

DESIGN  
FOR  
DELIGHT

# Design For Delight

## **Intuit's #1 Innovation Capability**

Design for Delight's goal is to help businesses create awesome solutions that their customers, employees and partners will truly love. When we create solutions people love, it dramatically improves our businesses, our lives and ourselves.

"Design for Delight" is a set of principles which describe how we innovate at Intuit. Each principle includes a variety of techniques which can be used to improve the chances of success when exploring new ideas, improving our products or working better as a company. Anyone can learn these principles, and anyone can use them to improve the world around them.



# Welcome

Thank you for joining us for our “Data Science + Design Thinking” session at the O’Reilly Artificial Intelligence Conference!

The best AI products are a team effort by data scientists and designers. Great data scientists work at the intersection of math, statistics, and software engineering. Great designers bring a unique combination of creativity & deep customer understanding. Together, they provide a perfect blend to achieve the best user experience.

Of course, bringing these disciplines together isn’t as simple as putting them in the same room and hoping for the best. Data scientists and designers speak different languages and hold different mindsets.

To bridge the gap and drive innovation here at Intuit, we’re staunch advocates and practitioners of the Design for Delight methodology. It’s a simplified approach to what the Stanford University d.school calls Design Thinking. And, it’s been instrumental to Intuit’s success in developing AI/ML-driven software and services that help consumers, self-employed individuals, and small business owners make better financial decisions.

The techniques you learn today will inspire you to be bold, think creatively, and help you learn how to try new ideas in your business.





# Example Follow-Me-Home Flow

In this example, imagine a team from QuickBooks Online is interested in learning more about the pains and problems customers experience when sending invoices to their customers. One team member has a friend who owns a small business, so they ask the small business owner if they can visit her office.

**Before you go:** Make sure the customers you plan to visit are real customers or potential real customers. In this case, make sure they send invoices frequently. Ask one or two team members to join you, so you'll have multiple perspectives, and help recording what you hear and observe. Respect your customer by arriving at the customer's location on time.

**When you arrive...** Set the context (5 min)

You: "Nice to meet you [customer name]. Thank you so much for taking the time to meet us today. Our goal is to learn more about challenges you encounter when sending invoices to your customers. We are hoping to learn from you."

**Observe and dig in deeper** (15-45 min)

You: "OK, let's get started. Can you show me how you send an invoice to one of your customers? (Observe, and listen to the customer's story.)

You: "That was very interesting. Can you show me more?" (Observe)

You: "Why did you do it that way?" (Listen to the customer's answer.)

You: "Interesting, can you show us what you did next..?" (Observe)

(continue asking questions as needed...)

**Clarifying questions you might ask:**

Why do you do it that way?

What is good about the process? What do you hate most about it? Why?

What's the very next thing you do afterwards? What do you do before? Why?

Can you show me exactly how you do it in detail, step by step? Why those steps?

Do you mind if I take a quick picture of it (then take a picture)?

**Wrap up**

You: "Wow, [customer name]. We really learned a lot by watching how you work. We'll use this information to help us improve the product. Thanks so much for your time today." (End the follow-me-home visit)

**Debrief as a team**

As soon as possible after the Follow-me-home (in the car ride back to the office or at a nearby coffee shop), ask to hear your teammates' observations.

You: "OK team, what pain points did you observe? What surprised you most?"



# The Customer Problem Statement

The most important thing to agree on is the customer problem we're solving. If we don't agree on the customer problem, or we see it differently, it is hard for any team to work well. Customer Problem Statements help describe in detail "What is the customer problem?", so teams can align and agree on which problems to solve, and communicate with partners and stakeholders.

**How to do it:** Customer Problem Statements can be written anytime, but are most often written after conducting customer empathy methods such as Follow-Me-Homes. The template provided can help you get started.

1. Go broad, and write down many potential problem statements based on your recent customer empathy. Don't speculate, focus on real problems you've actually observed - see "Pro Tips" below to help.
2. Share and discuss your list of problem statements as a team
3. Go narrow, and select a single problem statement on which to focus
4. Include problem statements in your team's communication

**Time:** 15-20 minutes

**Watch out:** The problem statement itself is not as important as the process your team will go through to develop it. Your understanding of the customer problem will improve over time, so don't be surprised if you and your team revisit and update the customer problem statement from time to time.

## Pro tips:

- • • • **Find the customer's problem, not Intuit's problem.** The "I" in "I am" is the customer, NOT you or Intuit
- • • • **Write specific, tangible, and detailed, using full sentences.** Avoid vague catch-all words such as "integration" or "personalization"
- • • • **Leave solutions out.** Avoid suggesting a solution in the problem statement.
- • • • **Look for the biggest pain.** Look for facial or physical reactions indicating pain. Look for "compensating behaviors" customers do to prevent or deal with pain.
- • • • **Write more than one problem statement.** Try writing many different problem statements based on what you observed

# Customer Problem Statement Template



**I am a:** .....

.....

