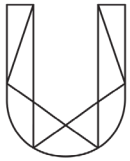# From Ideas to Action

Toolkit

IDEO

From Ideas to Action

This is our toolkit to help you prototype, ideate, and iterate your way forward.

ABOUT THIS TOOLKIT

Throughout IDEO U's From Ideas to Action course, we have created activities for you to do so you can get real practice with others. We're all about **learning by doing** here.

This toolkit is a companion piece for the course that will also help you with your own projects. The more you continue to practice this in your work, the better you'll get at bringing your ideas to life and experimenting your way forward.

Welcome!

WITHIN THIS TOOLKIT YOU'LL FIND

+ An overview of each lesson

+ Project assignment worksheets

+ Advice and tips from some of the best in design thinking

We encourage you to keep practicing and have some fun!

3 Lenses of Design Thinking

These three lenses help us frame the design thinking process. They'll be increasingly relevant as you make your way through this course.

1 DESIRABILITY

We also refer to design thinking as a human-centered process because it begins with people. We want to listen to the dreams, wants, and *desires* of others, and then propose a solution that addresses what people *need* and *value.*

2 FEASIBILITY

The solutions that surface should be *feasible.*

We start here! → **DESIRABILITY**
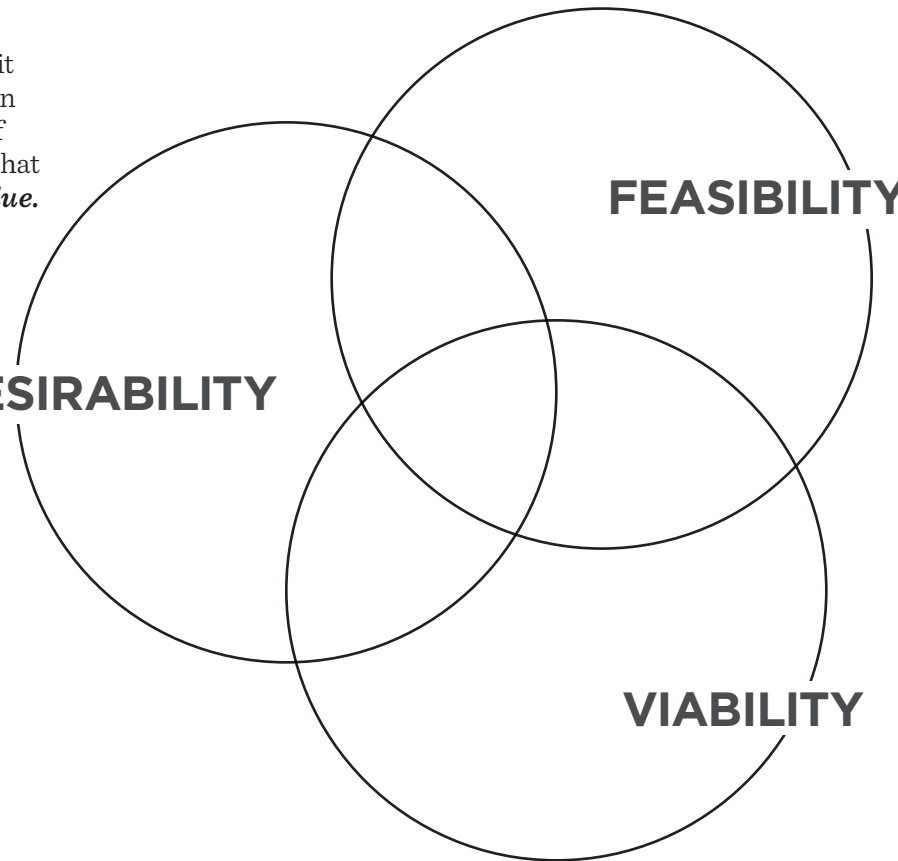
FEASIBILITY

VIABILITY

3 VIABILITY

And they have to be sustainable in different environments. They should make solid *business sense.*
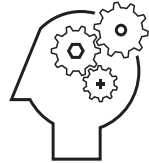
Ideate, Prototype, and Iterate Your Way Forward

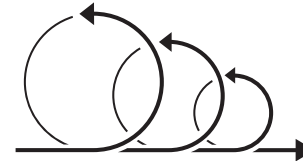*Here are three skills to help you move from ideas to action.*

Skills to Move From Ideas to Action

IDEATE

Generating lots of ideas quickly and choosing the right ones to move forward with. Your mindset here is **be playful.**

PROTOTYPE

Making your ideas come to life by building something rough and rapid. Your mindset here is **build to think.**

ITERATE

Repeating ideation and prototyping over and over to refine your idea and move it forward. Your mindset here is **experiment your way forward.**

5 Strategies for Gathering Insights

Soon you'll be sharing your ideas and prototypes with others. Insights serve as a good launch point for these skills. In case you have not taken our Insights for Innovation course, here are five strategies for gathering insights.

