

The background image shows a modern library or study area. Three students are seated at tables, each working on a laptop. The student on the left is a woman with glasses and dark hair, wearing a blue jacket. The student in the middle is a woman with long dark hair, wearing a grey sweater. The student on the right is a woman with long blonde hair, wearing a white sweater, and her laptop has a Totoro sticker on it. The tables are dark wood, and the chairs are red. The walls are a mix of red and dark grey, with large windows in the background. The ceiling has a slatted wood design. A large, light grey, semi-transparent geometric shape is overlaid on the left side of the image, containing the text.

Design Thinking 101: centering the student experience

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CAVAL CSCN Mini-Conference

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Today's session

- You will be set a design challenge which you will develop a solution for using human-centred design
- We will guide you through the human-centred design process and principles
- You'll apply these learnings and apply them in real time
- It's going to be fast and hands-on!



Learning Outcomes

- General understanding of Design Thinking
- Learn basic HCD principles
- Gain understanding of the HCD process
- Centre the user/student experience
- Lead with empathy
- Creative thinking mindset

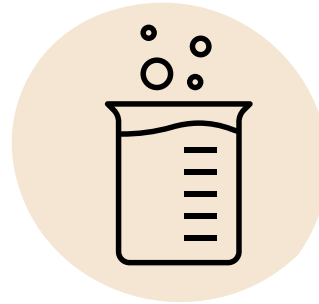


Ways of being



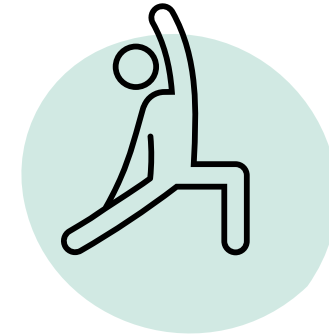
Done, not perfect

- Less talking, more action
- Learn through doing
- Just get started



Experimental mindset

- Being open-minded
- Not being in delivery mode, but focus on possibility
- Challenge traditional thinking



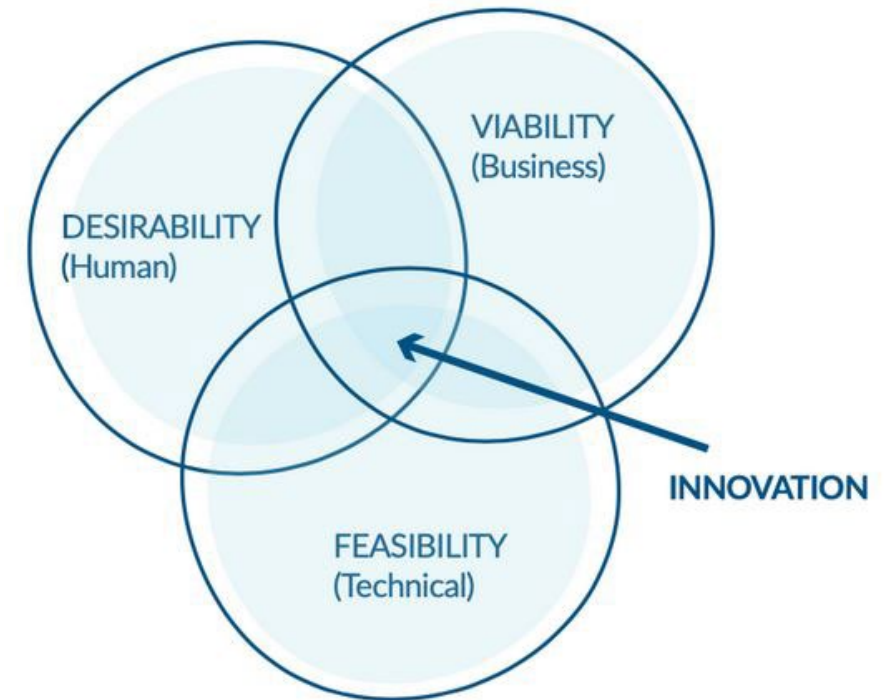
Stretch zone

- Sitting in a place of possibility
- Challenging ourselves
- Asking you to rise to the challenge

What is Design Thinking?

Design thinking brings together what is desirable from a human point of view with what is technologically feasible and economically viable.

