEDS?

HOW CAN WE  
DEVELOP  
NEW  
MATERIALS  
THAT MEET  
THESE  
GOALS?

ARE OUR  
U.S.-FOCUSED  
ENABLEMENT MATERIALS  
APPROPRIATE FOR A UK-  
BASED PARTNER GROUP?

HOW CAN WE CREATE  
• EFFECTIVE,  
• RELEVANT,  
• ENGAGING  
ENABLEMENT MATERIALS THAT  
OUR PARTNERS WILL ACTUALLY

## Chapter 1

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# What Is a Design Sprint?

A design sprint is a flexible product design framework that serves to maximize the chances of making something people want. It is an intense effort conducted by a small team where the results will set the direction for a product or service.

A design sprint consists of five discrete phases:

0. Prepare (Get ready)
1. **Understand (review background and user insights)**
2. **Diverge (brainstorm what's possible)**
3. **Converge (rank solutions, pick one)**
4. **Prototype (create a minimum viable concept)**
5. **Test (observe what's effective for users)**
6. Iterate...to another design sprint, or a Lean and Agile build process such as Scrum or Continuous Delivery/Extreme Programming

**A** design sprint reduces the risk of downstream mistakes and generates vision-led goals the team can use to measure its success. For the purposes of this book, we'll focus on digital products, as our direct experience lies in that arena, though the design sprint has roots in gaming and architecture,<sup>1</sup> and many industries have employed them successfully.

## Uses of a Design Sprint

There are many ways to utilize a design sprint; one way is to look at which stage of development the project is in. Are you at the beginning and need to understand a wide array of unknowns? Or are you looking at a mature product that has been on the market for a while?

### **At the beginning of a project**

You might use a design sprint to initiate a change in process or start the innovation of a product concept. This works well when you're exploring opportunities with the goal of coming up with original concepts that ultimately will be tested in the real world—for example, if we need to understand how young parents would buy healthcare products online.

### **In the middle of a project**

You might use a design sprint to start a new cycle of updates, expanding on an existing concept or exploring new ways to use an existing product. For example, we worked with a marketing data company that realized the data it gathered might be useful to other market segments. Building a prototype gave the team the validation it needed and prompted a deeper investment into that product segment, which ultimately was rewarded with a significant increase in sales.

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<sup>1</sup> <http://alexbaldwin.com/qcon-2014/>

### **For a mature project**

A design sprint can also be used to test a single feature or subcomponent of a product. This allows you to focus on a particular aspect of the design. For example, your team might need to know what improvements can be made to the onboarding process. Using the design sprint to discover the pros and cons of a new onboarding channel could give you granular insights into a high-return part of the product experience.

However you use it, the design sprint brings clarity to your road map to kickstart and obtain initial validation for almost any new, product design-related work.

## **How the Design Sprint Came to Be**

The design sprint evolved from a number of different approaches to design. As Agile and design thinking became more popular, design sprints became a way to encapsulate them.

### **From Agile**

The word *sprint* comes from the world of Agile, and it describes a short period of time, typically 1–4 weeks, set aside to accomplish a focused goal. The design sprint is no different. It uses the original concept of the sprint to describe a period of time dedicated to working on the necessary design thinking. This time-bounded paradigm is critical to the success of the design sprint. *Timeboxing*, as it's sometimes called, is essential to driving the right types of behavior from the participants. In addition to speeding up the product design and development process, it also takes advantage of core parts of our human nature: energy economy and social collaboration.

### **From design charrettes**

Going way back, the term *charrette* was used to describe any collaborative workshop session among designers, and design-thinking frameworks from Stanford's d.school

emerged as a way to apply more structure to this concept. Industrial product design firms like IDEO developed short-cycle design sessions called deep dives, which built on the design charrette concept popularized by Stanford's d.school.

IDEO's most famous example is the Shopping Cart Concept, a deep dive that was featured on *Nightline* in 1999.<sup>2</sup> The team pushed back on age-old mythologies about how design gets done and brought a multidisciplinary team together to brainstorm, research, prototype, and obtain user feedback that went from idea to a working model in four days. By collapsing the time constraints, the designers were essentially holding a gun to their heads and forcing themselves to come up with better solutions in less time.

### **From digital product design**

The influence of industrial design and software design was the genesis, but it was the emergence of digital product design that brought on a more formal framework for testing ideas out in the wild. Several organizations started to converge upon similar processes with similarly named phases.

### **From Google Ventures**

Although there have been company-specific versions of this approach used over the last decade, it was the work of Jake Knapp at Google Ventures (GV) that brought them to a broader audience.

GV invests in startups, and at times those startups require product design advice to align their teams. To help with this, GV would send a designer to work with each startup for one week's time. As it turns out, these processes have five phases, one for each day of that week. The structure and time constraint proved useful. Lo and behold, the design sprint was born.

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<sup>2</sup> <http://www.ideo.com/work/shopping-cart-concept>

## **Created for Startups, Great for Enterprises**

### **For startups**

Startups are notoriously fast-moving environments that value speed to market over almost everything else. This commitment to speed gives them an advantage but also risks leaving out a lot of the essential thinking and testing required to build a truly useful product. Too many products go to market without customer validation. How do you maintain the speed while including the necessary research and design thinking? Many startups in the Constant Contact InnoLoft Program cite a design sprint as one of the most valuable parts of their participation.

### **For enterprises**

Enterprises that have well-established processes may also look to a design sprint as a way to accelerate their product design and development so that they can work more like a fast-moving startup. The accelerated learning can give the enterprise an advantage and also reduce the amount of resource investments for exploration of product ideas and concepts. Spending three to five days on a project idea to see if it makes sense to move forward is better than working three to five months, only to discover it would have been better to not have proceeded at all.

Any product or product feature will be validated or invalidated. You can do that validation yourself, or let the market do it. Which do you think will be less expensive?

## **Success = Time and Money Saved + Minds Blown**

A design sprint's success can be measured in many ways. What works for metrics in your organization may differ from others. Here are a few ways we have seen design sprints measured.

### **Success by preventing failure**

You can't change what you can't measure, right? One of the biggest questions we initially faced when implementing design sprints in our organizations was "How do you measure the success of a design sprint?" In our experience, it was often the absence of something that we were trying to measure. For example, how do you measure the amount of time you won't spend on bad product development? How much money will you save by not investing in a product that will make less ROI? Those questions point toward future gains by not spending some difficult-to-calculate amount of time or money. How do you measure the absence of a failed product?

There's no way you're not going to save yourself time and money. Because the way these deals usually work is to go out and build things and just invest thousands of dollars and all this time, and then, find out that it falls flat. There is no testing done, no exploration done with end users," remarked Dana Mitrof-Silvers, a design-thinking consultant who works with many nonprofits, such as the Indianapolis Museum of Art and the Denver Museum of Nature and Science. She measures the success of a design sprint by the ideas generated. "While ideas aren't usually the problem, most organizations find themselves with an excess of ideas—validated ideas and the execution is what's missing.

### **When you get validation**

In many cases, a design sprint will lead you to something that gets initial user validation, where the next steps are defined. You'll have reduced risk by doing some validation early, and developed next steps faster than would have otherwise been possible. Character Lab<sup>3</sup> had a design sprint like this with thoughtbot. In a week, a large group of diverse stakeholders from an educational nonprofit got on the same page about what would be built, and remarked upon how quickly they reached agreement.

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3 <https://characterlab.org/character-growth-card>

Teachers and students were excited about the prototype they saw and couldn't wait to use it. What we needed to build was clear and could proceed unimpeded at a good clip, which was very much needed given the size of the app and its shoestring, nonprofit budget.

### **Some validation, some things to fix**

Sometimes issues come to light that need some clear changes in your product, and you can fix those things and plan additional research. For example, thoughtbot did a design sprint for Tile<sup>4</sup> to optimize the team's mobile app design to help users find keys with a device attached. After the sprint, we iterated based on what we learned and continued additional research sessions. In those following weeks, we found that making the device beep louder helped users find keys three times faster than anything else.

### **When you don't get validation**

Design sprints can help prevent you from building the wrong thing even when your customers say it's the right thing. Larissa Levine, from the Advisory Board Company, believes that a design sprint is successful if it guides you toward building the right product feature. As she explains, "Product marketing wants to sell this one feature and says, 'let's build XYZ because we heard that the user said they wanted XYZ,' when actually, that's not the problem at all. They think they want XYZ, but it's not it at all. So you end up building the wrong thing."