Gathering Insights

1 PRACTICING OBSERVING

When we observe, we "listen" with our eyes to see what people care about as they interact with places, products, and people.

2 LEARNING FROM EXTREMES

You can learn a lot from extreme perspectives that stretch your thinking and inspire bold, new ideas that push beyond your initial assumptions.

3 CONDUCTING A GREAT INTERVIEW

Getting your interview questions right is important, but it's not everything. Body language and rapport are just as important for building trust and getting to deeper insights.

4 IMMERSING IN EMPATHY

Sometimes you have to walk a mile in someone else's shoes. Making a personal, emotional connection will motivate and energize you to respond creatively.

5 SHARING INSIGHTS

Take what you've learned through observing, learning, interviewing, and immersing in empathy and distill it down into a few key insights. Share them with others for feedback and buy-in to help fuel the next phase: ideation and prototyping.

Choosing a Challenge

Lesson 0 Assignment: Choosing your project challenge

We believe in learning by doing. Consider your five-week experience a sandbox – or a place to take risks and try out new methods. You need a problem on which to practice these tools, so that at the end of the course you feel equipped to take them out and apply them to the challenges in your own organizations and communities.

What is a project challenge?

WHAT IS A PROJECT CHALLENGE?

A project challenge is a "How might we" statement that invites you to apply what you've learned in this course to a "real life" situation or scenario.

Framing your own challenge can be difficult and time consuming – it could take the whole five weeks if you let it! We instead want you to be able to jump right into trying out these new skills. We have crafted a series of project challenges for you to choose from, all designed to be the right size and scope for this course.

The challenge you select will serve as the common thread throughout your course experience. Each assignment will help you explore your chosen challenge from a new angle – through ideating, prototyping and iterating – and position you for the final project.

CHALLENGES

+ How might we design new products and services for the modern 70 year old?

+ How might we design a better experience for people on public transportation in your area?

+ How might we inspire households to adopt healthier eating habits?

+ How might we encourage children to read more?

+ How might we encourage more purposeful collaboration in the workplace?

TIPS FOR CHOOSING A CHALLENGE

• *Consider a problem you aren't as familiar with*. It is easier to see with fresh eyes in a new context, because you come in with fewer assumptions.

• *What excites you?* Choose a challenge you can't wait to dig into. (We think that all of these challenges offer opportunities to design meaningful and innovative solutions.)

• *Whom do you have access to?* Getting to test out your ideas with your intended users is an important learning moment.

EXPLORING YOUR CHALLENGE

After choosing your challenge, *consider the following questions:*

+ What existing assumptions might you have around the challenge?

+ Why is there a chance for a new opportunity in the current landscape?

+ What makes this challenge appealing to you and what do you hope to learn and explore?
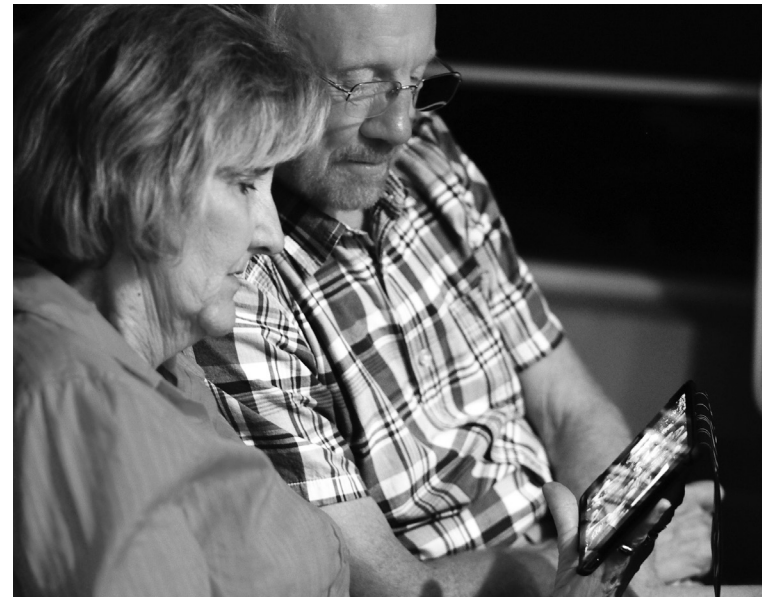
Choose a Challenge:
Today's 70 Year Old

Take a closer look at each of our project challenges.

Challenge

HOW MIGHT WE PROVIDE NEW PRODUCTS AND SERVICES FOR TODAY'S 70 YEAR OLD?

Time passes, and we age. That's about as certain as death and taxes. As we age, our daily routines can become trickier. Fortunately, there are many products that help with the aging process. You might have noticed the buttons on your grandfather's telephone that appear larger than life. Or maybe lifts on public transportation that allow the elderly to get to their seat easier. Or even a service for improving quality of life, like global tourism for senior citizens. But what else has yet to be invented? How might you provide new products and services for today's 70 year old?

