

# Lead with Empathy: Design that Drives Adoption

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Tableau Ambassador

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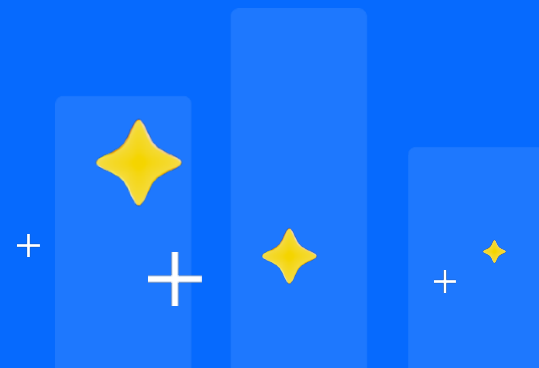
Lead Solutions Engineer, Salesforce

# Agenda

- 01 Leading with Empathy
- 02 Human-Centered Design
- 03 HCD In a Creative Context



# Leading with Empathy



# You're Hungry in a Foreign Country

and you can't speak the language

## What do you do?

- 3 months of Duolingo
- Know the following:
  - #1-3, 10-12
  - Thank You
  - Excuse me
  - Yes & No
  - Rice



# Venture Out to a Restaurant

## Tasks to Complete

1. Indicate party size to be seated  
to the host/hostess
2. Place your order
3. Ask for the check
4. Pay for your meal



# Venture Out to a Restaurant

## Tasks to Complete

1. Indicate party size to be seated  
to the host/hostess

2. Place your order

Typically requires  
speaking

3. ~~Ask for the check~~

4. Pay for your meal



# Considering the Human Experience

Grounding processes in empathy

**As someone completely unfamiliar with the country and the language, I was able to successfully order and pay for a meal at the restaurant**

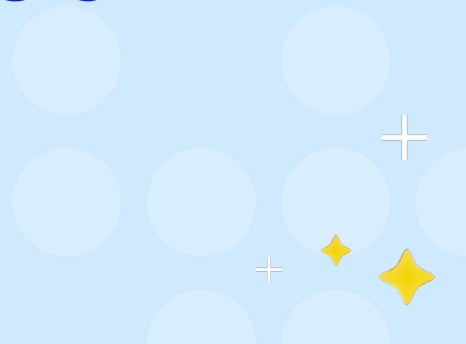
This was an intentionally designed experience

- Initial Problem: How might we make it easy for foreign tourists to eat here?
- Discovery: Mapping the customer journey & understanding challenges
- Solution: Table-side Point-of-Sale tablets with menus in multiple languages

**If we can have great experiences  
enabled by empathetic design in  
our day-to-day lives**



**Why don't we demand  
the same from our  
business dashboards?**



# Human-Centered Design

Grounding in Empathy



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**Human-centered design (HCD) is a creative approach to problem-solving that puts people—users, customers, stakeholders—at the heart of the process.**

IDEO

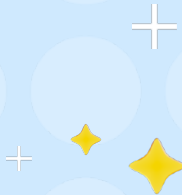
# A Real Ask

I need a new sales dashboard that tracks revenue

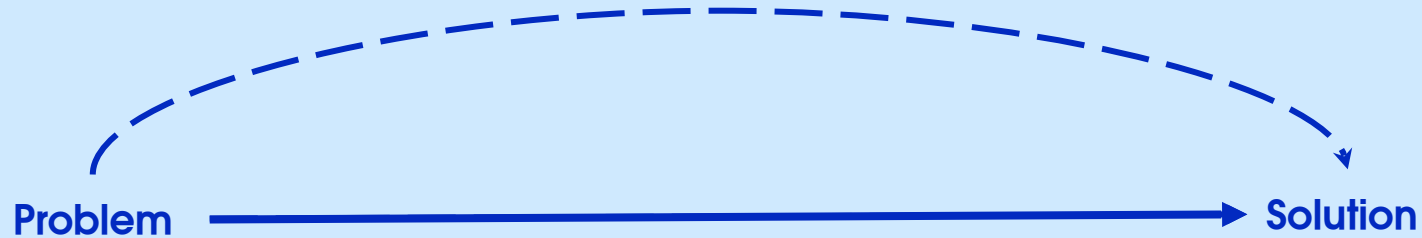
If you're lucky:

I need a dashboard that reports on...

- Daily customers
- Type of customer
- Sales revenues
- Operational costs



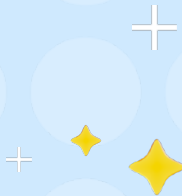
# Problem Solving Process



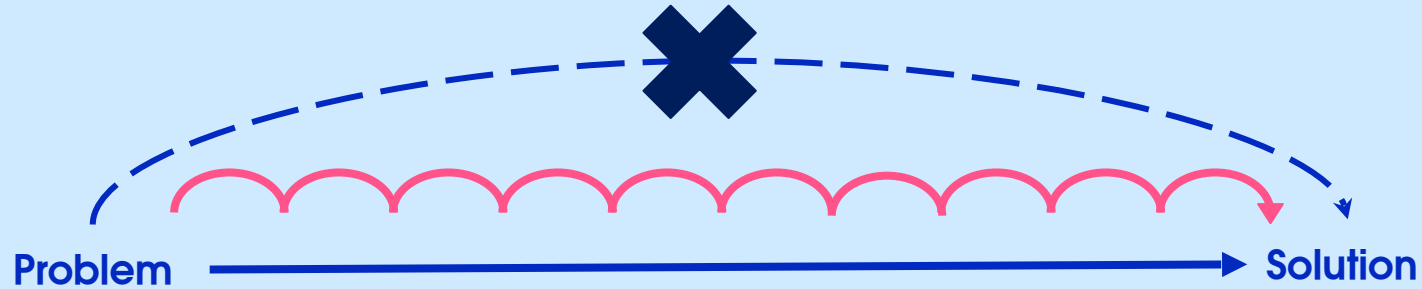
Are we solving  
for the right  
problem?

How do we  
know this is the  
right solution?

Does this need to  
be a dashboard?



# Problem Solving Process



How can we take smaller steps so we aren't making huge assumptions?



# Problem Solving Process

## Problem

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Are we solving  
for the right  
problem?

How do we  
know we're on  
the right path?

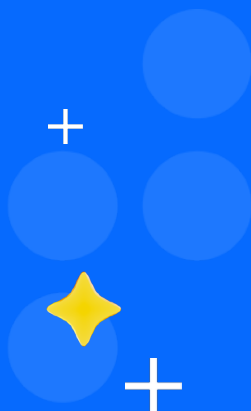




## Key Insight

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**Start with the why,  
not with the what**



# Getting to the Right Solution

requires solving for the right problem

To solve for the right problem:

- Explore the problem space
- Understand our users & their priorities
- Identify the so what? What action they want to take from the dashboard?



If we don't take the time to understand the people we're building dashboards for, why should they take the time to use what we make?





**“If I had an hour to solve a problem I'd spend 55 minutes thinking about the problem and five minutes thinking about solutions.”**

Albert Einstein



# Exploring the Problem

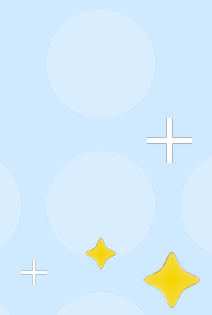
What's on Your Radar?

An exercise in which people plot items according to personal significance

- Reveals what people are thinking
- Shows how people prioritize
- Challenges your preconceptions



A finished exercise I ran with the sales team to understand their priorities & stressors



# Exploring the Problem

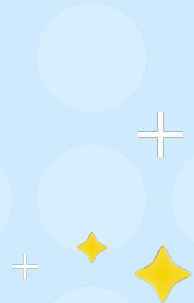
What's on Your Radar?