.....

.....

.....

A narrow description of the customer - not you.

**I am trying to:** .....

.....

.....

.....

.....

Desired outcome

**But:** .....

.....

.....

Problem or barrier

**Because:** .....

.....

.....

Root cause

**Which makes me feel:** .....

Emotion



# Brainstorming

When the team has defined key opportunity areas with “How might we…” questions, it’s time to start brainstorming. Remember – this is your time to go broad and get all your ideas out there. Teams tend to use the word brainstorm to describe casually talking about ideas, but a brainstorm is actually a focused, purposeful activity.

**How to do it:** Refer to your brainstorm topics, such as “how might we” statements or Ideal States, remind participants of the ground rules.

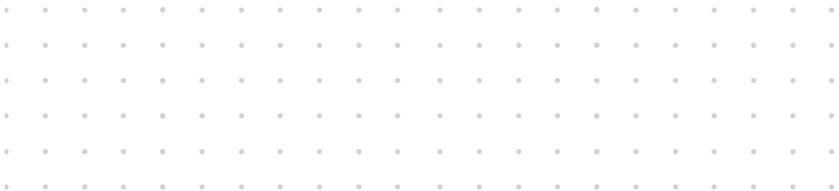
1. Choose a topic on which to brainstorm
2. Warm up with a quick 1-2 minute practice exercise
3. Begin brainstorming! If participants encounter slumps, encourage them to continue by using prompts and constraints.

The perfect group size for brainstorming is 4-6 people. For larger groups, simply break into smaller sub groups. Don’t brainstorm as a group of 15 people.

**Get warmed up.** It’s important to get the group in the right frame of mind for a brainstorm. Go over the ground rules, then get loose. Encourage creativity and fun without judgment of any kind.

**Consider designating a facilitator for your brainstorm,** such as an Innovation Catalyst, so they can pay attention to the energy of the group, keep everyone focused, and push for quantity. A facilitator should not participate in the brainstorm. You might even need more than one if you have big groups.

**Supplies matter. Space matters.** Small post-its lead to two word ideas, so use the 3x5 post-its. Pens lead to writing that’s hard to read at a distance, so always use sharpies - one idea per post-it. Each idea should be clear and concise enough so that other people reading it will understand the idea.

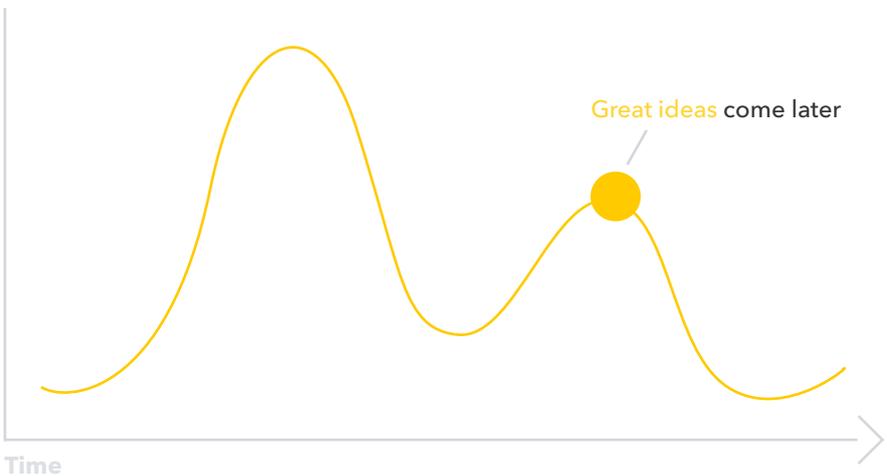


# Ground Rules

Before you begin brainstorming remind everyone of the ground rules below to ensure a positive experience.

1. Defer judgment.
2. Encourage wild ideas.
3. Build on the ideas of others.
4. Stay focused on the topic.
5. One conversation at a time.
6. Be visual.
7. Go for quantity.

## Embrace The Slump



**Embrace the slump.** Obvious ideas will come out first, then there will be a slump in ideas and energy. The best ideas often come next, so push past the slump by adding creative constraints like “What if we had no money?”, “What would get us fired?”, or “What if we had to build it in 24 hours”, etc...

# 2x2 Narrowing

Narrowing is about making decisions with intention. It's not about reaching consensus on the easiest idea to implement or voting for your favorite.