Choose a Challenge:
Public Transportation

Take a closer look at each of our project challenges.

Challenge

HOW MIGHT WE IMPROVE THE COMMUTING EXPERIENCE FOR PEOPLE ON PUBLIC TRANSPORTATION IN YOUR AREA?

Since the Industrial Revolution, public transportation has moved large numbers of people within residential and commercial districts and from urban areas to towns, suburbs, and villages cost-effectively and efficiently. Research has shown that public transportation can improve health benefits, save people and cities money, bridge gaps in social and economic mobility, and improve our environment. Unfortunately, many people dread their commute each day, and as a result, more people choose other methods of transportation. But what if we reimagined the public transportation system? How might *you* improve the commuting experience for people on public transportation in your area?

Choose a Challenge: Healthier Eating Habits

Take a closer look at each of our project challenges.

Challenge

HOW MIGHT WE INSPIRE HOUSEHOLDS TO ADOPT HEALTHIER EATING HABITS?

As a child, would you rather have eaten carrots or dessert? For most children, the answer is dessert. It just tastes better at that age. In 2013, an estimated 43 million children (under the age of five) suffered from early obesity globally, a 60% increase since 1990. Some might blame this increase on a shift in exercise habits with the advent of video games, tablets, and cell phones. Others might point to the family structure and a decline in family mealtime routines. Regardless of the cause, children have less focus and energy without proper nutritional intake. So, what might *you* do to solve this challenge? How might you inspire households to adopt healthier eating habits?

Choose a Challenge: Children Reading

Take a closer look at each of our project challenges.

Challenge

HOW MIGHT WE ENCOURAGE CHILDREN TO READ MORE?
Reading has been proven to have extremely positive efects on childhood development. Children who are avid readers often have better communication skills, more empathy, higher self-esteem, and advanced brain development.

Yet studies have shown that reading for pleasure has declined sharply in recent years for children. Interestingly enough, the digital revolution has dramatically increased platforms to read on. But therein might lie the problem. Children are choosing to chat with friends online, watch movies and television, and game instead of reading for pleasure. But what if we could make reading fun again? How might you get kids to read more?

Choose a Challenge: Collaboration in the Workplace

Take a closer look at each of our project challenges.

Challenge

HOW MIGHT WE ENCOURAGE MORE PURPOSEFUL COLLABORATION IN THE WORKPLACE?

When tackling complex challenges in the workplace, it's important to bring together diverse perspectives and skill sets. Once in place, teams need to find ways to collaborate. Collaboration in the workplace isn't getting any easier: individuals can be spread out across the globe, share different values, and feel pressure to be independently efficient rather than collaborative.

What might you do to promote cross-pollination and different ways of working together? How might you encourage more purposeful collaboration in the workplace?

Note: Using your own workplace as the focus for this course is difficult, as you will be coming in with a strongly held set of assumptions. And your own office can be a hard place to step outside your comfort zone and take risks.

If you are interested in this challenge, we recommend that you do not focus on your own team, meetings or workflows. Look for inspiration and opportunities in teams and organizations that work differently than you.

What insight might you glean from collaboration in a restaurant kitchen or amongst a team of doctors? Or, consider investigating parts of the organization that you don't normally engage with (increasing collaboration around recycling efforts, for example).

The Art of Ideating

The Art of Ideating

IDEO U Lesson Overview.

LEARNING GOAL

This lesson's goal is to get comfortable with generating an abundance of ideas—even ones that might seem ridiculous at first.

WHAT

What Is Ideation?
Getting comfortable with divergent thinking

ACTIVITY

30 Circles Activity
Exercising your fluency and flexibility

HOW TO

Ideation Methods
Ways to generate ideas

7 Brainstorm Rules
Leading your own brainstorm

ACTIVITIES

Zoo Ideation Activity
Increasing attendance at the local zoo

Observe Experts Brainstorming
See an IDEO team in action

HOW TO

Converging After Idea Generation
What to look for in the real world.

PROJECT ASSIGNMENT

Generate tons of ideas around your project challenge and converge on your top choices.

MINDSET

BE PLAYFUL

TOOLS

30 Circles Worksheet, pen, paper, Sharpie, Post-its and stickers for "voting."

INTRODUCTION

Ideation is all about quickly coming up with lots of ideas to explore options for solving a problem. A playful mindset is key. In this lesson you'll learn how to diverge and choose the ideas you'd like to move forward with.

What Is Ideation?

*Here are a few things to consider when getting playful with idea generation. Have some fun with it, and you'll unlock some **brilliant** and **outrageous** ideas along the way.*

What is ideation?

GOING FOR QUANTITY OVER QUALITY

The more ideas you come up with, the better chance you have to reach a truly brilliant solution.