In short, it:

- Helps us understand what's important to people
- Build empathy for our users
- Allows us to better align user priorities with dashboard features & metrics

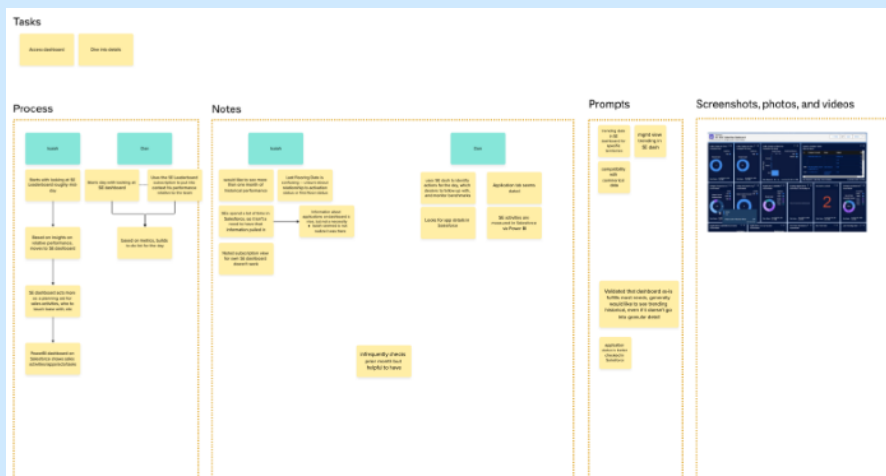


A finished exercise I ran with the sales team to understand their priorities & stressors



# Exploring the Problem

## Contextual Inquiry



I asked the sales team to walk me through different actions they took when using an existing dashboard





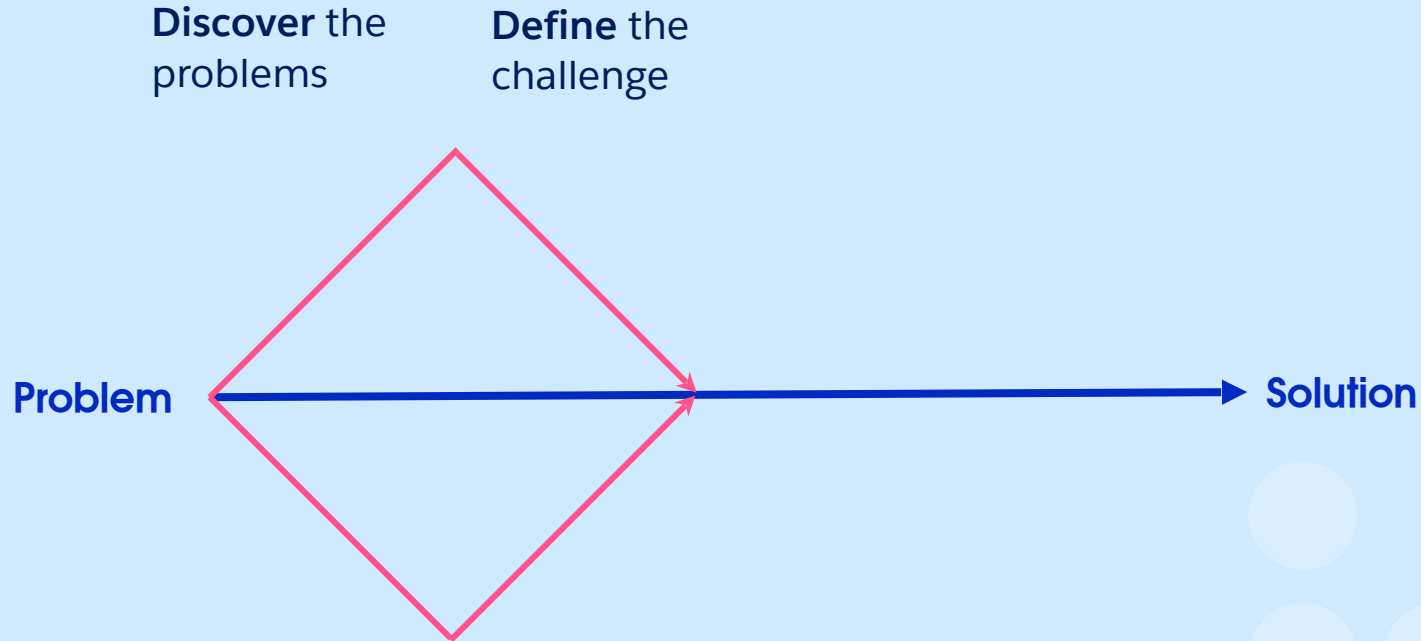
# Problem Solving Process

Let's track our progress

Problem  Solution



# Problem Solving Process



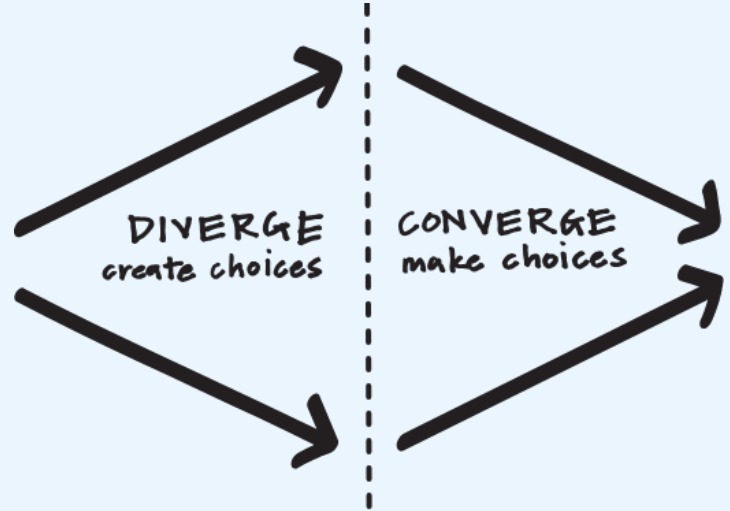
# Modes of Thinking

## Divergent Thinking followed by Convergent Thinking

By exploring the problem, we created choices/options.

Next, we:

- Synthesize information
- Prioritize options
- Choose a path forward



*Divergent and convergent thinking*

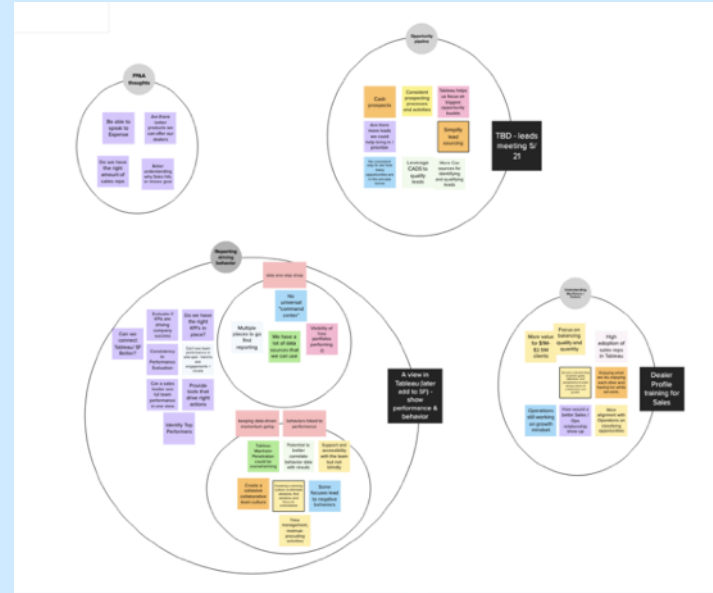
IDEO

# Defining the Challenge

After exploring the problem and building empathy and understanding:

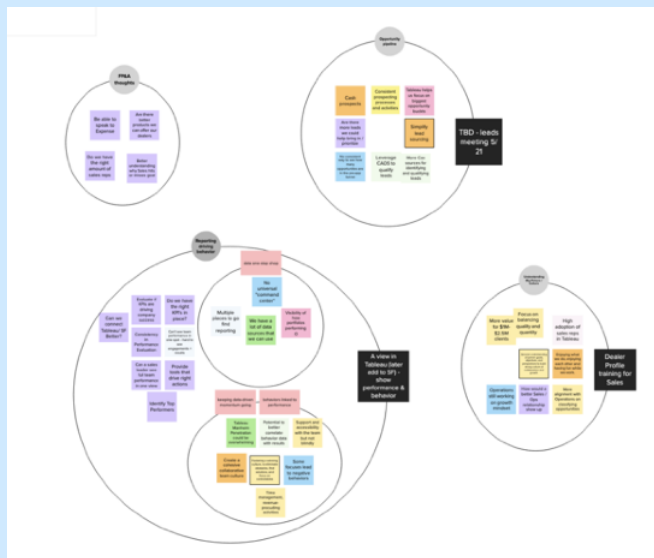
- Synthesize your findings
- Identify trends/patterns

