Design Sprint: What to Expect, How to Prepare

A Guide to Help Your Team Get the Most from the Design Sprint Process
Why Design Sprints?

Design sprints are often confused for a brainstorming session where teams try to problem-solve as a group by throwing ideas around. But this is not the case. A design sprint is far more effective than traditional brainstorming. It brings more expertise to bear on the problem, including business leaders and, more importantly, the customers or end-users. The design sprint process forces more structure on simple brainstorming, and results in better outcomes.

The Design Sprint process has been widely popularised by Jake Knapp from Google Ventures, but its origins can be seen in the Stanford design school’s workshop frameworks and product design firm, IDEO’s deep-dive short design cycles. Some psychological elements are also derived from Edward de Bono’s Six Thinking Hats.

What kinds of problems can design sprints be used to tackle? They can range from huge to small. Here are some examples:

- **Discovery workshop.** This is where even the nature of the problem is vaguely understood, and the goal of the sprint is to develop a clear picture of what a project needs to address.
- **Solution design.** The problem is well defined. Customers/users are known. A business mission or goal can be stated quite clearly but may need to be polished.
- **Complex problem.** These can arise in the middle of a project. Some aspect of the problem has turned out to be harder to figure out than initially thought so a hard sharp focus on just this one thing is needed to overcome it.

The structure of a design sprint is a five-step approach to tackling and solving a problem. Each step, like de Bono’s six thinking hats, uses a different way of thinking about the problem. The steps are outlined and sequenced in a specific manner, but in practice, a good facilitator can mix things up a bit as the work unfolds. Let’s look at how the steps work.
The Five Steps

The standard design sprint runs the five steps over five days, each day focusing on a different approach to the problem. But the process can also be run in a couple of days or even a half day. It all depends on the size and complexity of the problem. I'm going to present the process in the traditional five-day approach. The days are often labeled Learn, Sketch, Decide, Prototype, and Validate.

It is important to recognise that a design sprint embodies Design Thinking, which is a multi-disciplinary process that fully engages the key business, technical and design team members in the process, adding user or customer input to the mix to validate that the solution is creating the value it is intended to create.

Here is an overview of what each day/step is all about, plus some notes on the key activities for the day. The days/steps are given different names by different practitioners, but once you understand what each step is about, you can use any term that makes sense to you and your team.
Monday - Learn/Understand

Is all about priming the pump - filling the team with the background, the data, the information, the understanding - that the team needs to tackle the problem successfully. The management sponsors and representatives from sales and marketing will make presentations that frame the problem and the desired outcomes of the sprint. This preparation work, done before the sprint begins, is critical to the success of the sprint. This includes agreeing on a mission statement or the goal for the sprint.

This information imparted by your internal people is important, but because we are solving for actual users, we also bring in customers and end-users for interviews about their needs, desires, aspirations and motivations. These insights will really guide you in all that you do for the rest of the week. If what you hear from customers contradicts what you hear from your own people, then you know some discussions needs to take place before the day ends.

Sometimes the goal that was stated in the morning needs to be revised at the end of this first day. The last thing done at the end of Monday is to create a hypothesis that will be tested on Friday when we test our prototype with users. We identify the key learning objectives for the sprint, so we can stay focused on that object during the week. Sometimes this is labeled a “problem statement,” a sharp focus on the key issue the group is to address.
Tuesday - Sketch/Ideate

Is a design-led day for blue-sky brainstorming. This is the traditional “there are no bad ideas” part of the process. There are a number of exercises that have been designed to get the brains in the group dancing with the elements of the process, but just as with all brainstorming processes, it’s messy, it goes in circles, it can be frustrating, and group dynamics have to be managed carefully so that the day makes progress. Design sprints use a number of structured activities to both elicit fresh thinking and to keep overly critical responses from disrupting work.

Here are some exercises you can try with your team:

- **Challenge map.** Working from the key challenges that the business has provided and the desires and frustrations that users identified, create “How might we?” cards or sticky notes. For each challenge, write down ideas for addressing the problem. Big, small, technical, crazy - the focus is on quantity of ideas, not quality. Share ideas with the group, ask questions, but don’t critique. Then do another round. The good ideas will inspire other ideas, hybrid ideas, refinements. The bad ideas quite naturally fall away. Do this for several elements of the problem. You can create a quadrant map of the solution ideas, using whatever axes make sense. For example, one axis could be for ease of implementation - easy/hard, and one for value to the user - don’t want/must have.