Sometimes a design sprint can get rid of those preconceived notions. Michael Webb, cofounder of InnoLoft startup resident itsgr82bme, entered a design sprint with a clear idea in his head about using APIs as a means for connecting its calendar of family-friendly events with other sites' event listings. During the sprint, he realized

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4 <https://thoughtbot.com/work/tile>

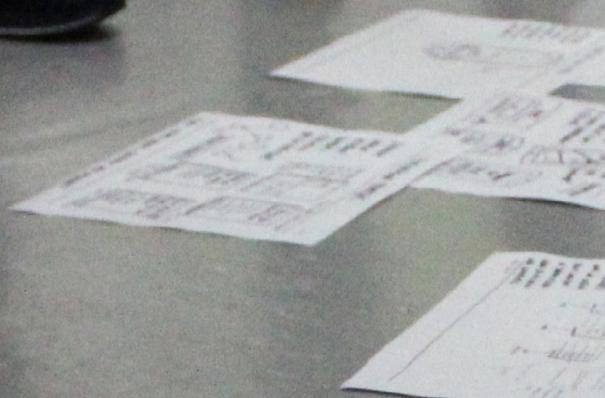
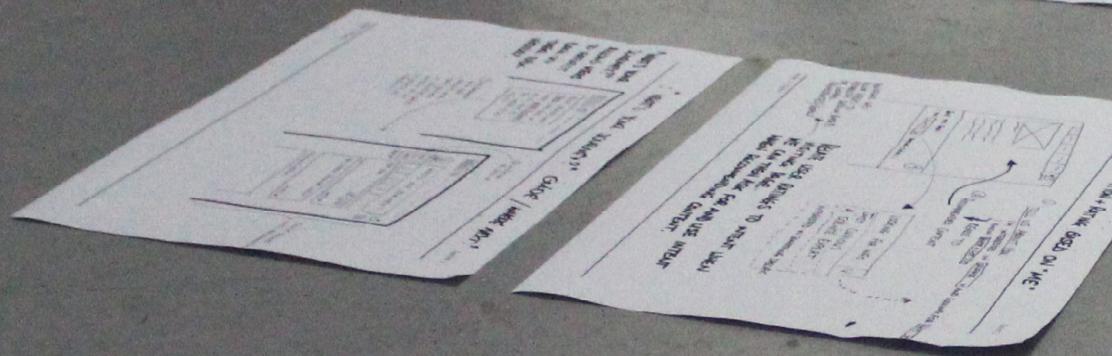
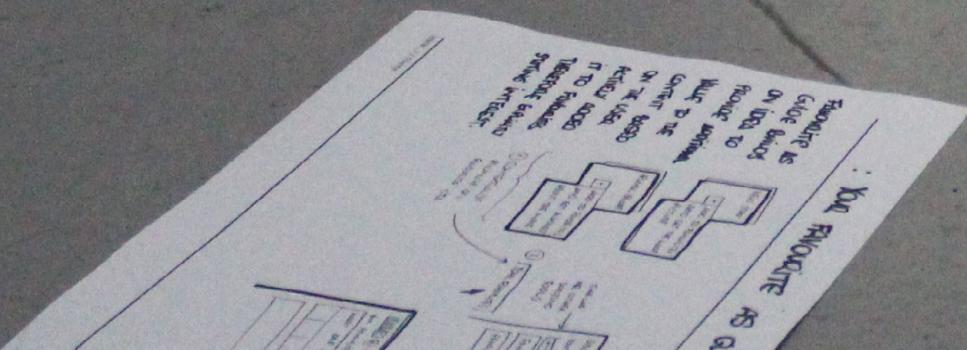
this could be done without using any APIs at all. He ended the sprint in a very different place.

Lastly, a design sprint can stop you from building any product at all. Marc Guy, CEO of Faze1, also went through a design sprint at the InnoLoft. The sprint made him realize his company needed to stop building a product and instead go out and talk to customers. Mind blown, product invalidated! The business model has shifted significantly since then, as it subsequently focused on customer development. In fact, C. Todd didn't see Marc or his team in the InnoLoft much after their design sprint. They were all out talking to customers, even their development team! The results were impressive and yielded an 8x increase in booked revenue over their previous year.

Each design sprint will have its own needs and idiosyncrasies, and you'll have to determine up front what's best for your project. Any good design-thinking process might help identify the real problem in each of these cases. What makes the design sprint approach more effective is the structured, time-constrained framework, along with the appropriate exercises. This will force the team to make decisions and validate ideas faster than most methodologies.

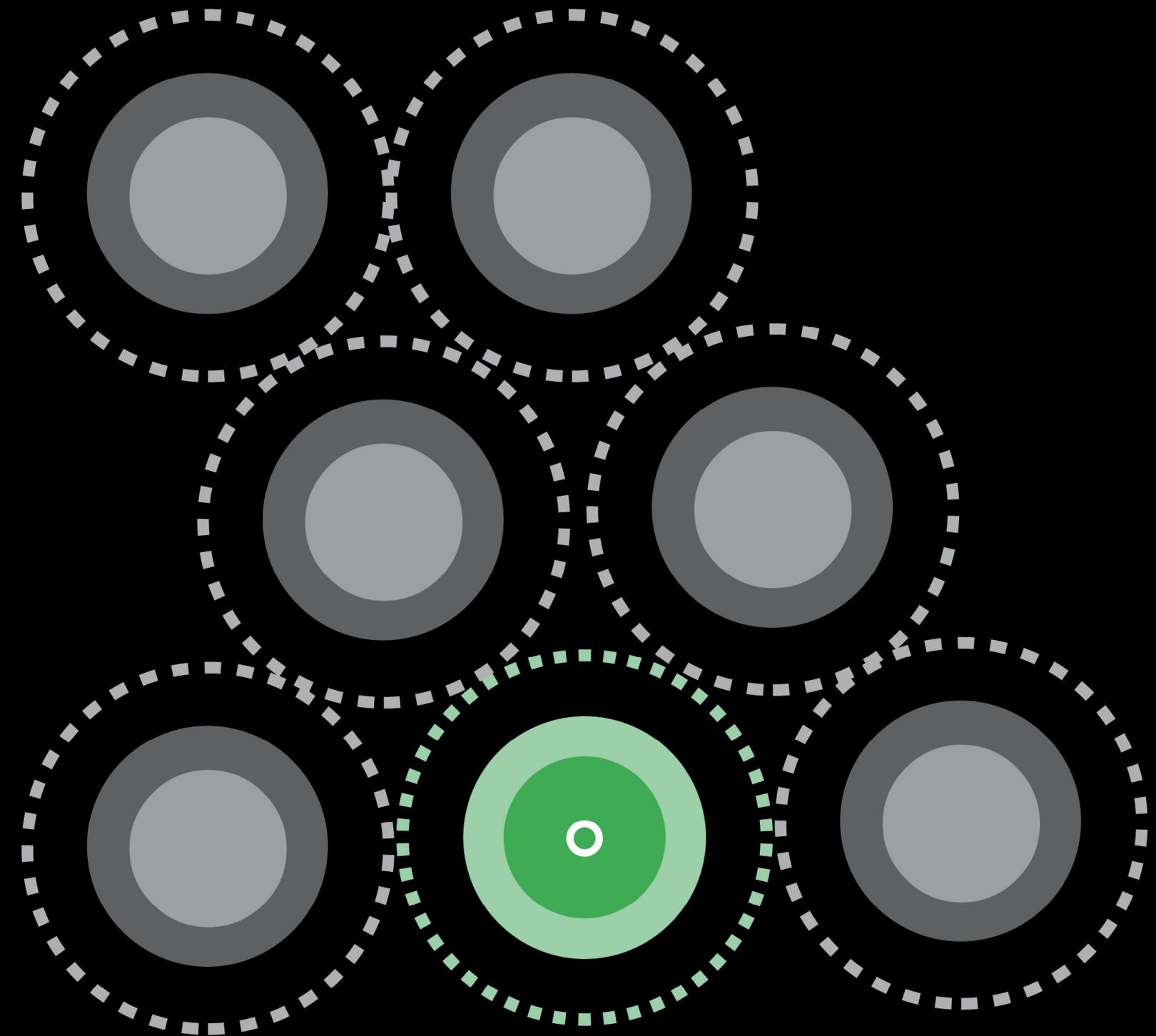
## Takeaways:

- A design sprint has five phases: Understand, Diverge, Converge, Prototype, and Test. The names of these phases may vary from company to company, but the overall ethos remains the same: a timeboxed design cycle completed in a collaborative fashion with real user input.
- The focus of a design sprint is to get the validation needed to maximize the chances of creating something people want.
- The process is very flexible and can adapt to different teams and needs.
- Design sprints can be measured in different ways, from number of “good” ideas generated, team alignment, company direction, and even halting a project.









## Chapter 5

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# Phase 1: Understand

The first day of a design sprint is primarily an opportunity to bring the working team to a mutual understanding of the problem to be solved. If the team members haven't already met one another, then this is the time when everyone will get acquainted. Getting to know each other helps to develop empathy, which is a cornerstone of any design-thinking exercise. In this chapter, we'll give you tools and exercises to help break the ice and inject a little fun into the process. These exercises will also help you get inspired. Whether you need to be inspired by facts or out-of-the-box ideas, we've included a collection of tools to get you there. Together you'll answer the questions: "Who is the customer, who is the user, and what are their problems?" You'll all share the relevant context so the answers to these questions can be understood clearly, but you won't need to come up with solutions yet.