Align with your team on a focus to move forward with



# Defining the Challenge

## Affinity Clustering



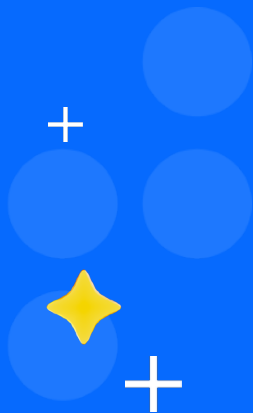
With my team, I used affinity clustering to identify patterns and priorities for the new dashboard



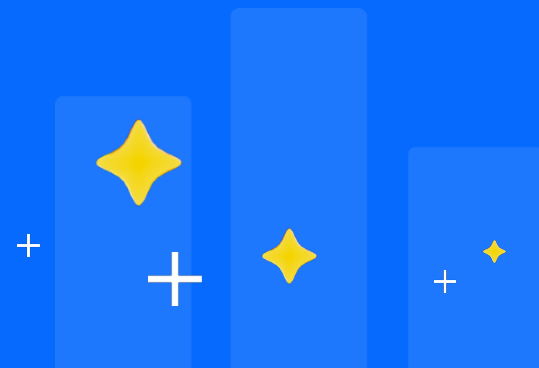
Garbage In = Garbage Out

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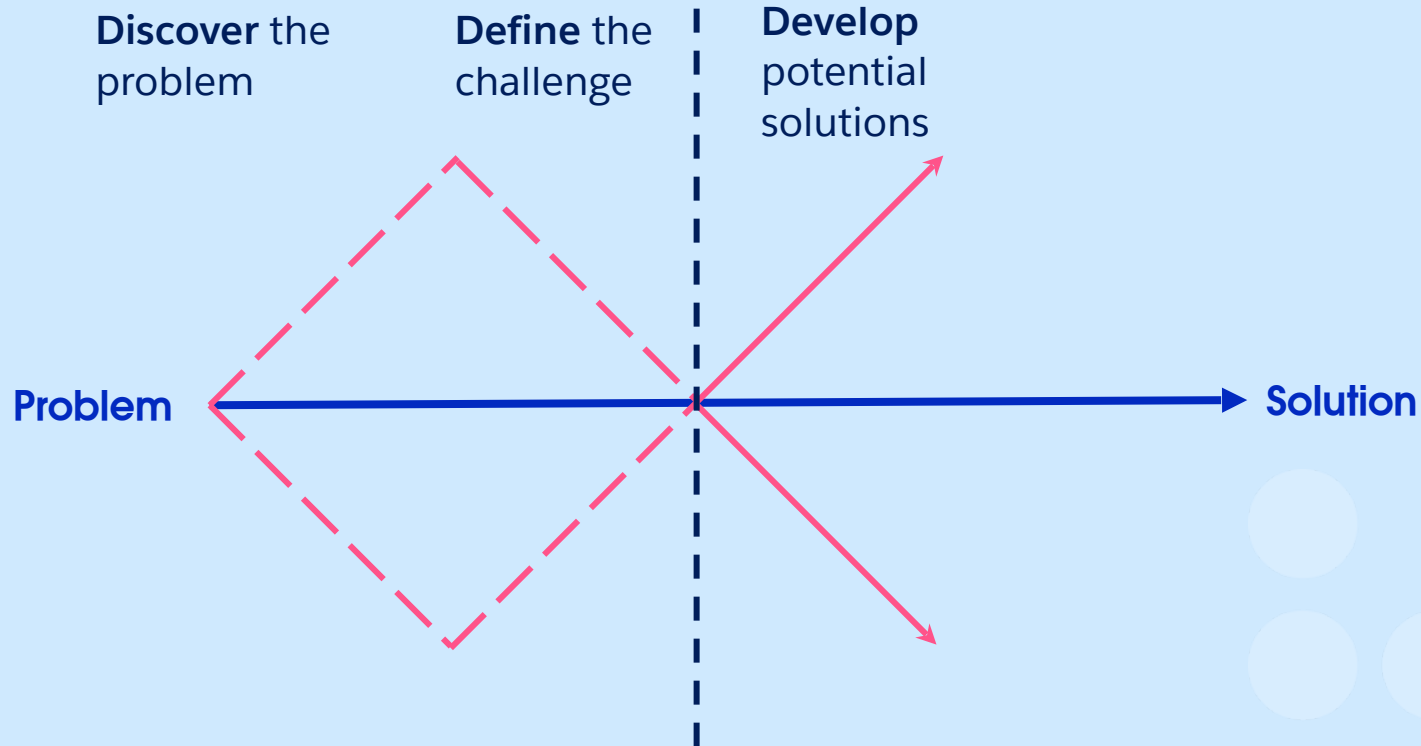
If we don't spend time defining  
the right problem, we'll spend  
time building the wrong solution



# Solutioning Our Way Forward



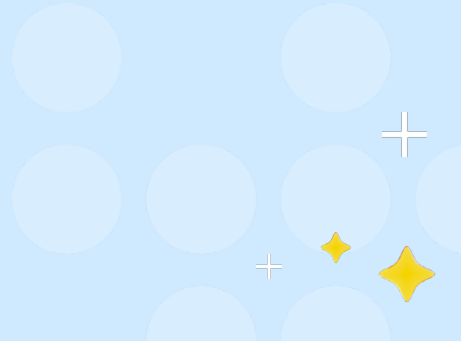
# Problem Solving Process



# Developing Solutions

In this space, we want to explore potential solutions **alongside our stakeholders**

- Generate ideas without filtering
- Consider challenges from alternate perspectives and give different answers
- Collaborate and ideate with a range of people
- Test potential solutions