- **Six-ups.** Divide one sheet of paper into six boxes and spend five minutes quickly sketching six “solutions” to one element of the problem. This might be a “How Might We?” card that generated a lot of enthusiasm. Sometimes it’s hard to get started with Six-ups, especially if people make the typical “I’m not a creative person; I can’t draw” excuses, but any kind of sketch can work - stick figures, flow charts, a jumble of buttons with words on them, anything that gets an idea across. Once your team gets the hang of Six-ups, they’ll let go of the “pretty pictures” hang-up and just start to blast out concepts. Again, share your first attempts with each other (limited to one minute or less per sketch), and ask questions but don’t critique.

- **Dot-voting.** At any time during these exercises, you might take a pause and dot-vote a collection of solution ideas. Members of the team put a marker or dot on the idea or solution that they see as the best option. This is a quick way of developing consensus on which ideas seem to be moving in the right direction. Instead of a long-winded discussion (argument!), you’ll get a sense of where the team is at. This does not mean that some particularly tricky issue that comes up should not be discussed, but try to avoid getting bogged down and ending the day not having developed enough ideas.

- **3-12-3.** This one doesn’t necessarily design a solution to the problem, but it is a really good way to expand thinking. Select a “How Might We?” challenge and boil it down to two words. For three minutes everybody writes down (on separate cards or stickies) as many nouns and verbs as they can think of that relate to that two-word distillation. Put all those words into a pile. Working in pairs, randomly select three words from the pile and use these to inspire a solution to the “How Might We?” topic. Each team then spends three minutes presenting their solution to the group. Then dot vote the solutions that have potential. This exercise is a good one to use if the group seems to be stuck at any time during the day.

**Journey map.** This is something that can be done at the beginning of the day as part of cementing the understanding that was gained from users on Monday. It can be handy for developing the “How Might We?” questions. And it will likely be revised as the week goes on, when moving from a current state to a future state solution.

Sketch is a day of high energy, frustrations, breakthrough moments, creative tensions and, ultimately mental exhaustion. And, of course, you get out of it what you put into it. Allow for the energy to rise and fall, for the inevitable light and dark moments to come and go. Keep at it. Ideas will find their way from our dark subconsciousness up into the light.

At the end of the day you might do a final dot-vote of some elements you’ve created, but do not make any decisions. You’re exhausted. Go home and get a good night’s sleep.
**Wednesday - Decide/Refine**

Is for sorting through the craziness of Tuesday to find the ideas that seem to address the problem most successfully, then to combine and flesh out those concepts into a proposal for a working prototype that you will build on Thursday, the prototype that will be used to test your hypothesis. Part of the strategy for the prototype is to focus on the most important elements, so make sure you prioritise what needs to be built according the key learning objectives of the sprint. This way, if you do run out of time, it is the least important elements that remain undone.

You may need to bring back some management people from Monday for advice, feedback or additional insights. You may need to contact one of the users you interviewed to ask any clarifying questions. This day will require more brainstorming, but it is less about new ideas than it is about refining what’s already been conceived, combining ideas and creating the glue elements that pull it all together. By the end of the day you will have created a concrete proposal and outline of the work that will be done tomorrow.

**Thursday - Prototype**

Is a hard-core work day spent building a prototype of the proposal. It should be as close to a polished look-and-feel representative of the final product as you can make it, but if a paper prototype is the best you can do, so be it. But remember, the quality of the feedback you receive on Friday is directly correlated to the quality and fidelity of the prototype. Building a great prototype is hard work, so make sure everyone on the team knows this is a day to be ambitious and focused. Bring in extra work hands if you need to.
**Friday - Validate/Test**

Starts with bringing back your customers/users from Monday and observing them as they use the prototype. There are guidelines on how you can do this, so the tester is not influenced by how you solicit their feedback, but an experienced UX designer or design facilitator knows how to do this properly. The results of the user tests are then collated and analysed.

A presentation is made to the sponsors and business people that you worked with on Monday, and the results are discussed. The outcome of Friday is one of two successful results - either you know that you have developed a workable solution to the problem, or you now have a much better understanding of the problem and how to address it through further effort. When Thomas Edison was asked how he felt about how it taking over 900 failures before discovering a successful element for his light bulb, he replied that he did not fail 900 times, he conducted 900 successful experiments that guided him toward the successful solution. No, this does not mean that it will take 900 design sprints to solve a problem, but you get the point!

My experience is that a successful design sprint will get you to an 80% confidence level of knowing that the solution you are working on is the right approach to the right solution. The rest will get resolved when you proceed with work. For early project design work, this is a good result.

See the After the Sprint section below for some follow-up suggestions, but it’s a good idea to end Friday with a Next Steps planning session. A number of loose ends - further research, user follow-ups, archiving, thank you notes, etc. - need to be captured, assigned and calendared. This is the time to do this, because believe me, you’re going to sleep all weekend long, and you’ll have forgotten by Monday!
Participants - The Right Team, the Whole Team

Who should participate in a design sprint? Probably more people than you’ve included in a brainstorming session in the past. Business sponsors will only need to participate on Monday, Wednesday and Friday. Users will be involved on Monday and Friday, although you might want a check-in with them on Wednesday to help guide some decision-making.