## What Happens During the Understand Phase?

<b>Get the Background</b>	~1.5 hours
<b>Get Inspired</b>	~1.5 hour
<b>Define the Problem</b>	~1 hour
<b>Know the User</b>	~3 hours

**A**s discussed in Chapter 4, a design sprint is a flexible framework, and you'll need to adapt it to your particular situation. If the conversation requires it, exercises can be added, reordered, skipped, shortened, or extended. Your mileage may vary on the duration for each of the exercises; we've done journey maps in 15 minutes, and some have taken up to three hours. It all depends on the level of detail your project needs.

Whatever you do, don't forget to take frequent breaks and get a good lunch! (Yum.)

You might not finish these exercises by the end of the first day. In that case, do the retrospective at the end of the day, then continue the exercises on the second day. If that happens, be sensitive to the time constraints to finish up the background work so that you have enough time for the additional phases of the design sprint.

## Recommended Agenda

### Get the Background

Introductions	~15 minutes
Introduce the Idea Parking Lot	~ 5 minutes
Review Agenda	~ 5 minutes
Rules of the Design Sprint	~ 5 minutes
Pitch Practice #1	~10 minutes
Review Research and Past Work	~60 minutes

### Get Inspired

Goals and Anti-Goals	~30 minutes
Existing Product, Competitors, and Substitutes	~40 minutes
Facts and Assumptions	~20 minutes
Question Formulation Technique	~15 minutes (optional)

### Define the Problem

Problem Statement	~30 minutes
Reframe the Problem with Challenge Maps	~30 minutes (optional)

### Know the User

Who-Do	~10 minutes
Personas	~45 minutes
Customer Interviews	~60 minutes
User Journey Map	~60 minutes

### Wrap-up

Daily Retrospective	~15 minutes
Team Drinks	~60 to 90 minutes (optional)

# Get the Background

The goal for this part of the day is to understand all the relevant data and information on hand. The team should explore what they know and what they don't know to gauge what knowledge gaps exist for the problem. You'll cover existing research done before the design sprint and review analysis of competitive or similar product offerings.

## Introductions

Give the design sprint team the opportunity to introduce themselves. Everyone should say their name and their role in the design sprint team and the project to follow. The facilitator can go first to set the stage and provide a good example, followed by the main product sponsor or stakeholder, followed by the rest of the team going around in a circle.

Depending on how familiar the team members are with each other you could include an icebreaker to get the team to open up and be comfortable working together. You'll be spending an intense few days together—might as well get the edge off up front!

### How

1. Select your icebreaker from the list on the next page or another you know how to do already.
2. Describe your icebreaker to the group.
3. Blueprint it by going first to set the stage and give an example for everyone.
4. Pick an order and go around the room and make sure that each person completes the icebreaker.

**Difficulty:** Easy

**Size:** The whole group

**Materials:** 5 x 7 index cards to fold

**Don't** let someone talk for a long time. This is a time for simple introductions, not for people to drone on about their background and opinions

**Approximate time:** 30 to 60 seconds per participant

## A Few of Our Favorite Icebreakers

**Word Ball:** Bring a plush ball. Toss the ball to someone else in the room, and as you throw it, say a random word. Each person does the same thing in turn, until everyone's had a chance to throw the ball.

**What Neighborhood Do You Live In?:** Great for people in cities who love to talk about their 'hoods. At the end of each person's intro, each person says the neighborhood they live in. One of Trace's favorites.

**Draw Your Name and Draw \_\_\_\_\_:** Give each participant an index card and ask them to fold them in half: on one side, they should write their names in a decorative font, and something tangential and/or related to the topic of the week. For example, at a recent sprint, C. Todd asked everyone present to draw how they'd make pancakes. The manager present drew a car and an International House of Pancakes sign (he liked their blueberry syrup).

**Little-Known Fact:** Ask participants to state their name, title, and/or function, then add a fact that no one in the room likely knows about them.

**Hopes and Fears:** We learned about this one from Karen Cross at Atlassian. She uses this to help bring out potential project issues, in addition to getting others to know one another:

*"It's basically a 20-minute brainstorm exercise at the very beginning of a sprint. Everyone sits, and has two colored Post-its (usually red and blue). Depending on the number of people involved, I usually limit them to maybe three hopes and two fears, two hopes, or maybe one hope. And then everyone writes them down, and they all put them face down in the middle of the table, and then they draw from them, and then have to read someone else's and explain what they think it means. By doing that, it gets them to be empathetic [to one another]."*

After the introductions, acknowledge the others involved with the project but not participating in the design sprint.

## Introduce the Idea Parking Lot

After that, introduce the concept of the Idea Parking Lot. During the sessions, the team may generate ideas or have other “aha” moments that may not apply to the main topic, or they may propose solutions on the first day that shouldn’t be explored until the Diverge phase. An Idea Parking Lot is a place where such ideas and topics can be captured, so you can come back to them when you’re ready. Unlike a real parking lot (especially during the holidays), there’s always room in the Idea Parking Lot!

### How

1. Place a large piece of paper on the wall. A page from a Post-it easel pad is ideal.
2. Label it “Idea Parking Lot” at the top. Draw a picture of a car. Drawing pictures of cars is fun.
3. Throughout the sprint, when anyone has an idea you want to capture that doesn’t fit the sprint, write it on a small Post-it and stick it in the Idea Parking Lot.

**Difficulty:** Easy

**Size:** The whole group

**Materials:** Post-its (you can also use a Google Doc or Trello Board)

**Approximate time:** 3–5 minutes

## Review Agenda

There’s a lot to cover on the first day of the design sprint. Give the team a sense of what’s to come, so they know what to expect.

### How

1. Review the printed agenda, or bring it up on a large TV screen.
2. In about a sentence each, describe the exercises you’ll be doing.

**Difficulty:** Easy

**Size:** The whole group

**Materials:** A printed agenda (or a large TV screen)

**Don’t** go into too much detail.

**Approximate time:** 5 minutes

## Rules of the Design Sprint

It might seem strange to start a creative thinking process by establishing rules. This counterintuitive approach is often shunned by the uninitiated as being restrictive or dampening the creative process. This couldn't be further from the truth.

The guidelines we recommend are intended to level the playing field for all participants. Human beings are complicated enough without the additional pressure of having to solve problems while stuck in a room full of peers or strangers for five days, some of whom speak more forcefully than others. Put them all in a small space together to understand a problem, generate solutions, and make prototypes, and it can get downright chaotic. The humans involved in the design sprint phases are more than just sources for ideas and hands to make things. They bring with them their own experiences, biases, emotions, preferences, and politics. Guidelines reduce the risk of those biases and focus the team on the customer's problems. Our goal with these guidelines is to get the team to fall in love with solving the problem and not with one of their own subjective solutions.

By providing guidelines and rules for the team, you can empower the team. Again, constraints increase creativity, and these guidelines can help. You reduce the opportunity for mental fatigue and ensure that each person's contributions will be given attention and value.

One of the most important elements of a design sprint is that these are established on day 1 or even before the design sprint begins. These are not guidelines to impose on everyone in an authoritarian fashion—rather, ask the entire team to co-create them. Our recommendation is to select a few from this list (or your own!) then place blank bullet points and ask the team to help you fill them in. If no one adds any to the list, add some yourself. By adding it on the fly, you’re more likely to get things moving.

**Here's a sampling of guidelines we use. What could you add to this list?**

- Everyone participates
- Have one conversation at a time
- Withhold judgment of others' ideas
- Get up and draw
- Be comfortable
- Be easy on people, tough on ideas
- Be timely
- Be present
- The phone stack
- One computer at a time
- No jargon/TPS reports
- No HiPPoS
- No “Yes, but...”

**Everyone participates.** We mean everyone. Design sprints are not for the faint of heart, nor the introvert that struggles to speak up. Rather, design sprints are intended to encourage participation by all, regardless of roles with the company or project team. There will be mechanisms to allow the quiet voices in the room to be heard, and the facilitator's role (see Chapter 4) is important in identifying who isn't participating and draw them out.

**Have one conversation at a time.** Have you ever been in a meeting and seen lots of side conversations? We don't want those in a design sprint because we believe that all comments are valuable and want everyone to hear them. This will prevent everyone from talking over one another and prevent she/he-who-speaks-loudest-wins.

**Withhold judgment of others' ideas.** This is increasingly important during the Diverge phase when participants are generating ideas. To bring forth an idea can be a courageous act, and if there is harsh judgment, it can begin to erode confidence and diminish the quality of ideas. There will be mechanisms for judging ideas and bringing the better ones forward; those are when judgment is necessary and even welcome. So hold judgment until that time arrives.

**Be comfortable.** We don't want people to feel like they have to stand up or sit down all day, so if someone is sitting and feels the need to stand, or, if they need to leave to go to the restroom, that's OK. It seems almost too obvious to call out, but it does make a difference and establishes the tone of the sprint. Take frequent breaks so everyone stays refreshed and brings their A-game.

**Be easy on people, tough on ideas.** Along the same lines as withholding judgment, we want people to feel like they can contribute. There's no better way to do that than to value what they contribute and go easy on them for doing so.