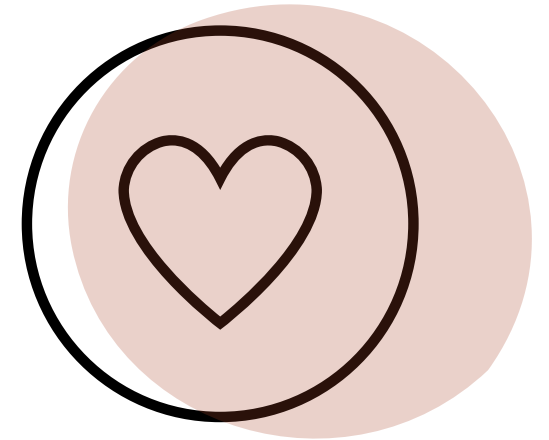
It allows people who aren't trained as designers to use creative tools to address a wide range of challenges, through a deep understanding of human needs and experiences. It is an iterative process focused on creating better solutions to meet people's needs.



What is Human-centred Design?

Human centred-design is a creative approach to problem solving that starts with the people you're designing for. At its core, it's about cultivating deep empathy with the people that use our services and spaces and developing solutions with them.

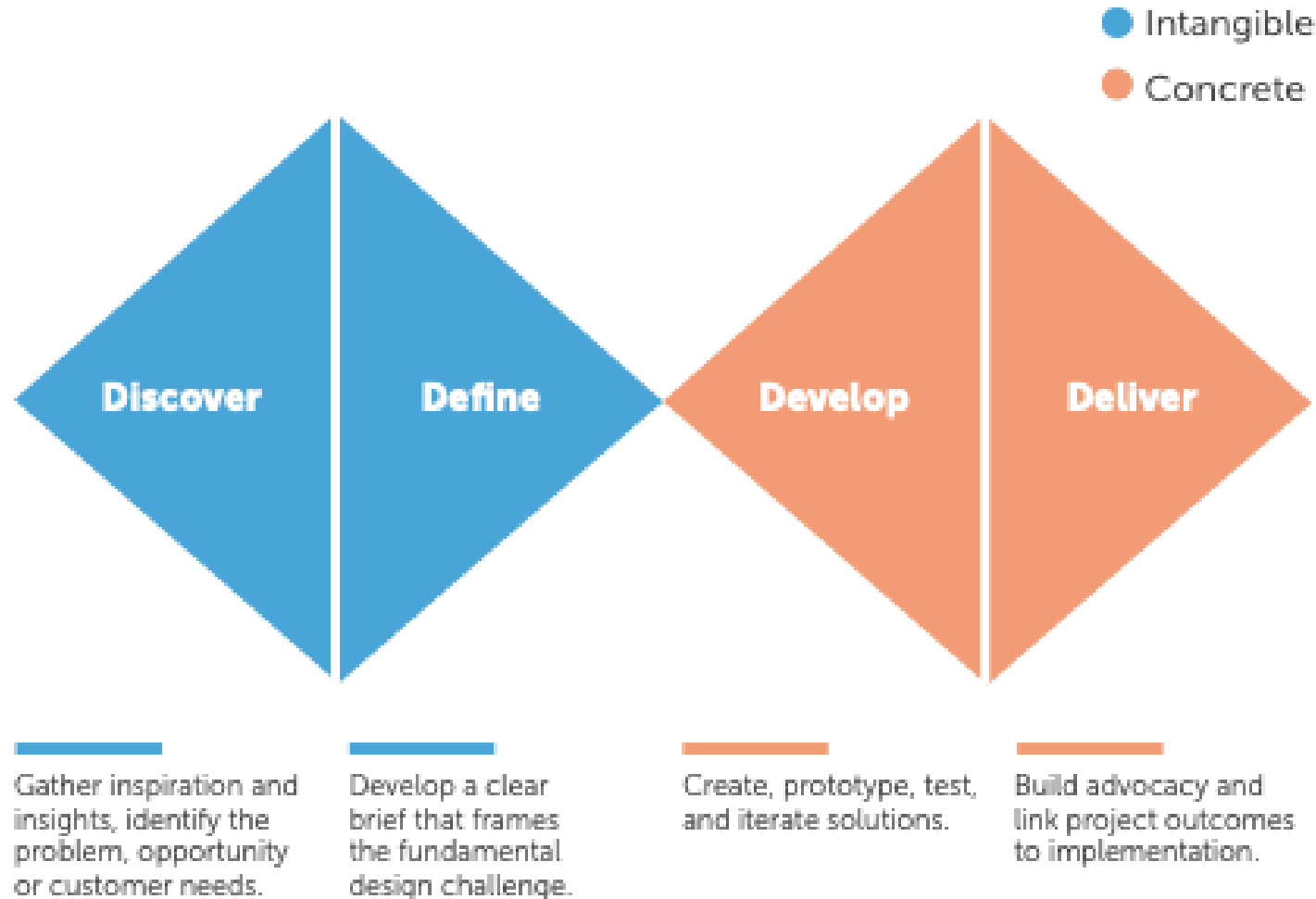
By gaining a deep understanding of their needs, hopes and aspirations we can create better services and spaces that will meet their needs.