WORKING WITHIN CONSTRAINTS

It works best when you apply some rules and deadlines to your creative session. For example, you might limit yourself to one hour during a brainstorm.

THE BRILLIANT AND THE RIDICULOUS

It's often hard to tell the difference between what is ridiculous and what is brilliant, so encourage both.

DIVERGING A BIT LONGER

Stay in the mindset, continue to exercise your creative muscles, and don't rush to convergence. It's not time for decision-making yet.

A TEAM SPORT

It helps to have diverse perspectives when you're coming up with lots of ideas. If you're working alone, find ways to pull people in—anyone can ideate.

REMEMBER

Ideation is about exploring options to answer a question.

KEY TAKEAWAY:

"I believe the opposite of play is boredom."

— **BRENDAN BOYLE**

4 Ideation Methods

You can use these methods when coming up with lots and lots of ideas. You can also explore other options or even create your own. This list isn't exhaustive by any means.

Ideation Methods

BRAINSTORM

For many, this is the bread and butter of ideation. Get lots of people together, follow seven simple rules, and watch as the ideas flow.

MASH-UP

This method is about bringing odd or unexpected things together to spark fresh ideas (e.g., hospital + mini-bar = a healthy, non-alcoholic beverage station in a hospital room).

OTHER PEOPLE'S SHOES-STORM

This method encourages you to look at a challenge from different perspectives. You can do this by role-playing a scenario or drawing up a rough storyboard.

E-STORMING

A clever way to get a bunch of people who aren't in the same office to ideate together is to send a shout-out over email. Remember: subject line, the request, and the follow-up are important.

KEY TAKEAWAY:

"Ideation is about shared invention. Attaching a single person to a single idea hinders collaboration and greatness."

— BRENDAN BOYLE

30 Circles Activity

Here's your chance to warm up your creative muscles. The goal of this activity is to turn ordinary circles into recognizable objects in a very short period of time.

Activity

PARTICIPANTS
Solo or group of any size.

TIME
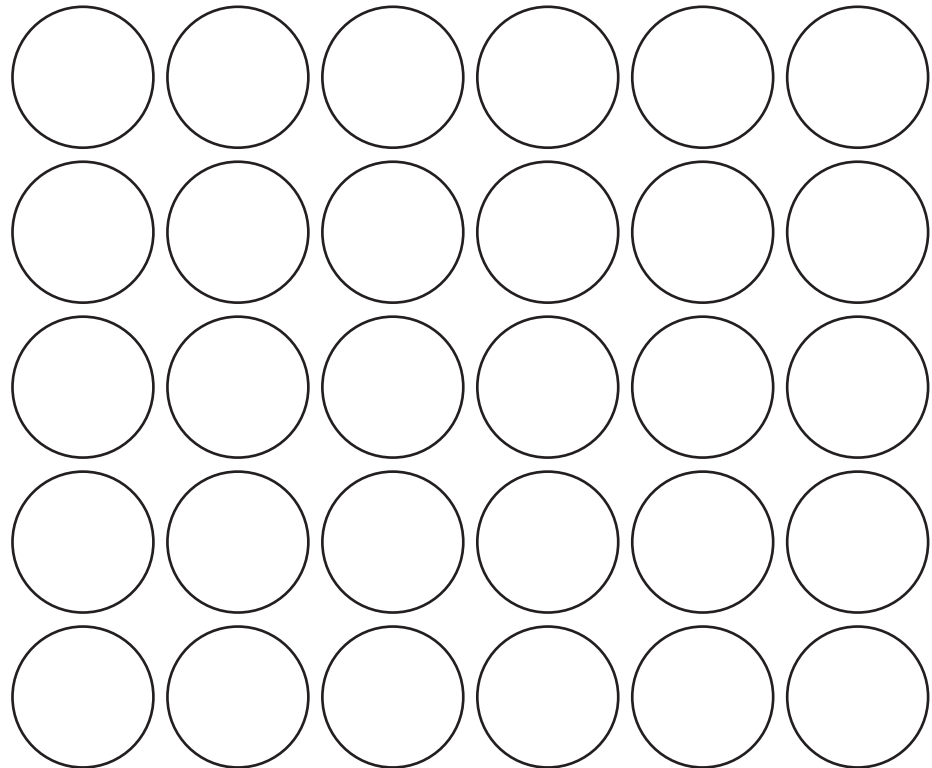Three minutes.

WHAT YOU NEED
Pen and this worksheet.

PROMPT
Turn as many of these blank circles as you can into recognizable objects in just three minutes.

REMEMBER
A key to ideation is giving yourself tight time limits. Deadlines motivate and help focus the creative process.

7 Brainstorm Rules

Here are seven simple rules that will help you get the most out of your brainstorm. Post them on your wall if it helps.

Brainstorm Rules

1 DEFER JUDGMENT

Creative spaces don't judge. They let the ideas flow, so people can build from one another's great ideas.