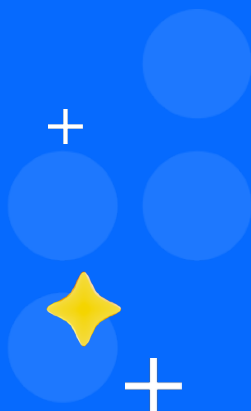




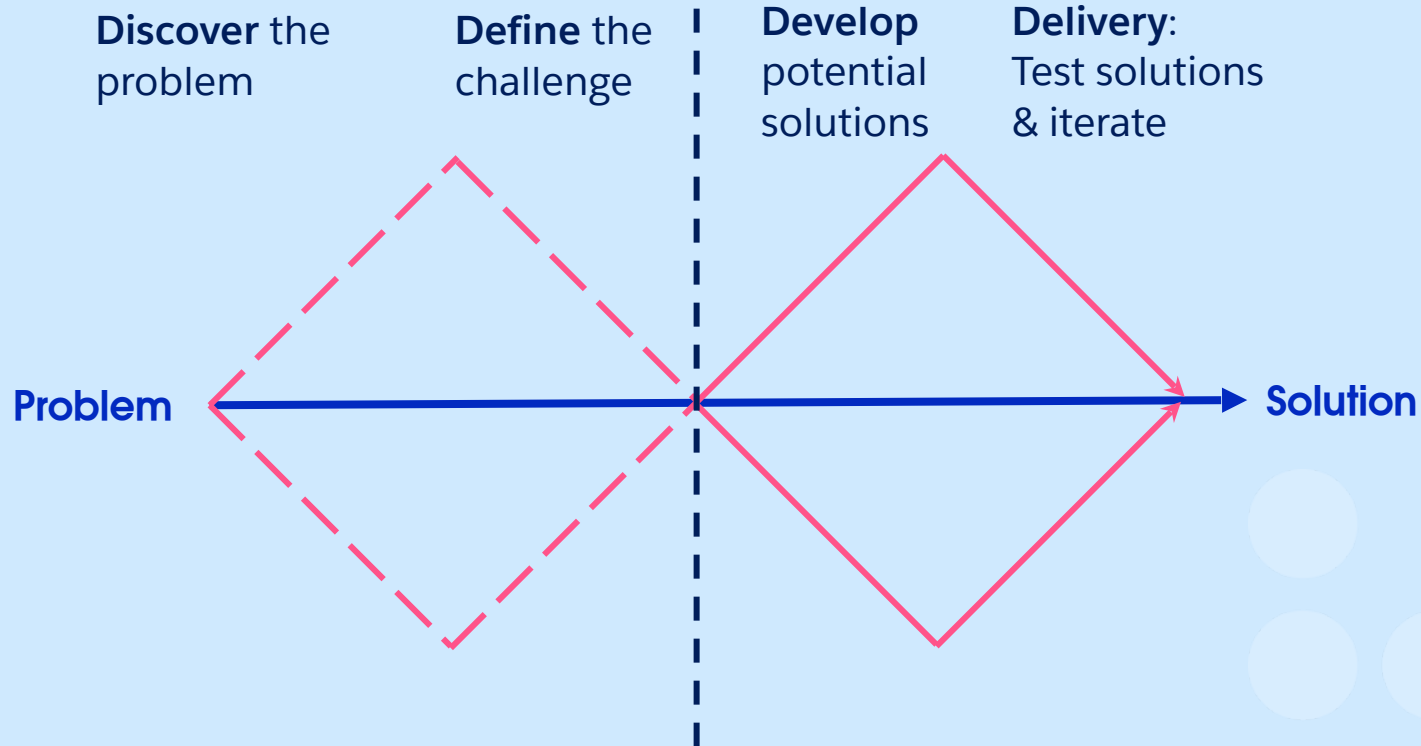
## Maintain Focus

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Focus on solutioning—developing various solutions—rather than polishing one to perfection



# Problem Solving Process



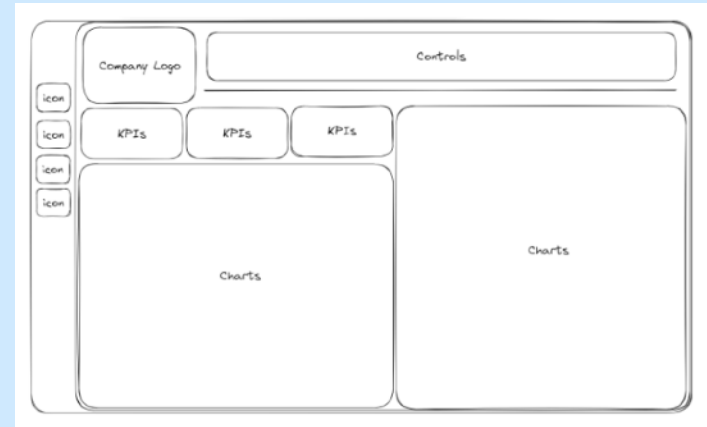
# Testing Solutions

## Prototyping: Wireframing

Once you have narrowed down potential solutions, it's time to start testing!

Use low-fidelity wireframes to:

- Validate ideas
- Align team/stakeholders on layout
- Iterate rapidly

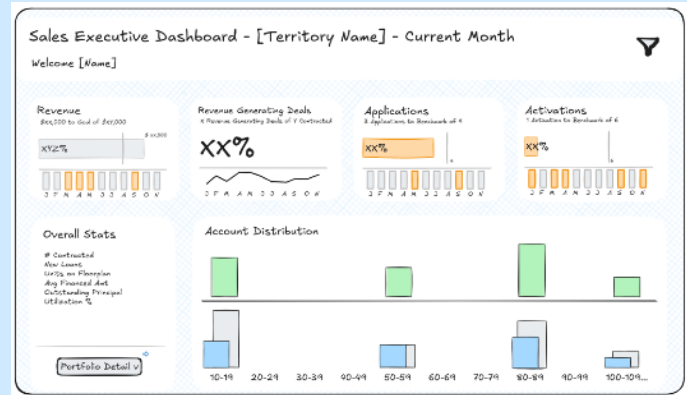


# Testing Solutions

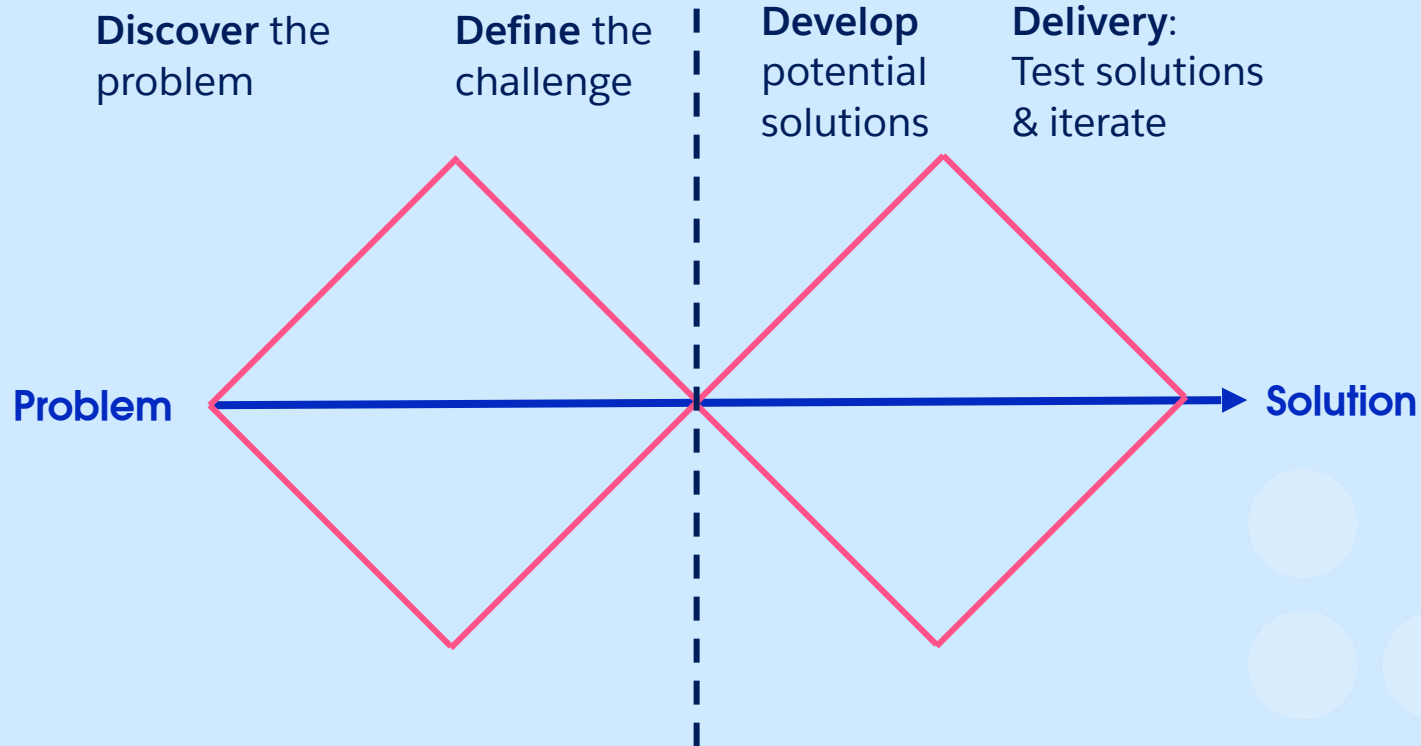
## Prototyping: Wireframing

Use high-fidelity wireframes to:

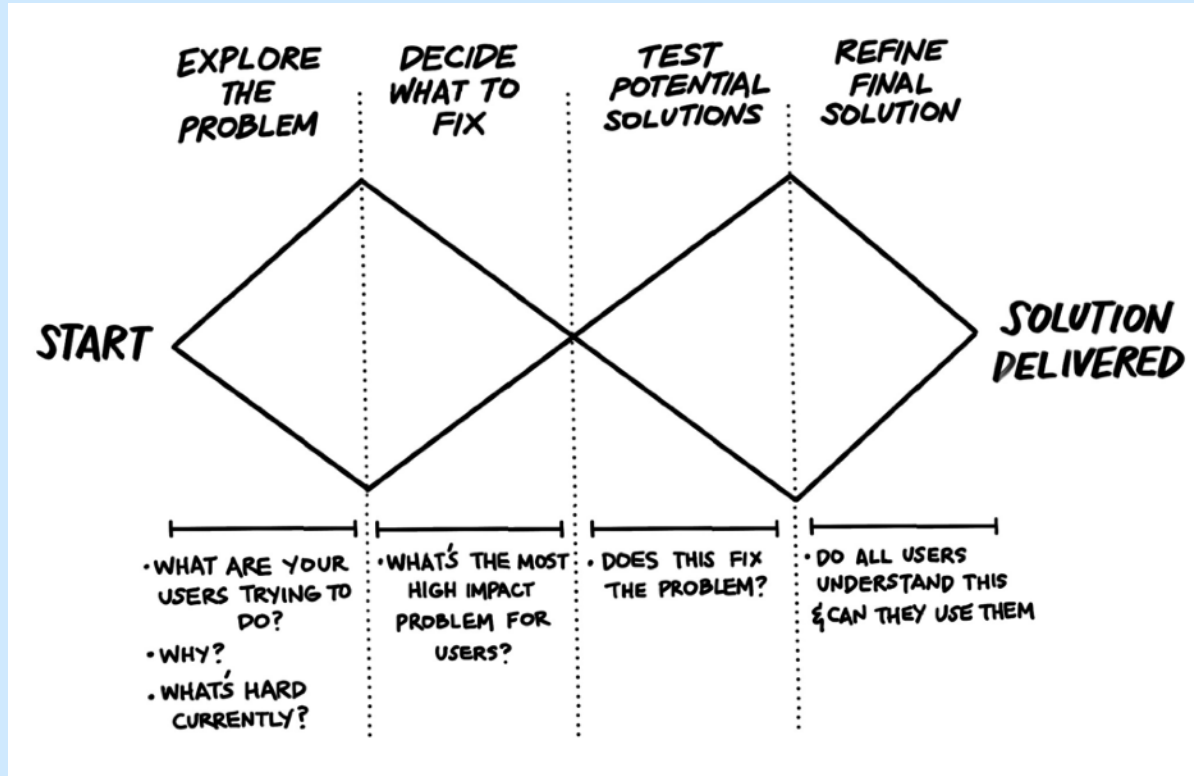
- Test interactions
- Conduct usability tests
- Align on specific dashboard elements



# Problem Solving Process



# Double Diamond Framework



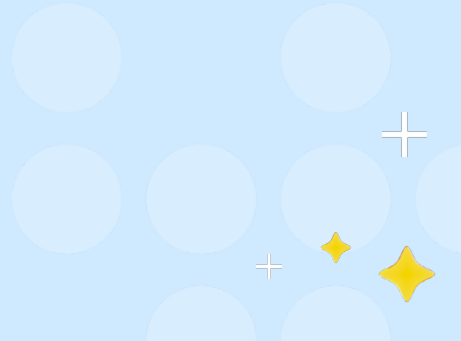
# Human-Centered Design is For Everyone

## You don't need to be a designer to use HCD

If you can't change the solution, you can still use HCD to help

If you are tasked to build a dashboard, and it has to be a dashboard, you can use HCD to:

- Understand the why behind the dashboard
- Gain alignment & buy-in from users & stakeholders
- Prototype & validate dashboard interactions and layouts



# Working Alongside People

Allows us to achieve ideal outcomes

## Problem Space

Start with the Why

- All about seeking to understand, not assuming
- Lean into empathy and curiosity, not judgement
- Define the challenges to tackle, perhaps reframe the issue

## Solution Space

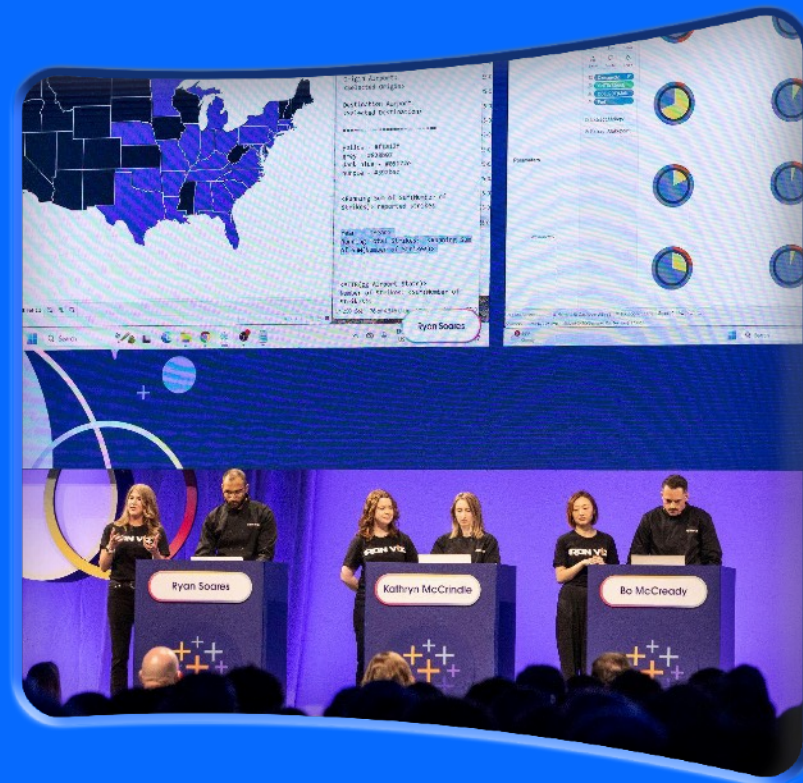


Co-create and Iterate

- All about collaborating, iterating, and testing
- Lean into empathy and curiosity, not judgement
- Generate and test solutions with a range of people, validate what works

# HCD in a Creative Context

How I applied Human-Centered Design to Iron Viz



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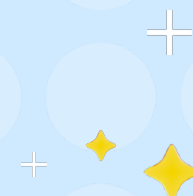
# Creative Data Visualization

Not what you'd build for your boss

The screenshot shows the Tableau Public 'Viz of the Day' page. At the top, there's a navigation bar with 'tableau public', 'Create', and 'Learn' options. A search bar is on the right, and 'Sign Up' and 'Sign In' buttons are also present. The main heading is 'Viz of the Day' with a subtext: 'See new and inspiring data visualizations featured every weekday'. Below this, a grid of 12 visualization cards is displayed, each with a thumbnail, title, author name, and engagement metrics (likes, views, and a star icon).

Viz Title	Author	Views
The Tooth Fairy Poll	Sara Fisk	995
Overview Sample Superstore	Vadimir Belikov	3.2K+
The Global Story of Tuna	Hideaki Yamamoto / Chasocz	7.7K+
E-Commerce Sales and RFM Dashboard	Yan Aung	6.6K+
The Periodic Table of AI Startups	Alax Sibodskoy	3.2K+
Songs That Strike A Chord	Jeff Plattner	1.5K+
Superstore Regional Analysis	Vlad Herbachenko	3.8K+
From Empire To Identity	Rob Taylor	3.4K+

Tableau Public Viz of the Day



# Creative Data Visualization

Not what you'd build for your boss

Today  
@  
4pm!!



## Meet your 2026 Iron Viz finalists.

Get to know the competitors who whipped up powerful visualizations with the perfect blend of design, analysis, and storytelling.