Everyone who is actually developing the solution should participate all week. This includes business analysts, the product owner, system architects, software engineers, designers of various stripes (service, user experience), and, if they are also wearing “help make the thing” hats, a scrum master and/or project manager might be involved. If these people are not contributors to the “what is it” thinking, perhaps they won't be involved. However, the group should not be too big. Five to seven participants are as big a group as you should have for the design sessions. If the project team is bigger than that, pare it down to key roles, but make sure all disciplines are represented - business, technologists, analysts, designers and users working together to understand and tackle a problem. By the end of the week, those that are reluctant to participate will realise that they had some of the best breakthrough ideas of the whole group, and they appreciate that their discipline was well represented in the development of a feasible approach to the problem.

Another common complaint is that in addition to the challenge of getting this much time from people (see Preparation below) this is an expensive week. Yes, it is a big investment. But trust me, you are going to spend money solving this problem one way or another. It is actually cheaper to solve it this way than the stumbling bumbling twelve steps forward, ten steps backward approach that happens when we aren’t working as a cohesive, problem-focused team.

Another benefit of this approach is that by talking directly with users/customers at before anything is developed, understanding what really matters to them, and validating a meaningful prototype with them - there is a good chance that you will reduce the feature set and ultimately save money by not doing work that is not important to the end goal of your work. Management will be happy to know that a project can be smaller, less expensive, and delivered sooner than expected.

One issue you may run into is someone saying something like, “I’m not a designer, and I’m not a creative person. I’ll just email you the data or the requirements document, and you guys can go from there.” But please remember, Design Thinking is not “designers thinking,” it is the collaborative teamwork of business people,
Preparation

One of your first steps will be to invite the participants. You will need to send invitations far in advance (and negotiate those dates carefully and aggressively). One of the biggest challenges to mounting a successful design sprint is getting the dedicated time from all those people for an entire week. You will get resistance on this, especially if those people are attached to other projects, or if they all report to different department heads. You simply must impress upon everyone involved that the process works because all these disciplines are working together - teaching each other, challenging each other, inspiring each other to stretch and achieve. All these people will work on the project eventually, but now is the time to develop a design approach with all these perspectives considered when they matter - when the seed is first sprouting.

Allow for adequate prep time. It can take as many hours of prep time as it does in sprint time - 40 hours for a 5-day sprint. You will need to work with project sponsors to solidify the brief, to agree on the sprint goals. This will help determine the participants list. The Monday presenters will need time to prepare their research and presentations. Your sales or marketing people need time to line up users or customers for the Monday and Friday sessions, because if you’re not talking to, working with, and validating with real end users, you will not end up with the quality result that a design sprint is capable of coming up with.

I recommend that an experienced facilitator plans and runs the sprint. This could be a seasoned designer or someone who’s good at coordinating multi-disciplinary energies. Some phases of the design sprint process are by their very nature chaotic, frustrating and confusing, but a good facilitator will help the group stay focused and navigate through all the brainstorming craziness. If the facilitator is outside the team or the domain, allow for a bit more time to get this person up to speed. Allow time for them to read background material, ask some key questions, and have their agenda reviewed before starting.

If the facilitator does not have experience with design sprints, I can recommend two great books that will help you prepare:

- Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days - Jake Knapp
- Design Sprint - Richard Banfield, C. Todd Lombardo, Trace Wax

Either of these books will guide you through all the preparation and operation of every step of the process.

Book your facility, determine your A/V needs, gather your supplies - sticky notes, newsprint sheets, whiteboard markers, blu-tack. You are going to burn through sticky notes and wear out whiteboard markers, so stock up. Make sure the room has lots of wall space for building out charts, diagrams, maps. Book the room exclusively for the duration of the sprint, so everything can stay intact until the sprint is over.
Collect all the artefacts that were created during the sprint and archive them so the team can access them easily. Publish the results. Share the prototype with others. Share the “Next Steps” plan with others, and do all the other best practices stuff, like make clear assignments, deadlines, communications to all relevant parties. People who were not involved to the sprint will be curious about how things went, so share that with people.

Make sure you have a retrospective, especially if a design sprint is a new process for your team. It is common that a first design sprint for a team was pretty messy, even if the result was a good one. But by reviewing how things went and agreeing on ways to do better, subsequent design sprints will be more and more productive.

Design sprints are a powerful way to incorporate Design Thinking across the full spectrum of disciplines that it takes to solve a problem. If you make the effort that they require - the payoff can be huge.