2 ENCOURAGE WILD IDEAS

Embrace the most out-of-the-box notions. There's often not a whole lot of difference between outrageous and brilliant.

3 BUILD ON THE IDEAS OF OTHERS

Try to use *"and"* instead of *"but."* It encourages positivity and inclusivity and leads to tons of ideas.

4 STAY FOCUSED ON THE TOPIC

Try to keep the discussion on target. Divergence is good, but you still need to keep your eyes on the prize.

5 ONE CONVERSATION AT A TIME

This can be difficult, especially with lots of creative people in a single room, but always think about the challenge topic and how to stay on track.

6 BE VISUAL

Use colored markers and Post-its. Stick your ideas on the wall, so others can visualize them.

7 GO FOR QUANTITY

Crank your ideas out quickly. For any 60-minute session, you should try to generate 100 ideas.

Zoo Ideation Activity

Run your own ideation session to generate ideas for how to increase attendance at the local zoo.

Activity

PARTICIPANTS

Solo or group of any size.

TIME

No more than one hour.

WHAT YOU NEED

Pen, paper, Post-its, and whatever else you'd like to use.

IDEATE

You're working for a local zoo and attendance is down 20%. How might we boost the number of visitors to the zoo? We'd like for you to get one to four people to help, but if this isn't possible you can do it solo—just pick another ideation method outside of brainstorming.

IDEATE

Grandparents and their grandkids, teenagers, and adult visitors in their 20s and 30s without kids.

Converging After Idea Generation

You're probably pretty comfortable with convergence—you do it every day.
It's important to focus your energy and narrow down your options.

Convergent Thinking

WHAT IS CONVERGING?

Converging is about focusing—not settling on what ideas are simplest to execute.

WHAT ARE EXAMPLES OF CONVERGING?

You decide what to eat for dinner. You start with tons of ideas (e.g., noodles, meat, soup), but you choose to eat noodles at your favorite restaurant.

REMEMBER

Don't rule out ideas that seem too edgy or risky. You shouldn't converge too far too fast. Further out ideas are really important early on. Embrace them.

STEPS TO CONVERGE

1 Vote
Give everyone in your group three to five votes and ask them to place a sticker on their favorite ideas.

2 Cluster
Start looking for similarities between ideas and cluster them together to see if any themes emerge.

3 Discuss
The core team or individual should summarize what ideas came out of this ideation phase and discuss or consider which to prototype.

4 Decide
While you can certainly invite input from others, the final decision belongs to the core team or team leader.

REMEMBER

You can still follow similar steps when you're alone. Just get a bit creative!

Lesson 1 Assignment: Ideate

Pick an ideation method and begin to generate ideas around your project challenge. Then, choose your top three to five ideas. In this assignment, you will plan an ideation session, ideate with two to four people, and choose your top ideas.

STEP 1–PLAN FOR YOUR IDEATION SESSION

Plan an ideation session with two to four people. You might do this with workmates, friends, or family members. If you can't get a group together, use at least one of the ideation methods on your own. Plan for thirty minutes.

+ What's your challenge?

+ What ideation method have you chosen? (Bonus point if you include why you chose that method)

+ Who will be involved?

+ How will you help people participate? (Think about how you will set the stage and keep others inspired)

STEP 2–IDEATE

Lead your ideation session. And make sure to document. We want to see the range and depth of your thinking.

REMEMBER

It's important to *diverge* for as long as possible. Be sure to exercise those creative muscles and push past obvious solutions.

+ How many ideas did you generate?

+ How long did you ideate for?

+ How did the session go? Reflect on what felt like it worked and what didn't.

STEP 3–CONVERGE ON TOP IDEAS AND CAPTURE HIGHLIGHTS

Consider the wild, brilliant or that perfect mix of the two. You will return to these top ideas in the next lesson. They will also appear in your final project report.

REMEMBER

Look for general themes before you choose top ideas. Use the *steps to converge*: vote, cluster, discuss and decide which ideas to move forward with.

+ What were your top three to five ideas and why? Walk us through your process for selecting these ideas.

Rapid Prototyping

Rapid Prototyping

IDEO U Lesson Overview

LEARNING GOAL

This lesson's goal is to inspire you to rapidly build your ideas. You will make your ideas tangible so you can share them, get feedback on them, and push them even further.

WHAT

Why Prototype?
Make your ideas tangible and shareable

HOW TO

Types of Prototypes
Anything can be prototyped

ACTIVITY

Show Me Your Prototype
Predict what became of early prototypes

HOW TO

3 Steps for Prototyping
Build, share, and reflect

ACTIVITY

Tinfoil Hats Activity
A fun, fast prototyping activity

Tinfoil Hats in Action
IDEOers tackle the challenge

PROJECT ASSIGNMENT

Build a prototype, share it, and reflect on the feedback you receive.