**Be timely.** Timeboxing helps force movement. Facilitators take note: this one is mostly on you. Your job is to make sure the time doesn't go over what was stated and agreed on. If you said you'd have lunch at 12:30 p.m., make sure you're breaking at 12:30 p.m. Otherwise, everyone will be looking at their watches thinking "Weren't we supposed to break for lunch now?" and they will become disengaged. And hangry.

**Be present.** A design sprint is an intense exercise and many participants will get tired and distracted. Stay in the room, listen intently, and participate actively in the conversations.

**The phone stack.** Who loves their mobile phones? Most people. Who also doesn't put them down in meetings? Most people. To keep the team focused and avoid the inevitable buzzing phone distraction, we ask everyone to pile their phones up on top of each other. This is known as the phone stack. The first person to reach for the phone might receive a small punishment, such as having to buy the next round of coffees or drinks.

**One computer at a time.** Sometimes you'll need a computer projecting on a screen to review the agenda, instructions, or materials, but everyone else should keep their computers away. Only one computer should be in use at a time. Unless necessary, refrain from using your computer during the sprint. People will use the computers to multitask and will stop paying attention to the conversation. To take notes, write them down on paper instead. Everyone will be able to listen better when they're looking at one another instead of their screens.

**No jargon/TPS reports.** Do you know what a TPS report is? Neither do we! Keep the jargon and acronyms to a minimum so everyone in the room understands. If necessary, start an acronym dictionary in the back of the room to keep track and let everyone know what "BTKO" really means.

**No HiPPOs.** The Highest Paid Person's Opinion can often trample on other people's ideas. Make this a rule so that a senior member doesn't keep junior participants from defending their own points of view.

**No “Yes, but...”** Any time the word “but” is said, it often invalidates what was said earlier, so “yes, but...” is really a disagreement. Disagreeing is OK, but preceding that disagreement with a “yes” can be subtly counterproductive. There will be times for debate and disagreement in design sprints. Or instead of disagreeing, build on the last idea by saying “Yes, and...” or “Yes, because...”

If you ever see anyone breaking these guidelines during the sprint, call them out on it. If you violate these guidelines, call yourself out. If you are called out, admit it and move on.

After reviewing the rules you'll be following over the next few days, it's time to get started! Proceed with the following exercises to begin the design sprint itself.

## Pitch Practice #1

The project sponsor should begin each day by walking the design sprint team through the business opportunity and market, and the problem you're solving as they see it.

Pitch practice makes sure that everyone is aware of the original intent of the sprint, and allows the project sponsor to practice and refine the application's elevator pitch over the week. The pitch can be modified as needed as new information, options, and decisions come to light.

### How

1. Have the project sponsor give her elevator pitch. Use a pitch deck if one is available. Cap it to a few minutes.
2. Ensure that she covers the business opportunity, market, and the problem the team wants to solve.
3. Allow quick questions at the end, but save most of the discussion for the rest of the day's activities.

**Difficulty:** Easy

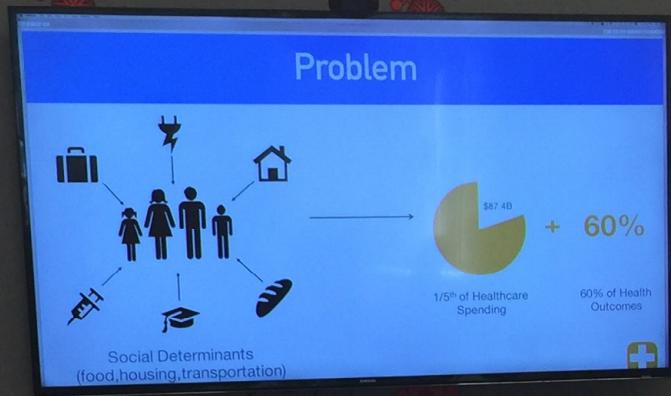
**Size:** The whole group

**Materials:** The project sponsor's brain and her pitch deck if one is available

**Don't** let the project sponsor drone on and on and on (there's a 12-step program for that called On-and-On-Anon). Keep them timeboxed!

**Approximate time:** 5–10 minutes

**Credit:** Alex Baldwin at thoughtbot, Jared Spool for the On-and-On-Anon joke



## Review Research and Past Work

Following the pitch, share a deeper dive into the background and motivation for the project. Reviewing the current body of knowledge together will help to get everyone on the same page, and allow people to build upon what has come before.

### How

1. Make it clear that what was done previously will inform the activities during the design sprint, but there will be an opportunity to take things in a different direction if it's better.
2. Have a brief discussion of the background information or research that was sent out before the sprint.
3. Go over any other materials or things people know about the problem space but haven't yet shared.
4. Review any previous initiatives, including applications or prototypes the company has made to solve a similar problem.

**Difficulty:** Easy

**Size:** The whole group

**Materials:** Presentations of past project work (if applicable); screenshots or walkthrough of product (if existing); any relevant metrics, perhaps from a business intelligence report or marketing report

**Don't** overload the team with information. Cognitive (over)load is a thing. Also don't judge or get into debates. There will be plenty of opportunity to discuss different perspectives later in the day and throughout the design sprint.

**Approximate time:** Up to 1 hour

**Credit:** The team at thoughtbot

With the guidelines established and the background material covered for this sprint, the team can seek ways of inspiration to create a fantastic product.



# Get Inspired

When considering new possibilities, you will want to know where you're starting from so you can later diverge in order to generate a multitude of options. Going into a project, it's important to understand what constitutes success. Everyone on the team arrived with their own notions of what success is. Like the North Star for ships sailing in the 1700s, understanding in detail what the goals are can help you as you search for inspiration and direction.

## Goals and Anti-Goals

In this exercise, you'll define the objectives of the project so all get on board and agree with it. This can also help define the project's guardrails.

### How

1. Draw two columns on a whiteboard, one for the project's goals, and one for its anti-goals. Anti-goals are things that are explicitly not goals of the project.
2. Ask the team to brainstorm goals for the project. These should be high-level objectives, not features. For example, "Save \$75 million per year in increased production efficiency" is a high-level objective, but "Allow users to propose savings ideas" is a feature.
3. As each goal is suggested, allow the team to discuss it and agree that it's a goal for the design sprint or following project. If it's not, move it to the anti-goals column.

4. Ask the team to similarly brainstorm the anti-goals that are not needed for the project's success.
5. Identify the top three goals. Underline the #1 goal.
6. Capture and upload the list so the team can refer to it later.

**Difficulty:** Easy

**Size:** The whole group

**Materials:** Whiteboard and markers

**Don't** list features, list too many goals. You'll go nuts trying to meet them all.

**Approximate time:** 30 minutes

**Credit:** Graham Siener, Pivotal Labs<sup>1</sup>

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<sup>1</sup> <http://bit.ly/pivotal-pov>

## Goals

- all media types in One place
- all languages - unicode support  
RTL language support
- Single Sign On
- Single Platform
- Simple Display & Visualisation for Complex Meta Data
- Search & Filter Data
- aggregated Content from internal system
- be as asynchronous as the pipeline
- Repeated ease of use

## Anti Goals

- No DIY visualisations
- No Advanced visualisations
- Not to Reuse Suggested wireframes - but to use insights from them to create new simpler wireframes.
- no user-added content
- No insights

### Questions:

- Single sign on for which websites?
- Real time updates?

## Existing Product, Competitors, and Substitutes

As you continue to look for inspiration, it can come from an analogous solution in another industry. A competitor. An elegant solution to a different product you'd like to emulate in some way. With digital products, many solutions exist, so rather than reinvent the wheel, seek out solutions from other industries that might apply to your problem. They don't have to fit your problem exactly (remember, you're only seeking inspiration at this point). We often take a section of a wall and print out apps, screenshots, drawings, or web pages of things we find inspiring, useful, or maybe even want to replicate (or all this can be viewed online and projected onto a screen).

There's a risk of opening Pandora's box here, in that sometimes a team can get too focused on replicating what already exists, instead of solving what a user or customer really needs. Don't spend too much time on a deep dive of each of these; stick to a broad overview.

### How

1. Sync your monitor or phone to a large TV screen. Have someone bring up your existing site or app if one already exists, and walk through it to give the participants context. Discuss what's working well and what's not working well.

2. Invite participants to identify competitive and substitute products. Bring them up on the screen, or put a printout up on the wall. Discuss the strengths and weaknesses of each. Also consider what "non-products" are used. For example, when a customer uses pencil and paper to track event participants.
3. Do the same for aspects of apps or sites from other industries. For example, an onboarding flow or data visualization you might want to replicate.
4. Take notes on the areas that are inspiring. If you've put screenshots up, have everyone stick Post-its or dot stickers next to the areas they like the most.