### Packing for Mars

by Ann Pregler

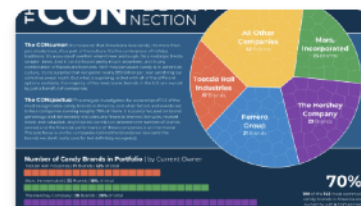
[Explore](#)



### Nutrition, Energy Sources, and Ingredients of Dim Sum

by Kevin Wee

[Explore](#)



### The Confection Connection

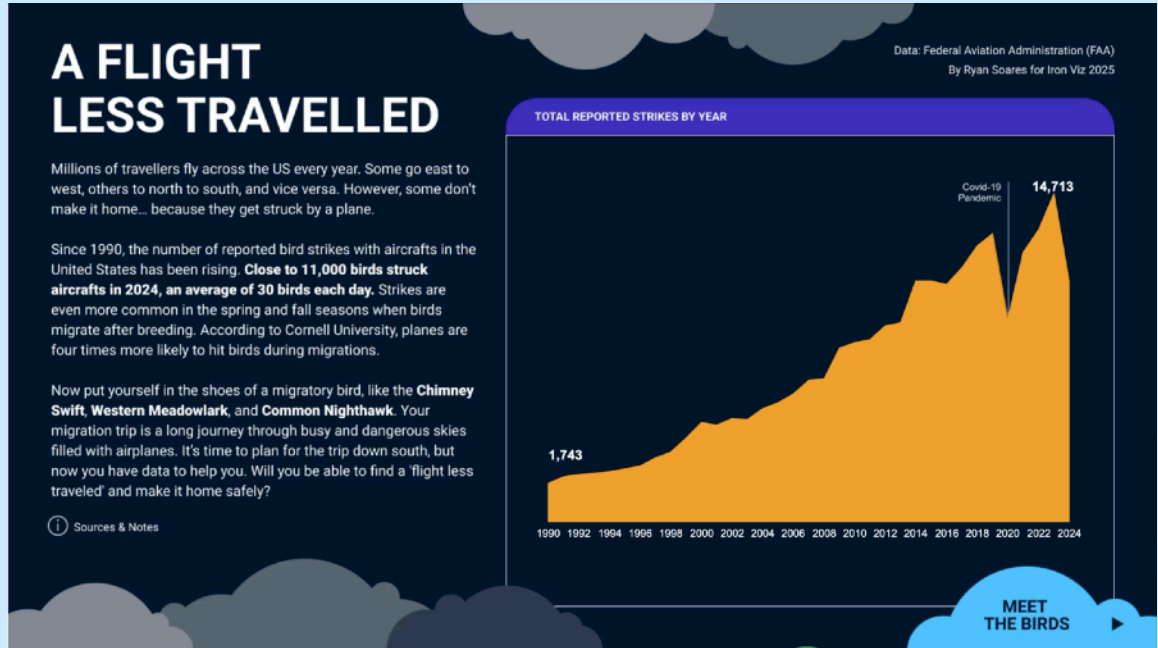
by Brian Moore

[Explore](#)

Iron Viz 2026 Finalists

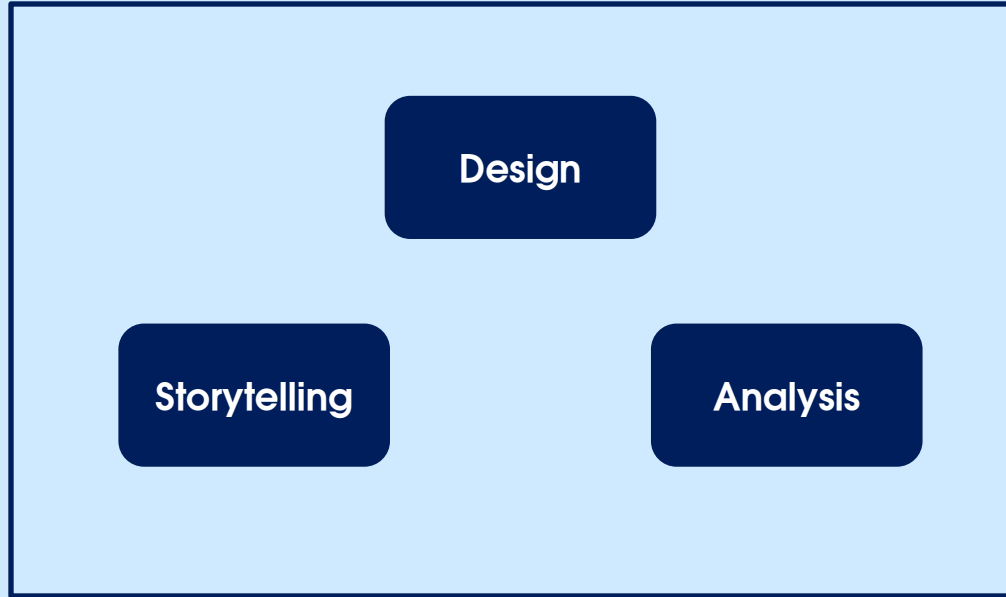
# Creative Data Visualization

Not what you'd build for your boss



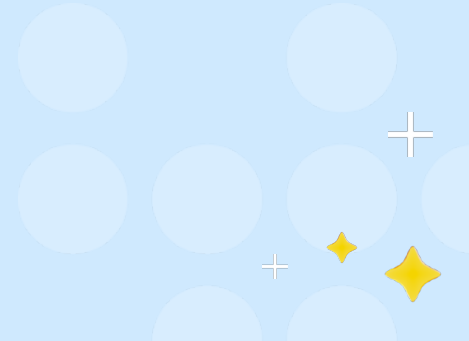
[My Iron Viz 2025 viz](#)

# Iron Viz Objectives



## Constraints

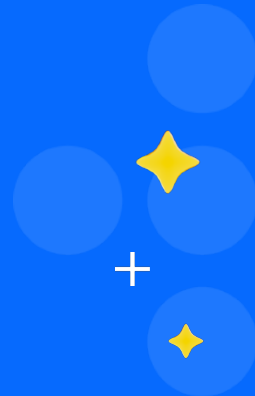
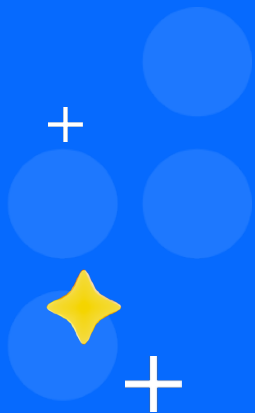
- 20 minute build limit
- 3 minute presentation



What is adoption?

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How do I get a  
human to care?



# The Context Switch

What does **adoption** mean?

## Business Adoption

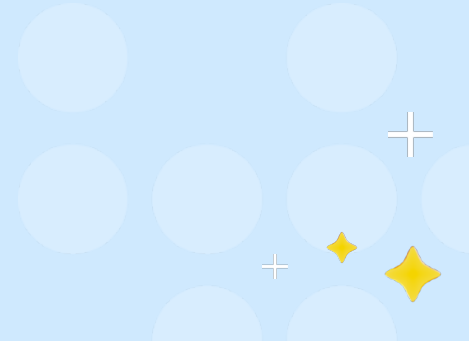
- Using a dashboard to make decisions
- Needs utility to drive a decision



## Creative Connection

- Finishing the story and walking away with changed perspective
- Needs a “hook” to drive a connection

**Both need Human-Centered Design!**



# Types of Stakeholders

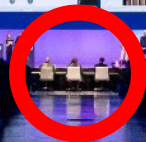
Audience-first design

**Visible Stakeholders**

- Judges
- Data Viz Experts
- Design, analysis, storytelling

**Invisible Stakeholders**

- The Casual Scroller
- Tableau Beginner
- Cares about engagement



Judges  
(visible)

Audience  
(invisible)

>> Fantastic. Mark, let me ask you a question what are the different approaches to geospatial data here?  
>> I mean, when you talk about geospatial

10:52

10:52

>> Fantastic. Mark, let me ask you a question what are the different approaches to geospatial data here?  
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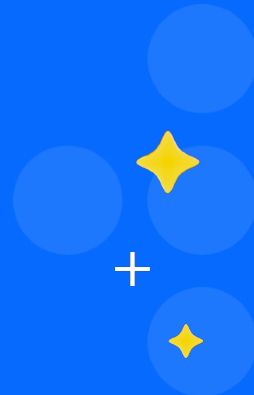
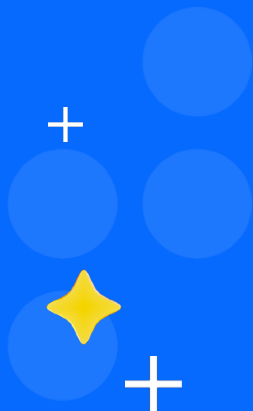
10:52