MINDSET

BUILD TO THINK

TOOLS

Pen, paper, Sharpie, Post-its, roll of tinfoil, scissors, tape, construction paper, and any other art supplies you might have on hand (e.g., Play-Doh, clay, foam core, poster board, Magic Markers).

INTRODUCTION

Getting tangible with your ideas is a great way to work through the kinks and get to better solutions faster. We call it "building to think." In this lesson you'll learn the hows and whys of prototyping as you build something yourself.

Why Prototype?

*Making your ideas tangible allows you to gather feedback and improve them. Consider the following when making the jump to **rapid prototyping.***

We Prototype To

BUILD IN ORDER TO THINK

Seeing and interacting with your ideas is a great way to work through kinks and allows you to get to better solutions faster.

GATHER FEEDBACK FROM STAKEHOLDERS AND END USERS

Feedback is a gift that allows you to learn and move forward with your idea. Thank your critics. They will help you get to better solutions.

FAIL EARLY TO SUCCEED SOONER

Getting tangible and asking for early feedback allows you to make inexpensive mistakes rather than finding out that something isn't working too far down the road.

REMEMBER

The longer you wait, the harder it is to begin.

KEY TAKEAWAY:

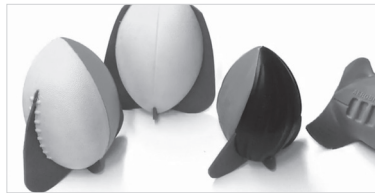*"Never attend a meeting without a prototype."*

— DENNIS BOYLE, BOYLE'S LAW

Types of Prototypes

A prototype can be anything.

Prototype Types

PHYSICAL

When we created the Aerobie football, we tried out multiple rough physical prototypes so that kids could play with them and we could observe what worked and was fun.

DIGITAL

With the Monster Maker app, we wanted to work out an engaging experience without investing heavily in programming. So we made a digital prototype out of paper, cardboard, people, and a video recording.

EXPERIENCE

When prototyping comfort on airplanes, we wanted to see how close was too close with respect to comfort, space, and passengers.

KEY TAKEAWAY:

"A prototype is just your idea of what the future might look like."

— DAVID KELLEY

3 Steps for Prototyping

Here are three steps for making your ideas tangible so you can begin telling your story to others.

Prototyping Steps

1 BUILD

Get tangible quickly. Get rough. Get physical. Tell your story to the world.

2 SHARE

Don't try to sell your idea, and do your best not to defend it. Welcome feedback from customers and stakeholders.

3 REFLECT

Listen carefully to what others have to say, and think about how you might respond with your next prototype. Sometimes it's all about reading between the lines. Pay attention to body language.

REMEMBER

The days of revealing the perfect solution are over (or at least, they should be).

KEY TAKEAWAY:

"Strong opinions, weakly held."

— DAVID KELLEY

This means you want to feel excited about your prototypes, but not too attached to a particular design early in the game.

Tinfoil Hats Activity

Build your own prototype.

Activity

PARTICIPANTS

Solo or with others.

TIME

30 minutes

WHAT YOU NEED

Tinfoil, scissors, tape, construction paper, a camera, and a few friends, if possible.

BUILD A HAT

Grab a roll of tinfoil, scissors, tape, and construction paper, if you have it. Design and build a hat using only these simple household items.

Start off by thinking about who the hat is for. Maybe it's for you or (even better) a friend. If you can talk to that person ask about his/her hobbies and how he/she likes to spend his/her time. Sketch ideas for no more than five minutes (your sketches can be rough), then take 15 to 20 minutes to bring one of the sketches to life. That's right. You're building a prototype!

Advanced Tips for Sharing Prototypes

In case you need a little extra guidance and support, we're giving you some advanced tips for sharing your prototype.

Prototype Sharing Tips

CONSIDER YOUR AUDIENCE

Get tangible quickly. Get rough. Get physical. Tell your story to the world.

HOW TO SHARE

You might tell a story, act out a skit, or create a playful advertisement for your prototype. Do whatever works.

WHAT NOT TO DO

Don't try to sell your idea, and don't defend it.

WHAT TO DO

Listen actively and welcome constructive criticism. Pay attention to body language—it's sometimes more important than what people are actually saying.

REMEMBER

Prototypes should be props that help you tell a story.

Lesson 2 Assignment: Prototype

Now that you've converged on some ideas, it's time to bring one to life. In this assignment, you will plan for your prototype, build a prototype, and share it with others. To get the most out of this assignment, we suggest that you involve two to four people. That means you might not complete this in one sitting. Dust off your sketchbook, grab some materials, and get ready to get **rough.**

STEP 1–BUILD

Grab whatever arts and crafts supplies you have handy and take one full hour to build a rough prototype. Don't worry about making it perfect. Just make something...anything!

REMEMBER

You're in the early stage of *rapid prototyping* where *rough is right.*

SET THE CONTEXT FOR US:

+ What's your challenge?