**Difficulty:** Easy

**Size:** The whole group

**Materials:** Printouts or displayed screens of anything that inspires the team

**Context:** This is a good generative exercise best completed at the start of the sprint.

**Don't** go too deep or spend too long.

**Approximate time:** 30–45 minutes

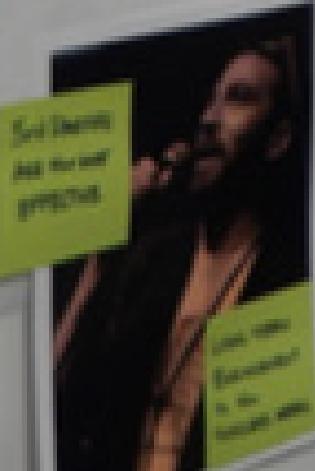
**Credit:** The team at thoughtbot

ES PASTA

Lots of  
surprisingly  
interesting

Old  
Not  
Connect

Resource  
can be  
an issue



Good things  
are not just  
good things

It's  
it's

Mac  
Pasta  
with  
cheese

It's not  
about  
the food



SOME is 70%

about  
the food

## Facts and Assumptions

Another way to find inspiration is to acknowledge the biases we each bring to the table, so everyone's aware of them and can overcome them when they need to. It's human to make assumptions and form biases. Just get over it: we are biased. These biases can influence our decisions, which will affect our ability to solve the right problem. Before we can solve tough problems and open new pathways, we need to escape the confines of our existing biases, break out of our mental habits, and call out the assumptions that we may have. Einstein famously observed that "You can't solve problems at the same level of thinking that created them." Pushing our brains to identify all the assumptions we have about a problem will unlock ways for us to try and solve it; facts and assumptions help to reduce your bias by identifying them.

Let's take a simple example: "I went to the supermarket yesterday and bought an apple because I was hungry." How many assumptions do you think are in that statement? More than you think. First, there's an assumption of causality: that being hungry causes the purchase of an apple. We don't know about you, but we often look in our cupboard or refrigerator first before going to the store for an apple. Second, that the supermarket has apples in it. Yes, in the United States this is common, but depending on time of year and location, it is not always true, and hence an assumption.

These same subtle assumptions and biases can haunt you if not properly identified at the start of a project.

This exercise is used to identify what data is on hand, what is still unknown, and most importantly, what assumptions the team is making. This helps to minimize confirmation bias (*it never* is eliminated) and baseline everyone in the room to understand the context of the problem at hand. This also helps to identify what knowledge gaps exist.

## How

1. Allow participants 3–10 minutes to individually document facts and assumptions (one fact/assumption per Post-it). Use one color Post-it for facts and another color for assumptions.
2. Invite each participant to share their assumptions as they post them to a wall or display board.
3. Ask participants to rewrite any successfully challenged facts on the assumption colored Post-its.
4. Document questions that arise during the group discussion process.
5. Ask participants to approach the wall or board of facts and assumptions in pairs to work silently grouping the facts and assumptions by commonality.
6. Partway through the process, replace the categorizers with two new participants, allowing them to undo or redo any work previously done; continue to replace categorizers every few minutes until all Post-its are categorized.
7. Once half the Post-its are categorized, give the categorizers medium-sized Post-its to add category headings.

**Difficulty:** Hard

**Size:** Individuals, pairs, and the entire group

**Materials:** Sharpies, medium-sized Post-its, small Post-its in two colors

**Context:** This is a good generative exercise completed at the start of the sprint. It must be done before determining insights.

**Don't** let questionable facts go unchallenged, as they may be assumptions (anyone can challenge a fact or an assumption). Let the group jump to insights without a full exploration of the facts and assumptions.

**Example:** “9% of current customers use feature X” is a fact; “current customers don’t understand how to use feature X” is an assumption.

**Approximate time:** 20–30 minutes

**Credit:** InnoLoft team at Constant Contact with inspiration from Craig Launcher of Assumption Storming

## Question Formulation Technique (QFT)

In addition to our biases, we likely have questions—lots of questions: Will this work? Is my idea as awesome as I think it is? How are users currently solving this problem? What are the best ways for your organization to solve this? A question-storming approach can be quite helpful in understanding the problem you’re trying to solve. Phil McKinney, former Hewlett-Packard CTO, made himself into a question specialist for the corporate world, and argues that crafting good questions is what allows people to make innovative breakthroughs: “The challenge is that, as adults, we lose our curiosity over time. We get into ruts, we become experts in our fields or endeavors.” Dan Rothstein, founder of The Right Question Institute, studies the art and science of asking questions.

*“Wielded with purpose and care, a question can become a sophisticated and potent tool to expand minds, inspire new ideas, and give us surprising power at moments when we might not believe we have any.”*

Dan and his cofounder Luz Santana created the Question Formulation Technique, which was initially made for teachers to teach children the skill of asking questions. However, we have found that this also helps teams generate questions about the project and uncover some interesting opportunities.

This exercise is used to bring to the surface the questions each participant has about a particular topic. This can align teams so they all know what questions everyone has on a particular topic.

## How

1. Provide a question focus: the area that needs exploration.
2. Inform participants about the QFT guidelines:
  - a. Ask as many questions as possible.
  - b. Do not stop to answer, judge, or to discuss the questions.
  - c. Write down every question exactly as it is stated.
  - d. Change any statement into a question.
3. Establish a time limit.
4. Post-up and sort per your preference.

**Difficulty:** Easy

**Size:** Individual and group

**Materials:** Sharpies and Post-it notes

## Context

This is a divergent exercise, so it is best used in the beginning of a sprint. It could precede or follow Facts and Assumptions. A good follow-up exercise is to converge onto the important questions to answer by voting.

**Don't** allow questions to be answered—it can be a rat-hole in the making. Don't let this go un-timeboxed.

**Approximate time:** 5–15 minutes

**Source:** The QFT is © The Right Question Institute 2011. Used with permission: <http://rightquestion.org>.

By this point in the day, you know which direction to go—you're feeling inspired and you're ready to dig deeper into the problem. If someone comes to you with a problem, most people start thinking about a solution. Hopefully the questions you've generated are more about the problem and not leading to one solution or another, because as soon as you start thinking of a solution, you risk missing out on possibilities for a deeper understanding of the problem.

# Define the Problem

What's the problem you're attempting to solve? This is one of the most important aspects and sadly, it is one that's overlooked frequently by the many teams and clients we have worked with. Since most designers and engineers are trained to design and build things, the propensity to create and deliver often overpowers the desire to understand why they are creating something. You can look at the copious amount of digital products that were created and went nowhere. Let's take a look at a few examples you might have heard of.

Airtime, the face-to-face video chat web application that was launched on June 5, 2012 with quite a splash. Shawn Fanning and Sean Parker (the famous Facebook investor), who created Napster, did a number of talk-show appearances and held a launch party that any record company would envy, well, except for the glitches.<sup>2</sup> The result? \$33M of funding with no users after 16 months of operation.<sup>3</sup>

What was the problem they were trying to solve for? Skype, Google Hangouts' and Apple's Facetime already had been in the market to solve these needs and Airtime offered little extra in the way of solving for another need. Had Airtime been more focused on the problem of video chat, it could have worked toward a better solution—instead they kept building and didn't pay attention.

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2 Erin Griffith, "Big Celebs, Big Ideas: The Double-Edged Sword of a Big Flashy Launch," June 5, 2012. <http://bit.ly/celeb-ideas>.

3 Milo Yiannopoulos, "There Is Literally No One Left on Sean Parker's Airtime," October 28th, 2013, <http://bit.ly/yiannopoulos>.

Facebook Home is (or was) a mobile digital product you might have tried on your Android device. We didn't. Did it even make any sense? It seemed to solve a problem for Facebook, which was keeping their users in their app, but it did not solve any real problem or need for the user. We have seen many companies start design sprints to solve their own problems rather than solve a problem for their users and/or customers.

To understand the problem you're solving for, you need to understand what information you have on hand about the current user behavior. Now that you've dug into the data and information you already have, and explored your facts, assumptions, and questions, you'll consider the problems your users have faced. Are there tangential related problems? Are there seemingly unrelated problems? The objective is to paint as complete a picture as possible to understand the context of the situation.

## Problem Statement

You can't define a good solution until you understand the problem you're solving. Defining that together gets the team on the same page and sets it as the North Star for the rest of the design sprint. This keeps ideas focused on the problem at hand, and other great ideas that solve a different problem can get added to the Idea Parking Lot.

### How

1. Distribute large  $3 \times 5$  Post-its and ask participants to individually write down potential problems the target user might have (one problem per Post-it).  
The following questions can serve as prompts:
  - a. What is the job-to-be-done?<sup>4</sup>
  - b. What is the problem that this product or service will solve?
  - c. What is the motivation behind what the user wants or needs?
2. Place the Post-its on a whiteboard, grouping similar ones together, drawing lines between them as needed to indicate themes.
3. Discuss the problem statement, and agree on the general problem to be solved.
4. Refine the problem statement and finalize the wording.

5. Rewrite the problem statement in a large format on a whiteboard or big Post-it and keep it visible throughout the sprint. This will be important to reflect and revisit if the conversation veers too far from the established problem.

**Difficulty:** Medium

**Size:** The whole group

**Materials:** Whiteboard, markers, and large Post-its

**Don't** write a compound problem statement that solves all problems and tries to be all things to all people. Use conjunctions like "and" and "or" sparingly, if at all. In addition, don't try to solve the problem yet. You're just trying to understand it.