## Designing for Human Connection

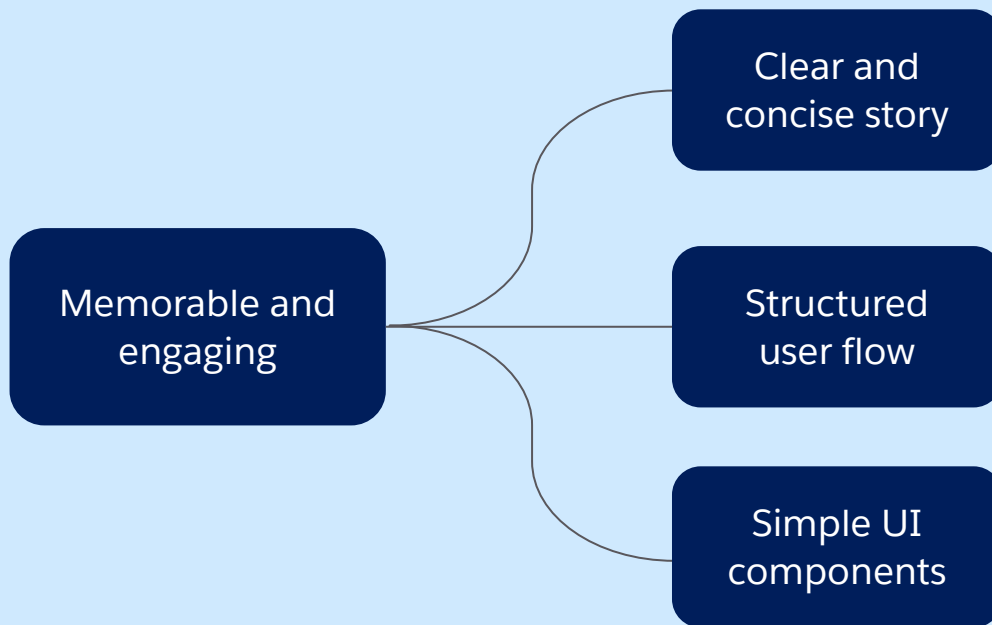
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# Keep it simple

Accessibility and simplicity are the  
highest forms of empathy.



# My Iron Viz Design Goals



# Brainstorming a Unique Story

My thought process

Two parties involved in wildlife strikes

What about bird safety?

Asking ChatGPT how birds would use the data:

If birds could analyze this information, they might:

**1. Avoid High-Risk Areas**

Birds could identify airports and flight paths with high strike rates and adjust their routes to steer clear of these zones—especially during takeoff/landing times.

**2. Adjust Migration Timing**

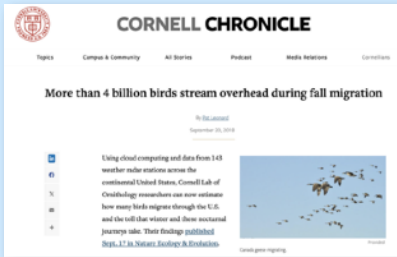
By analyzing the time of year and day when strikes peak, birds could shift their migration windows slightly to avoid peak air traffic periods (like holiday travel surges).

**3. Change Altitude**

Birds could recognize that most strikes happen below 3,000 feet and attempt to migrate at higher altitudes when feasible.

**4. Avoid Urban Areas**

If they see a pattern of high-strike densities near metropolitan airports, they might favor more rural or coastal flyways.



How would birds use this data to avoid strikes?

Use data to help birds migrate safely



# The Viz

### A FLIGHT LESS TRAVELLED

Each Flight Tracker Migration Area (FMA) represents a group of birds that fly together in a similar direction, seasonally, to get work or a job.

From 1980, the number of tracked birds that fly with us in the United States has increased by 147% to 14,713 birds a day. In 2005, an average of 23 birds fly each day. This was more than 10 times the number of birds that fly each day in 1980. This is a trend that is likely to continue.

How do we know this? The data is from a project called the **Western Meadowlark**. It is a species of bird that is found in the United States. It is a species that is found in the United States. It is a species that is found in the United States.

MEET THE BIRD

### MEET THE BIRDS

Each bird species has a different migration path. This is why we have different migration areas.

**Western Meadowlark**

Year: 2,476

About the Western Meadowlark

Western Meadowlarks are found across the United States. They are found in the United States. They are found in the United States.

SELECT YOUR TRAVEL PATH

### SELECT YOUR TRAVEL PATH

Each bird species has a different migration path. This is why we have different migration areas.

TRAVEL PATH

TRAVEL PATH SELECTOR

SELECT YOUR TRAVEL PATH

### SELECT YOUR TRAVEL PATH

Each bird species has a different migration path. This is why we have different migration areas.

TRAVEL PATH SELECTOR

SELECT YOUR TRAVEL PATH

### YOUR TRAVEL PATH

Each bird species has a different migration path. This is why we have different migration areas.

APPROXIMATE TRAVEL PATH

VIEW YOUR TRAVEL PATH

### YOUR STRIKE REPORT

Each bird species has a different migration path. This is why we have different migration areas.

STRIKE REPORT

GO TO CONCLUSION

### Your path is just one of over four billion migrations each year.

The birds have been able to find the flight less travelled and were able to find the flight less travelled. This is why we have different migration areas.

"A problem that is not well defined cannot be properly managed"

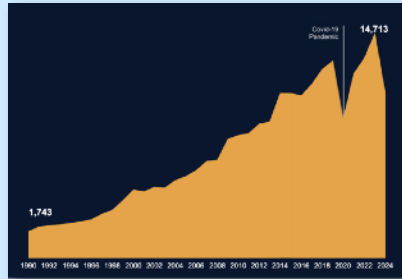
GO BACK TO START



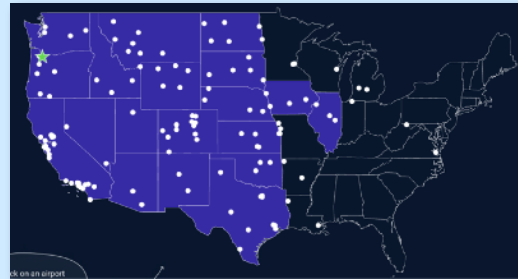
# Designing the User Experience

## Simple chart types

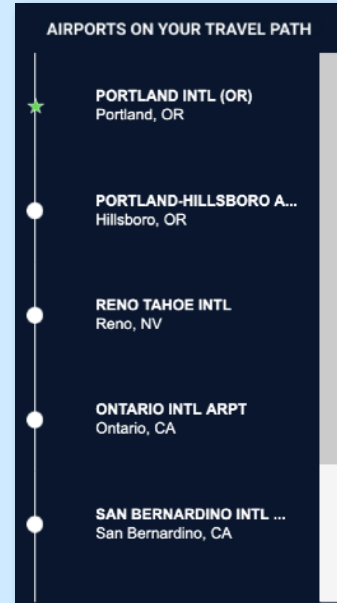
### Area charts



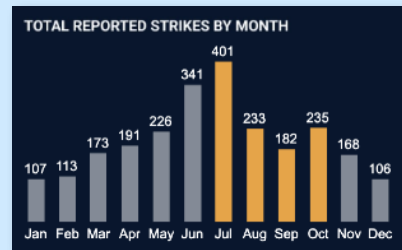
### Maps



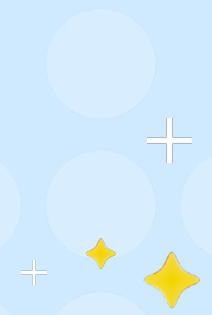
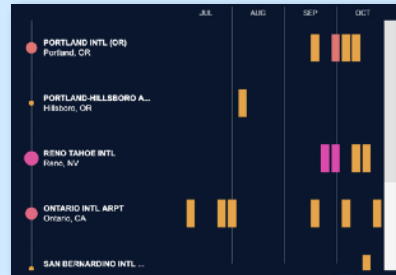
### "Subway stop" chart