+ Who's your audience?

+ What unmet need are you solving for through your idea?

WHAT DID YOU BUILD?

Document your prototype building and final creation. You can share your prototype as a comic strip, storyboard, or advertisement. Or, it can be a simple sketch or photo of what you made.

+ What's the name of your idea?

+ When or where will people use this? How will people interact with your idea?

STEP 2–SHARE YOUR PROTOTYPE WITH OTHERS FOR FEEDBACK

Share your prototype with one to three people: If you have the time and ability, test your prototype with your users. If not, use friends, colleagues, family members or your peers in the course (try asking those in your Learning Circle).

CONSIDER:

+ What do you want to learn with your prototype?

STEP 3–REFLECT ON WHAT YOU LEARNED

Capture highlights from your feedback sessions.

+ What did you learn about your idea, your user, and the problem?

+ How will the feedback you received inform your next steps?

Iterating Your Way Forward

Iterating Your Way Forward

IDEO U Lesson Overview.

LEARNING GOAL

This lesson's goal is to learn the process of iteration as a skill for moving your idea forward through multiple rounds of ideation and prototyping.

WHY

Why We Iterate
Fail early to succeed sooner

HOW TO

4 Steps to Iterate
Managing risk and refining your ideas

ACTIVITY

School Lunch Activity
A closer look at school lunch and iteration

PROJECT ASSIGNMENT

Apply the four steps to iterate to your project challenge.

MINDSET

EXPERIMENT YOUR WAY FORWARD

TOOLS

Pens, paper, and your favorite arts and crafts supplies.

INTRODUCTION

When we iterate, we repeat the process of ideation and prototyping to refine and move our ideas forward. This process helps us fail early to succeed sooner. Our ideas get bolder and tighter as we make important choices that move us from ideas to action.

Why We Iterate

Ideating and prototyping are like mouthwash. You have to rinse and repeat over and over to get the most out of them. In this way, iteration is repeating these first two skills to move your idea forward.

We Iterate To

LEARN THROUGH TRIAL AND ERROR

You have to ideate and prototype repeatedly before you move forward. It's all about sharing and receiving feedback. These two things will help you improve your idea and get it that much closer to where it needs to be.

EXPERIMENT OUR WAY FORWARD

Think of yourself as an experimenter. If at first you don't succeed, you should probably keep at it. Failure is one hundred percent necessary.

SAVE TIME IN THE LONG RUN

Many people make the mistake of racing forward once an early idea gains traction. But iteration actually saves you time in the long run. When you iterate, you manage risk by repeatedly checking your assumptions and answering more refined questions.

WHAT TO DO

Fail early to succeed sooner.

KEY TAKEAWAY

"I haven't failed. I've just found ten thousand ways that do not work."

— **THOMAS EDISON**

4 Steps to Iterate

Use the following four steps when you're refining your ideas and moving them forward.

Iterating Steps

1 LIST YOUR QUESTIONS

Sit down with your big idea and return to your three lenses of design thinking. Ask yourself what questions you have.

1 DESIRABILITY
We also refer to design thinking as a "human-centered" process because it begins with people. We want to listen to the dreams, wants, and *desires* of others, and then propose a solution that addresses what people *need* and *value.*

We start here!

FEASIBILITY

DESIRABILITY
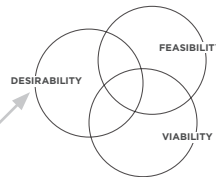
VIABILITY

2 FEASIBILITY
The solutions that surface should be *feasible.*

3 VIABILITY
And they have to be sustainable in different environments. They should make solid *business sense.*

2 PRIORITIZE TOP QUESTIONS

What is the level of *urgency* and *dependency?* Figure out which questions need to be answered first. You'll get to them all eventually, but you need a place to start.

3 IDEATE TO EXPLORE OPTIONS

Before you take your idea to the next level, diverge again around the best answers to your top questions. You're trying to learn from your assumptions at this point.

4 PROTOTYPE TO BUILD, SHARE, AND LEARN

Continue building and sharing with others to answer top questions about desirability, feasibility, and viability.

REMEMBER

Be persistent as you take more calculated risks and get closer to your end goal.

School Lunch Activity

Apply what you've just learned about iteration to a "real world" scenario.

Activity

PARTICIPANTS
Solo or with others.

TIME
30 minutes.

WHAT YOU NEED
Paper, markers/pens, and your favorite arts and crafts.

PRESENT
You're tasked with presenting on the School Lunch Project In this presentation, you will need to address a series of questions to catch people up to speed:

+ What are the questions they were iterating to solve?

+ What did you learn about their approach?

You're welcome to share this as a written report, slideshow or any other visual medium.