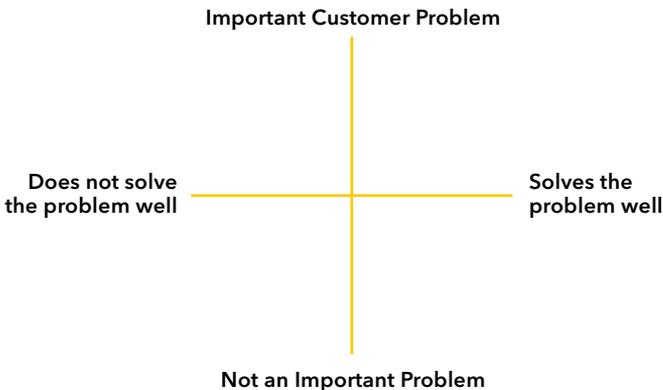
When you vote with your opinion, you just encourage group-think and bias. You throw away all the rigor you've brought to innovating for customers.

There are a handful of tools to help teams narrow, but a 2x2 is probably the most accessible and effective. A good 2x2 forces the team to balance the tension between two distinct criteria. Ideas are then placed on the 2x2 matrix relative to each other, which fosters productive debate and intentional decisions about which ideas the team will pursue. For example, the 2x2 below uses the criteria "requires new capabilities" (horizontal axis) and "Impact on customer benefit" (vertical axis).

**Time:** 15-20 minutes

## Pro Tips

If you're new to this method, start with CDI principles for your axis criteria. Remember, you can always change the criteria and re-prioritize if your first attempt is not working.



## How to create a good 2x2 criteria

Make sure your criteria are customer-backed. Good axis criteria are important for the customer problem you're trying to solve, or related to your ideal state. Include your team in the process, so you avoid bias and make transparent decisions.

Create real tension between your criteria. If all your ideas are in one quadrant, there's no tension pulling them apart.

Be clear why each criteria matters. The top-right quadrant doesn't always win. Sometimes a 2x2 can help you map the whole landscape of options and make decisions. You might choose to pursue the lower-right quadrant, and the 2x2 will have helped you make that decision with intention.

Make changes if your first attempt is not working. Be ruthless about prototyping your 2x2. Start using post-its for each axis criteria so you can easily change the criteria if they aren't working. The more you iterate, the better your conversations will be about which criteria really matter for your decision.

Sketch 2x2 Ideas:



# Rapid Experiments Loop

**Before you invest time and money on your idea, quickly test whether or not it is likely to work.**

We've all had exciting ideas which we invest our time and energy, only to realize these ideas don't end up working the way we expected. Luckily we've discovered a way to avoid this trap, by creating simple, very small scale experiments which test our ideas quickly and cheaply. You'll discover the truth with little investment.

As you run experiments over time, you will generate more evidence for or against your idea. Use this evidence to tell a story to investors, employees and partners, then tweak the idea until it works.

## Steps in the rapid experiment "loop"

### **1. Focus on Leap of Faith Assumptions:** "What do I hope will happen?"

Your "leap of faith" is the most important behavior that must be true for your idea to work in the real world. These are things you assume it to be true, but have not yet proven to be true with real evidence.

EX: "I hope students will learn to be more innovative"

### **2. Run Experiments:** "How will I quickly test my Leap of Faith?"

Build the absolute minimum required to test your leap of faith, and nothing more.

Write down a hypothesis, run your experiment quickly and be sure to measure real behavior.

EX: "If I teach innovation, 20% of students in this room will go home and run experiments with their own business ideas."

### **3. Learn & Decide:** "What actually happened and why?"

Review data and surprises from your experiment. Consider why your hypothesis passed or failed, and what new customer insights you discovered. Decide on what changes you'll make to your original solution idea, then start the process over again with Step 1.

EX: "Only 12% of participants ran experiments when they returned home. Maybe I should provide more in-depth training over a longer time period?"

Picture Experiment



# Prototyping

The word “prototyping” tends to make teams think of iPhone paper templates and click-through screens in InVision, but in reality prototyping is a mindset. Prototyping is all about making our conceptual ideas tangible as quickly and cheaply as possible, so that we can get feedback and improve the idea. You can, and should)prototype everything, whether it’s a sentence for your ideal state, a deck for a presentation, or an experience to test with a customer.

## When to prototype

**Stop a debate.** If you or your team find yourselves debating about which the right path to take, building out prototypes for each path and testing them out with customers can make the choice clear.

**Communicate.** If you or a team member has an idea – show it with a prototype, rather than just telling people about it. This helps get everyone aligned and clear that they are interpreting it the same way.

**Learn fast.** If you have an idea for a change to an existing feature you can quickly learn how customer will respond, before putting more money and time into building the idea.

**Confidence in decisions.** If you or your team is not sure what to prioritize next, use prototypes as quick way to generate customer-backed data that can help you make better decisions.

**Be bold.** Explore ideas which might dramatically improve the customer benefit. The risk is low with cheap and fast prototypes, so take bigger swings.

**Get feedback early.** When developing new ideas, concepts, or event courses of action, getting feedback early can help avoid surprises later.





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