**Approximate time:** 20 minutes

**Credit:** The team at thoughtbot

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<sup>4</sup> Clayton Christensen Institute, "Jobs to Be Done," <http://www.christenseninstitute.org/key-concepts/jobs-to-be-done/>.

Students don't receive  
enough guidance on how  
develop the skills that  
enable them to learn  
flourish.

## Reframe the Problem with Challenge Maps

Now that we've defined the problem, how might we reframe the challenge given what we collectively know? Taking all the information in, you may realize that your initial hypothesis might be the wrong one. If so, that's great! You'll congratulate yourself as this process has worked for you. As we mentioned earlier, there are plenty of stories about products being built that no one needs nor wants.

Why reframe? Often we see organizations thinking and speaking in terms of their features and their products, not the customer or the user's eyes (the paying customer and the user may not be the same person).

For example, have you ever purchased a pair of socks? Our guess is you probably have purchased many socks over your lifetime, and they are always sold in pairs.

In 2003, Jonah Staw, a product designer at the prestigious Frog Design was joking with Arielle Eckstut about how they could solve the problem of missing socks by wearing all the surviving socks that did not match. That silly joke inspired them to start LittleMissMatched. They reframed the problem from "I have missing socks" to "I can combine and wear these leftover socks" to "None of my socks match, and that's awesome!" They sold socks in "pairs" of three that have matching color palettes but no matching design patterns. Your suit-wearing Wall Street businesswoman might not wear them, but 11-year-old girls absolutely loved it. Eleven years later, the company is reportedly grossing over \$30M annually in sales.<sup>5</sup>

The ability to reframe a situation can lead to incredible breakthroughs, and it can also lead to small insights that you can leverage to delight your users. It all depends on

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<sup>5</sup> <http://bit.ly/mismatched-socks>

your perspective and the ability to shift perspective once you have all the context in front of your team. If you ask a team of engineers how to improve the experience of the Amtrak ride between Boston and New York City, they may offer all sorts of suggestions for improvements in the rail structures, suspensions on the train, and more comfortable seating. However, for the amount of funding it would take to implement that type of system and infrastructure, you might also be able to hire exceptional waitstaff as servers to serve top-shelf liquor and gourmet hors d'oeuvres to passengers during the trip. Rather than a shorter trip, passengers may start requesting a longer duration.<sup>6</sup>

This reframed the problem from a structural, smooth ride to creating an experience. The effort to improve that experience could be a much smaller implementation. These are the little details you'll want to seek out as you reframe the problem you're solving.

A technique that can help with this is to create challenge maps. A challenge map asks the questions "Why?" and "What's stopping you?" and forces you to consider the relationship between the possibilities. Once you've created a challenge map around a particular issue, you can start to see what might be blocking the way to a solution. Many times you start out in one area and learn that's not the area you need to focus on! With challenge maps, you can explore the problem you've identified and determine whether you need to restate it, reframe it, or solve a different problem altogether.

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6 From Rory Sutherland's TED talk (<http://bit.ly/brand-over-brain>)

## Challenge Maps

### How

1. Divide into pairs or small groups.
2. Write the Problem Statement on a large Post-it note, and place it in the center of a whiteboard or a flipchart page. Add “How Might We” (or “HMW” for short) before the text of the Post-it.
3. Challenge this initial statement by asking the group “Why should we do this?”
4. Answer that “why” question on another Post-it note and place it above the initial Post-it note. Add “How Might We” to the beginning of it. Now challenge that new statement with the same “why should we do this?” question, adding Post-its going upward. Repeat this until a natural endpoint is reached (such as “to make more money”).
5. You may find there are multiple reasons, so answering “why else?” will lead you to put Post-its to the left or right of each other.
6. In the downward direction, challenge each “How might we...” statement with the question “What’s stopping us from doing this?” Answer that question, then rewrite it to a “How might we...” question, and place it below that Post-it.
7. You may also find multiple reasons for what’s stopping you. Place Post-it notes to the left or right answering “what else is stopping us?”

8. Continue until a natural endpoint is reached.
9. With the entire group, review the Post-its that were created and see if any of the added statements would make a more applicable Problem Statement. If so, use that Post-it note to revise the Problem Statement accordingly.

**Difficulty:** Difficult—really, this is quite difficult

**Size:** Best in pairs

**Materials:** Flipcharts; large and small Post-its

**Don’t** do this in groups of more than four people.

**Context:** Good to start before or at the beginning of the sprint to explore the problem space before attempting to solve.

**Approximate time:** 15–20 minutes to start (can take longer depending on the size and nature of the project)

**Credit:** Min Basadur

OUR  
BIZNESS!

HMW...  
INCREASE  
CMRS VALUE  
↑ PROFITABILITY

CREATE TRUE  
BUSINESS  
for our CMRS?

HMW...  
INCREASE  
OUR CMRS  
MKT SAVVY

HMW...  
GET THEM  
TO MARKET  
their BIZ  
MORE

HMW...  
INCREASE  
OUR CMRS  
SUCCESSES?

HMW...  
MAINTAIN  
CMRS  
LONGER?

HMW...  
PROVIDE MORE  
EDUCATION  
IN BUSINESS?

FREE UP  
OUR CMRS  
TIME?

HMW...  
GENERATE  
LEADS for  
OUR CMRS?

HMW...  
CONNECT OUR  
CUSTOMERS IN A  
RELEVANT MANNER?

HMW...  
MAKE things  
SIMPLER?  
(for them)

HMW...  
MAKE THEM  
AWARE of  
EACH OTHER?

HMW...  
DEFINE  
WHAT IS  
RELEVANT for  
THEM?

HMW...  
IDENTIFY  
the RIGHT  
CONNECTIONS?

HMW...  
NAVIGATE  
LEGAL LANG.  
for T+C's

HMW...  
TEST WHAT'S  
RELEVANT in  
a CONNEXN?

HMW...  
MINE OUR  
DATA TO LEARN  
THIS?

HMW...  
GET OUT OF  
OUR OWN  
FUCKIN' WAY?

HMW...  
HACK BIG DATA!

# Know the User

In order to be successful, it is important to understand all the stakeholders surrounding a project, product, or service.

Regardless of what anyone else says, people are the ones to buy and use your product, so keep them at the center of your work. Personas are a good way to explore who those people are.

Personas are composite constructs of people, representations of the different types of people who use your product. They may be imaginary but they are not fictional, as they are based on knowledge of your customer base and/or user base. Personas are less about demographic data, and more about context, attitude, and behavior. If you already have personas from past work, that's excellent. You can bring the group up to speed and double-check that your assumptions are correct. If you don't have personas yet, that's OK; this is a great time to investigate the *who* you're solving for.

That said, it's important to define the difference between a user, a customer, and a persona. It's probably obvious, but to be clear, the user is a person who uses your product or service. A user might not be the person paying for or administering the product. A user may or may not be your customer. For example, a customer of

Google's AdWords may be the one setting up the ad (and paying for it), while another user may be a marketing director viewing the reports. Customers pay you money. Users use your product. They may be one and the same, but that's not always the case. Further, when you have multisided markets, as is common in marketplace apps like Airbnb or Lyft, you have multiple user types (i.e., multiple whos!).

The Who/Do exercise (from our friends who wrote *Gamestorming*) is a great way to begin to explore the stakeholder ecosystem. It answers two simple questions: *who* are the different stakeholders and what do you want to them to *do* with your product?

Once you know who the stakeholders are, you can flesh out more of the information about them. You won't have to consider all the stakeholders from the Who/Do exercise—one (or two) will suffice.

## Who/Do

### How

1. Draw a two-column table with “Who” on the left and “Do” on the right.
2. Ask the group: Who are the stakeholders? Who might be an obstacle? Whose support is critical to this project’s success? Generate an exhaustive list of whos, writing each on the whiteboard or on a Post-it.
3. The Do column is typically more challenging. For each who, ask: What do they need to do, or do differently? What do they need to do for this project to be successful?
4. If necessary, you can add columns—for example, “Gives” and “Gets.”
5. You can then rank and prioritize. If the choice isn’t obvious, you can have each participant indicate the most important whos/dos by sticking dots on them.

**Difficulty:** Easy

**Size:** Teams or pairs

**Materials:** Sharpies; large and small Post-its in a variety of colors; wall or display board (horizontally oriented); dot stickers (optional)

**Context:** Good when first examining stakeholders of a project/product. Empathy maps, personas, and user stories or job stories are natural follow-ons.

**Don’t** always drive toward action, as there is a tendency to say, “we just want them to understand.” Ask the group, “What will happen when they understand?”

**Approximate time:** 10–30 minutes

**Credit:** Dave Grey at XPLANE

# WHO

# DO

SANNY ANGEL

ANGEL FUND MANAGER

SUCCESSFUL ENTREPRENEUR  
↳ NEW ANGEL

LAWYER (REP'S ANGELS)

F.F.F.

REVIEW FINANCE  
• DUE DILIGENCE? →

REVIEW SITE / TEAM

GET EXCITED → SHARE // TELL SOMEONE  
Post on FBK / Twitter

INVITE TO APPLY FOR.....