### Bar chart



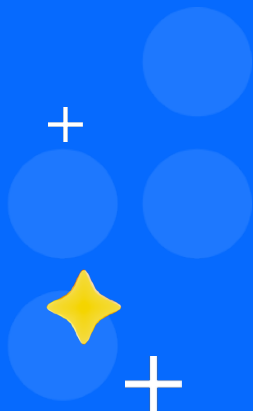
### Gantt chart



## Solutioning over Solutions

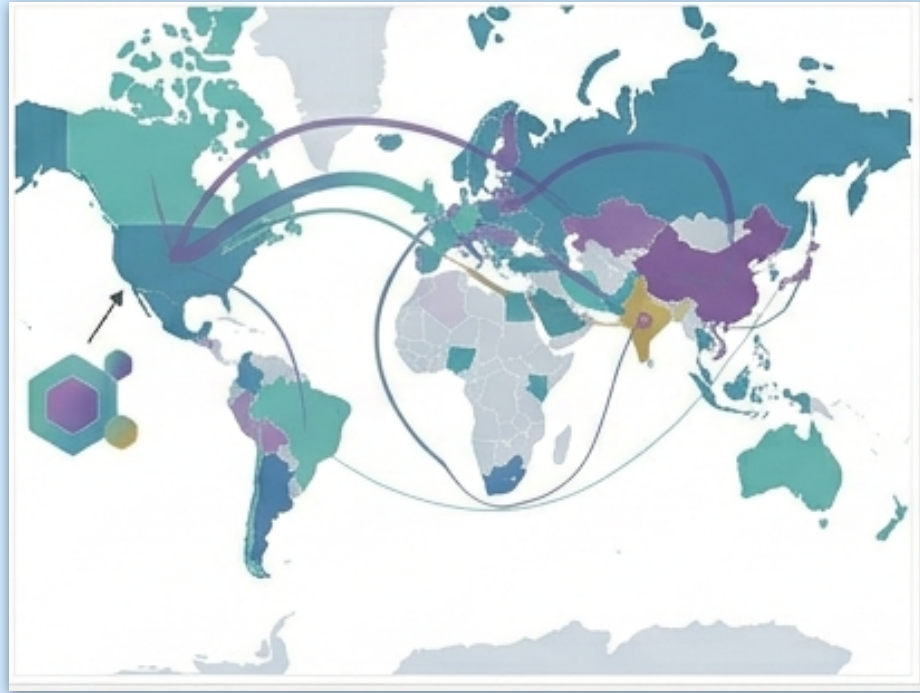
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A successful viz isn't always  
the most technical one - it's the  
one that requires the least effort  
from the user to understand



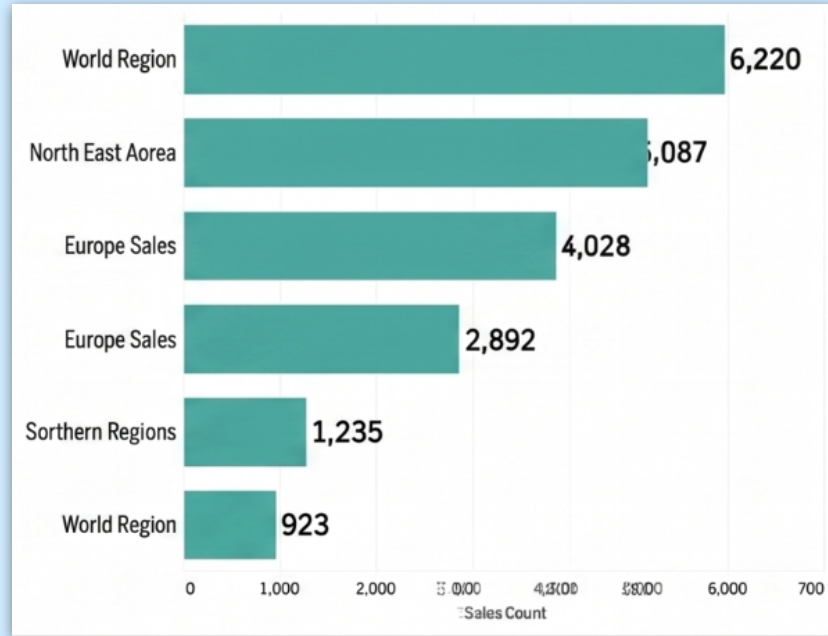
# Build with Intent

Focus on value and clarity



# Build with Intent

Focus on value and clarity



# Ask Yourself

If a user only has 15 seconds to look at this,  
will they spend more time figuring out  
*how* to read it, or figuring out *what* the insight is?

Is the story in this visual clearer and more actionable than  
if I showed it in a simple visual (bar chart, BAN, etc.)?



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Human-Centered Design is the difference  
between a dashboard people have to  
use, and a story people *want* to share.

Lead with the human and  
the adoption will follow

# Summary + Takeaways

HCD can be used in business & personal contexts

## Start with the why, not with the what.

Lean in with empathy and curiosity

- Understand the true needs of your users
- Explore problems and solutions alongside your stakeholders

## Co-create and ideate with stakeholders for alignment and buy-in.

- Gather continuous feedback
- Iterate
- Get alignment with every step



## Lead with people and adoption will follow.

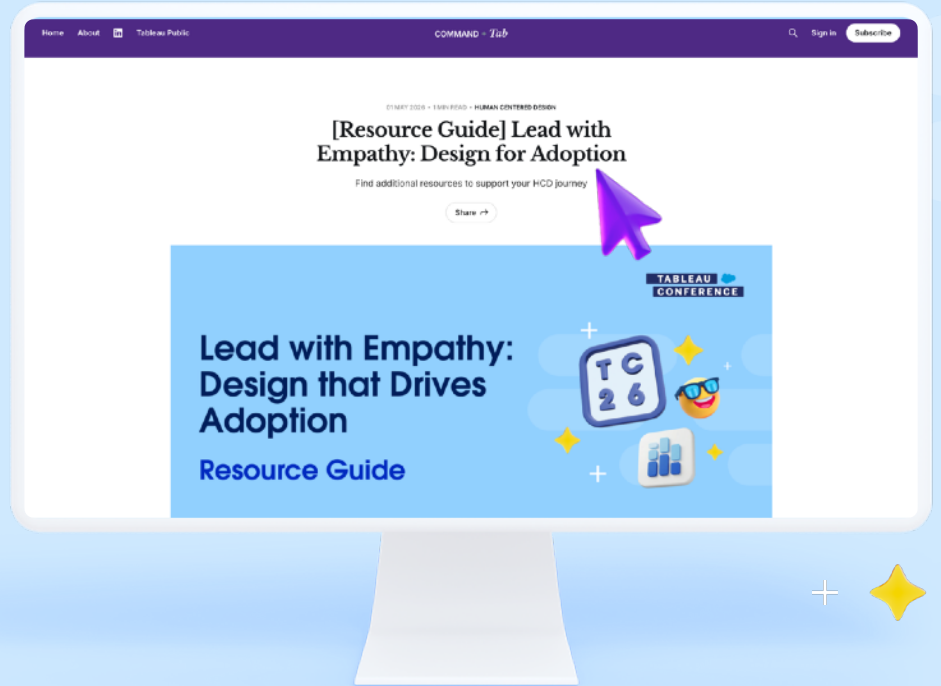
- Keep it simple
- Accessibility and simplicity are the highest forms of empathy



# Take HCD Beyond Tableau Conference



[A guide to help you get started](#)



# Q&A

## Contact information



Devon Ngo



[/in/devonngo](#)



Ryan Soares



[/in/ryandsoares/](#)

TABLEAU   
CONFERENCE

Thank  
you



# Tableau Public

Find inspiration, grow your data skills,  
and join a global community—free

Explore and get inspired by  
over 13 million public visualizations

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