Lesson 3 Assignment: Iterate

*This assignment will get you thinking critically about **what you've done so far** and **what you still need to do**. You will list questions that will help you iterate, prioritize those questions, ideate again (and again), and plan for the future.*

STEP 1–LIST YOUR QUESTIONS

Reflect on what you learned in Assignment 2. Now use the three lenses of design thinking (*desirability, feasibility,* and *viability*) to create questions that will guide your next round of prototyping. Come up with two to three questions for each lens.

For desirability: Consider what else you need to know about your user and their needs.

For feasibility: Consider the realities and mechanics of how your solution will actually work.

For viability: Consider how your solution fits into existing systems, and the business model necessary to make your idea sustainable.

STEP 2–PRIORITIZE TOP QUESTIONS

Rank your six to nine questions in order of most to least important. How would you rank your questions and why?

Consider the following questions to help guide your decision-making:

+ Which do you need to tackle earlier?

+ Are some more critical than others?

+ How might the answer to some depend on the answer to others?

Lesson 3 Assignment: Iterate (CONTINUED)

*This assignment will get you thinking critically about **what you've done so far** and **what you still need to do**. You will list questions that will help you iterate, prioritize those questions, ideate again (and again), and plan for the future.*

STEP 3–IDEATE TO EXPLORE OPTIONS

Return to your ideation methods and pick another one to try. If possible, grab a handful of people (we suggest two to five) and facilitate another ideation session around your top questions.

REMEMBER

You're **diverging** again (but not as widely as in Lesson 1) to explore ideas that might provide answers to your top questions.

+ Which question did you ideate around and why?

+ What were some highlights from the session?

STEP 4–PREPARE A PLAN TO PROTOTYPE

Make a plan for what you would prototype next. Consider the following questions to inform future iterations:

+ What could you prototype to help you learn?

+ Who would you involve and why?

+ What resources would you need in order to make it happen?

Final Project Assignment

Final Project

Create a pitch summarizing your key takeaways and highlighting your plans for the future. Who should hear this story, and what do they need to know to help you continue to address this challenge?

You might create your pitch through a three to six-slide presentation, a one-page text document, or a three-minute video.

STEP 1–REVIEW YOUR PREVIOUS ASSIGNMENTS

What are the key takeaways from each lesson?

What were some common themes from your feedback?

How might these inform your final pitch?

STEP 2–WRITE, RECORD, OR DESIGN YOUR PITCH

Put everything together in a concise, creative, and compelling way. Your pitch should address the following questions:

Current situation
What are people's needs? What are they missing?
What is the current reality like without your idea/prototype?

Recent learnings
What have you tested and learned so far?

Future opportunity
What do you want to create to improve the future?
What questions are you trying to answer? Why is it valuable?

Resources and needs
What do you need to make this a reality? Who do you need to involve? What funds, time, or resources do you need?

STEP 3–SHARE YOUR PITCH

Share your pitch with others. Be sure to include any relevant context (e.g., your challenge, your audience, the need you're solving for, sketches of early prototypes, etc).

Framing Your Own Challenge

Framing your own challenge

After the course finishes and you take these tools out into your organizations and communities, use this worksheet to help you frame your own challenges.

Challenge

WHAT DO YOU KNOW ALREADY?

Describe existing assumptions around the challenge (current paradigms, industry norms, default mindset) and the reasons why this problem exists.

WHY IS THIS IMPORTANT TO YOU?

Describe the personal or professional reasons that make this problem appealing to you. What do you hope to learn and explore?

FRAME THE CHALLENGE

Describe the challenge you see. Paint a picture of the current landscape and why there is an opportunity for a new solution.

It should be:

+ Focused on a need (rather than a functional benefit)

+ Broad enough to allow you to discover unexpected areas of value

+ Tight enough to make the topic manageable

+ Phrased as a goal, e.g., "To understand how people manage their time within the context of their social lives"

Too Big
How might we reduce staff turnover?

Too small
How might we pin compensation to seniority?

Just right
How might we create a working environment that inspires loyalty?

Too big
How might we get more healthy kids in the world?

Too small
How might we get more kids to walk every day?

Just right
How might we positively engage kids with their own exercise and fitness?

Framing your own challenge

After the course finishes and you take these tools out into your organizations and communities, use this worksheet to help you frame your own challenges.

FOCUS YOUR CHALLENGE

Use these questions to help focus your challenge

1. ***Have you baked a solution into your problem statement?*** That doesn't leave you very much room for creative thought.

2. ***Is your question generative and inspiring?*** You should feel giddy to get started.

3. ***Have you narrowed down your audience?*** Is your audience specific enough that you know what they need and care about? You can't solve for everyone at once.

4. ***Have you chosen a specific part of the journey to design for?*** What moment might your solution exist in? Narrowing your timeframe helps unearth contextual needs.

5. ***Have you drawn on insights or inspiration to make your question juicy and interesting?*** Adding some texture about what is driving the needs of your audience can help your team be more generative.