RECOMMEND TO COLLEAGUES

VETTING PROCESS ... WHAT IS MONEY FOR  
SETUP FOLLOW UP PITCH

SAME AS SANNY



RECOMMENDS / ENDORSES

SENDS EMAIL TO ANGEL FUND

SEE - ANGEL FUND

Partnership

AGREE IN

DESIGN SPRINT 107

BOUNDARIES

## Personas

Now that you know who your most important stakeholders are, you can go deeper into their personas. This will humanize your users and give the product team a sense of empathy for the people they're designing and developing for.

### How

1. Do a quick recap of all the user information you have, both qualitative and quantitative (Discovery Interviews, site analytics, market research, etc.).
2. Categorize your personas with some or all the following information:
  - a. Persona category (i.e., information seeker)
  - b. Name (fictional names are often used, but sometimes using the first name of a real customer/user can help humanize further)
  - c. Job titles and major responsibilities
  - d. Backstory (demographics such as age, education, ethnicity, and family status; also include their physical, social, and technological environment)
  - e. Motivations (the goals and tasks they are trying to complete using the site)
  - f. Quote (this sums up what matters most to the persona as it relates to your product; preferably a real quote obtained during a Discovery Interview)
  - g. Images (photographs and images representing this user group)

**Difficulty:** Moderate

**Size:** Entire group (if more than five people are in the room, split into teams)

**Materials:** Sharpies; flipcharts; wall or display board (horizontally oriented)

**Context:** If you do not have preexisting personas, a great place to start is a Who/Do exercise and then base personas from the selected whos. Combine that with any data from your market research, and other primary Discovery Interviews to create a composite.

**Don't** talk about a product or solution yet. Talk in abstractions. In addition, don't add aspects to a persona that aren't based on real-world research—just consider their world and what they're trying to get done.

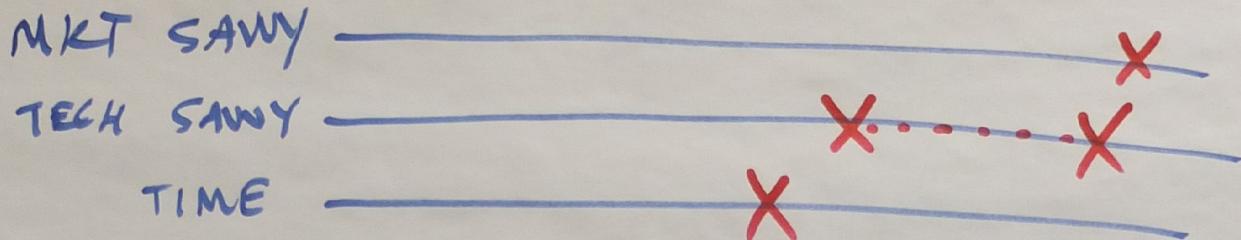
**Approximate time:** 30–60 minutes, depending on depth of data you have

**Credit:** Alan Cooper is considered the pioneer of personas



"ALLEN"

MKTG MGR @ RIKER-GO  
(a PR FIRM)



### FRUSTRATIONS

NEW CATEGORIES OF BIZ  
"UNFAMILIAR"

WANNABE MKTG FIRMS

MULTIPLE VARYING CLIENTS

CONSTANTLY EVALUATING TOOLS  
(TECH)

### NEEDS + WANTS

TO FIND NEW CHANNELS  
for CLIENTS

TO ~~REACHES~~ PROVE VAL  
JUSTIFY FEES

METRICS

SUCCE<sup>↑</sup>  
STO<sup>↑</sup>

TO STAY "ON BRAND"

### JOBS TO BE DONE

EFFICIENT MKTG \$ SEARCH for CLIENTS

## Discovery Interview

This is the first part of the design sprint where the team will get to talk to users and/or customers...you know: people! Research you may already have on hand will tell you the what and when of a user's actions, but the why remains elusive and the best way is to converse directly with an actual user to discover this information, and any other relevant information that may help drive the design of a product or service.

As an example, when Dana Mitroff-Silvers began a design sprint for the Denver Museum of Nature and Science, she started by running all the participants through an introductory "wallet project" design-thinking exercise from Stanford's d.school:<sup>7</sup>

*"It's essentially the wallet exercise from the Stanford d. school, but I change it out every time with a different design challenge based on where I'm going and who the group is. We've designed a morning commute. We designed the ideal neighborhood. We designed a Sunday night experience. It all depends on who I'm working with."*

By completing this exercise up front, she was able to navigate the remainder of the sprint and refer back to it to reinforce its concepts as necessary during the rest of the sprint, ultimately bringing a sense of empathy to the team. After the introductory exercise, she sent everyone out into the museum to observe and interact with museum goers:

*"We get ready to go out and do the real interviews; we talk about what the design challenge is, and then we talk about questions you might ask. Sometimes I let people draft their own questions; sometimes I give them starter questions. It depends on how much time and the group's comfort level and then I send them off to do interviews. Sometimes we do some observation of museum visitors out in the gallery: "What are they doing? What are they using? What kind of figures are you seeing?"*

Larissa Chavarria at The Advisory Board does something similar: although she doesn't have the luxury that the museum has with a location full of users to access, she has her teams get on the phone with users. Because of the nature of their product, sometimes users are internal employees and there's easier access, but for many teams, scheduling interviews on short notice is a challenge.

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<sup>7</sup> The Wallet Exercise is 90-minute project through a full design cycle. Participants gain an experiential introduction to the phases of the design approach and some shared vocabulary. (<http://bit.ly/wallet-proj>).

*"After each interview, the team gets together and does a team debrief. After every interview, we have sticky notes, and it's two minutes to write down, 'what do you think the user really wanted or what was surprising?' Having the sticky notes helps people who are maybe more introverted or some people who are stronger at the table can sort of overpower a meeting. The sticky note process is great because everyone silently brainstorms. You put them up on the wall and you say, 'OK, this is a recurring theme. You group those together. This is an outlier, we didn't think about it.' Then you vote, 'do you think this is important? Or is this a totally random thought?' It's a good process to make everyone equal."*

Once they have completed the interviews, her team creates a matrix to determine which observations are important to drive the next phase.

Conducting a Discovery Interview is a great way to delve deeper into the context of the problem. We encourage video and audio recordings of these whenever possible so that the entire team can hear the customers' own words.

## How

1. Create a brief description (up to two sentences) of a goal of what you seek to learn.
2. Select some icebreaker questions—something that

will build rapport with the interviewee. Remember: They are a human, too!

3. Make a topic map rather than specific questions.
4. Have one person ask the questions where possible. Let the user focus on them. Downplay the other people present.
5. After an introduction, briefly describe the reason for the interview, and work through the topic map.
6. Thank them and ask for their email address (to follow up with a thank-you note!)

**Difficulty:** Difficult

**Size:** Best in pairs, but if users are in limited supply, the whole team can listen in

**Materials:** A/V recorder; notepad and pen; camera; topic map; users to talk to

**Context:** Best on the first day of the design sprint after everyone's received a data-dump and has completed the earlier exercises.

**Don't** talk more than you listen, or ask leading questions.

**Approximate time:** 15–30 minutes per interview; 60 minutes total (or longer if the schedule allows)

## User Journey Map

Now that you've gotten to know the user, you'll want to look from a holistic viewpoint at what the users are doing before, during, and after the time they use your product. This will add context to your project and highlight opportunities you may have otherwise missed. We often see teams focusing only on areas where the customer is engaged in using the product, and they miss out on many opportunities to create delightful experiences based on that behavior or entry point.

Using an experience map or a user journey map is an excellent way to visualize the journey. In a user journey map, you break down the journey of each persona into different stages. Once you have all of those stages (and goals for each stage), you can see the touchpoints where the user would interact with your product or service. "Touchpoints" are the interactions of personas with the product or service. Keep in mind that the different personas you created earlier may have different needs, attitudes, and behaviors—however, their journeys may remain the same. They might not, hence the need for this journey map.

Let's consider a search engine optimization (SEO) example. Before a user is thinking about SEO, she is writing content for her blog, creating marketing collateral, or perhaps responding to a review on Yelp. Maybe she's taking a call from a customer or writing an email in response to a support ticket. All these activities can yield insight into how you might engage users who are undertaking SEO activities. Understanding the user's situation is key to defining the context and the opportunities your team has to create a solution that not only meets, but also delights.

A journey map documents the stakeholder experience from beginning to end, inside and outside of the product to identify opportunities for ideation. Further, the team will keep the waystations on the user's journey map in mind as they sketch their ideas during the Diverge phase of the design sprint.

## How

1. Divide group into smaller teams according to the number of key stakeholders or personas you are completing journey maps for.
2. Each team defines the stages of the current stakeholder experience from beginning to end on large Post-its in a horizontal line at the top of the wall or display board.
3. For each stage, define the goal(s) the stakeholder has for that stage; write these on small Post-its, one goal per Post-it, and place directly beneath the corresponding stage.
4. Continue this process for tasks and tools.
5. Next, map the stakeholder mental state by either drawing a moving line(s) across all the stages (high = happy, low = unhappy) or by noting significant points of mental state with happy or sad faces, or the corresponding emotion label (e.g., relieved).
6. Based on low points on the mental state, list needs, then opportunities, on small Post-its, one need/opportunity per Post-it, and post below the corresponding stage.
7. If necessary, perform a vote (using dot stickers) to determine primary opportunities to move forward with.

**Difficulty:** Moderate

**Size:** Teams

**Materials:** Sharpies, large and small Post-its in a variety of colors, wall or display board (horizontally oriented), dot stickers (optional)

**Context:** Good to do after background activities and before ideation activities. It's not necessary to complete every level of analysis for all journey maps. Choose the analysis points that meet the needs of each design sprint. It's best that journey maps focus on existing workflows, but they can be modified to map out proposed goals and needs to define what should be built.

**Don't** just focus on the product workflow; you'll want to include product elements that are part of the user's current path that does not involve interaction with the product. Don't leave out the user's mental state, as this is a significant eye-opener.

**Approximate time:** 60–90 minutes

**Credit:** Various sources

# Patient Experience Map

Yakima Valley Farm Workers Clinic

Phase	Triggering event and pre-event	Choose/schedule care	Apply for benefits
Channel	Radio, TV, billboards, word-of-mouth	Social, phone, web, word-of-mouth	Patient benefits coordinator
New Patient	<p>Heart attack → ER → Rehabilitation → Released from rehab &amp; urged to seek a primary physician.</p>	<p>Research → Scheduled → Calls multiple providers</p> <p><b>Danger Zone:</b> Poor customer service can permanently lose a current or potential patient.</p>	Referred to patient benefits coordinator <p>Scheduled → Established as cash patient</p>
Established Patient	<p>Positive pregnancy test</p>	<p>Call → Scheduled</p>	
Trust	<p>High</p> <p>We know the YVFWC has a good reputation in the community and can reasonably expect to start out with a high level of trust</p> <p>Low</p>	<p>If time is only available in the distant future trust can erode quickly and completely.</p>	Benefits paperwork should be comparable anywhere, but the PBCs can gain trust here. 
Thinking Feeling Doing Saying Seeing Hearing	<p><b>Doing:</b> Going to community events sponsored by clinic.</p> <p><b>Hearing:</b> Peers talk about clinic.</p> <p><b>Thinking:</b> “I can trust them.”</p> <p><b>Seeing:</b> Friends/family are getting treated affordably.</p>	<p><b>Doing:</b> Asking others about clinics. Making calls to a few clinics.</p> <p><b>Saying:</b> “I’m too busy.”</p> <p><b>Thinking:</b> “I don’t have time to go to the doctor, but my family needs me to be well.”</p>	<p><b>Doing:</b> Applying for Medicaid or ACA.</p> <p><b>Thinking:</b> “This paperwork is overwhelming.” “Do I actually qualify for benefits?”</p>
Pain Points	<ul style="list-style-type: none"> <li>Patient has no care history.</li> <li>Patient has care history with a different provider.</li> </ul>	<ul style="list-style-type: none"> <li>Scheduling: personal availability, availability of providers or locations.</li> <li>Problems are potentially more urgent than patient is willing to state.</li> </ul>	<ul style="list-style-type: none"> <li>High volume of paperwork.</li> <li>Difficulty in applying for coverage.</li> <li>Can’t pay for care.</li> <li>Lack of identification, fluidity in naming conventions, name change.</li> </ul>

Wait for appointment	Appointment day	Follow-up
Reminder in mail	In-person	Phone, mail
<p>New patient wait time is usually from 1 to 4 weeks depending on many factors.</p> <p><b>Danger Zone:</b> A long wait for an appointment increases the chances of a patient finding another provider, cancelling, or not showing up.</p>	<p>Reminder card received</p> <p>Patient checks in      Seen by provider</p> <p>Waiting &amp; paperwork      Checked out &amp; given pay options</p> <p><b>Danger Zone:</b> Long waits can create negative sentiment.</p>	<p>Care plan follow through depends on patient and their family.</p>
<p>Patient may be seen in as little as one day if established and on a treatment plan.</p> <p>Reminder card received</p> <p>Patient checks in      Seen by provider</p> <p>Waiting &amp; paperwork      Checked out &amp; given pay options</p> <p>Payment follow up?</p>		<p>Future appointments determined by care plan established with provider.</p>
<p>The longer a patient has to wait to be seen, the lower trust can drop.</p>	<p>Again, there's a lot of room to lose trust here, but the quality of care YVFWC offers can put it on the higher end.</p>	<p>The quality of follow up contact provides a lot of opportunities, to build trust and to build habits of healthy living and care.</p>
<p><b>Doing:</b> Waiting. Condition may be changing, for better or for worse.</p> <p><b>Thinking:</b> "I can't wait so long to see a doctor." "Why does it take so long to be seen?" "I'm better, I don't need to keep my appointment."</p>	<p><b>Doing:</b> Filling out additional paperwork. Getting benefits counseling. Getting treatment. Paying or deferring to benefits.</p> <p><b>Thinking:</b> "Why do I have to wait so long?" "The care here is really good."</p>	<p><b>Doing:</b> May or may not be keeping up with care plan. May ignore follow up communication. May never receive follow up communication.</p> <p><b>Thinking:</b> "Do I really have to stick to this?"</p> <p><b>Saying:</b> "They took really good care of me."</p>
<ul style="list-style-type: none"> <li>Patient gets sicker while waiting.</li> <li>Patient finds another clinic.</li> <li>Patient talks themselves out of seeing a doctor.</li> <li>Competing priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Long clinic wait times.</li> <li>Transportation difficulties.</li> <li>Patient shows up late (won't be seen).</li> <li>Provider is running behind.</li> <li>Clinic is overscheduled.</li> </ul>	<ul style="list-style-type: none"> <li>Missing or incorrect contact details.</li> </ul>

## Daily Retrospective (Plus/Delta)

What have we learned? We've taken the data we have and considered those constraints. We've spent all the energy and effort up to this point understanding and identifying the problem. This is a good time to take a step back to reflect on your work and appreciate what was accomplished, and allow everyone to propose improvements and share concerns, and plan action items.

The end of the day is an ideal time to do a retrospective, even if that falls in the middle of one of the design sprint phases. It's a great way for the team to come together before everyone leaves for the night, giving closure to the day by reflecting on it and planning for tomorrow.

There are many common retrospective formats. We recommend a Plus/Delta approach.

### How

1. Draw two columns on a whiteboard: one for a “+” (plus: what went well) and one for “ $\Delta$ ” (delta: the Greek symbol for change).
2. Ask the group to reflect on what was positive and capture those thoughts under the “+” column.
3. Ask the group then to candidly brainstorm what they would change about the day, and put these

under the “ $\Delta$ ” column.

4. For each item in the “ $\Delta$ ” column, list any action items that can be taken. For example, “revisit the challenge statement to include Larissa's feedback about older users.” Address these action items in the next day's activities, or note them for future sprints.

**Difficulty:** Easy

**Size:** Everyone

**Materials:** Whiteboard or Post-its

**Context:** Done at the end of every phase, except the Prototype phase, which requires a longer, more in-depth retrospective of the entire design sprint.

**Don't** ignore or skip over this exercise; daily reflection will help you continually monitor your progress. Don't think that every delta is an immediate action item, or allow deltas to become just “what I didn't like.”

**Approximate time:** 10–15 minutes at the end of each day, 30 minutes at the end of the design sprint

**Credit:** Plus/Deltas are found in the book *Gamestorming*. The earliest known use of the Plus/Delta game is at The Boeing Co circa 1980.



## **Team Drinks: Less Filling and Tastes Great!**

As the first day concludes, take the opportunity to go out with the team if you can. Getting out of the conference room will give you a fresh perspective, and the conversations you have will forge connections with your colleagues that will last the duration of your project and beyond. You will likely be tired toward the end of the remaining days of your sprint, so take advantage of this.

Drinks are a low-pressure way to get together without a big time commitment. The people who are local will then be able to get home to their families at a reasonable hour. Make sure you leave early enough; we prefer to leave for drinks no later than 4:30 p.m. (or 5 p.m. at the latest). If people want to spend more time after, anyone who chooses to can go out to dinner.

If there isn't a good place to go nearby, raid the beer and soda fridge and have a chat in your company's lounge or café. It's almost as good, and you can't beat the price!

Pace yourself; the second day of a design sprint is coming up soon and will be an intense one. Equally attractive nonalcoholic beverages (EANABs) are also always an option!

### **How**

You need instructions for this?

1. Go forth and get drinks!
2. Enjoy.

## Takeaways:

- Inspire yourselves with background materials and other solutions to similar and related problems.
- Define the problem and take time to understand it and the data you currently have about it.
- List out all your assumptions, facts, and remaining questions that your current data and research do not answer.
- Conduct Discovery Interviews so your team can understand who they're designing for.
- Create personas to humanize your users. They are people too!
- Map out the user's current journey or experience so you have a full visual context of the problem at hand. You'll be able to identify which areas to focus on creating a solution or a fix to a current friction point.





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