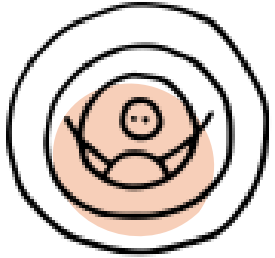
What's the difference between the two?



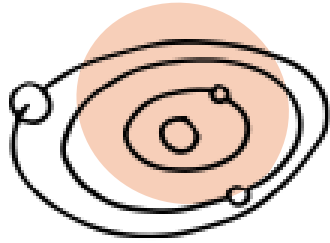
The Double Diamond



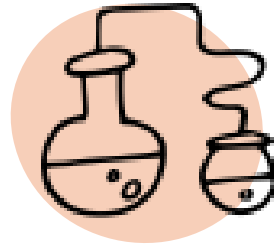
Ways of working



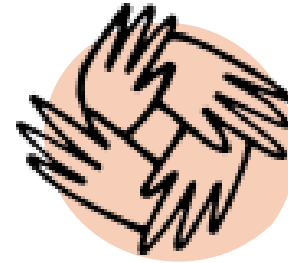
Customers at
the heart of
everything



Systemic
approach



Prototype and
experiment



Collaborate



Keep iterating

Mindsets of HCD



Generative

Generating ideas, and building on other people's ideas



Agency

Believing that you have the ability to make change



Empathic

Putting yourself in the shoes of others without judgement.



Open

Appreciating other people's perspectives, backgrounds, experience and skill sets



Experimental

Learn by doing. Trying, and making the process and tools work for you



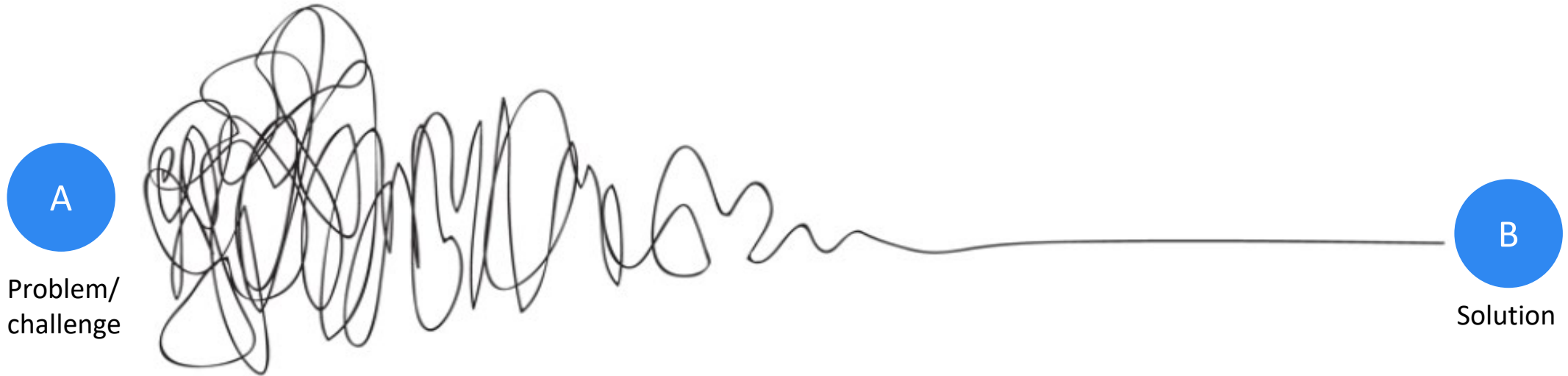
Beginners

Challenge the status quo, not being led by solutions or your assumptions

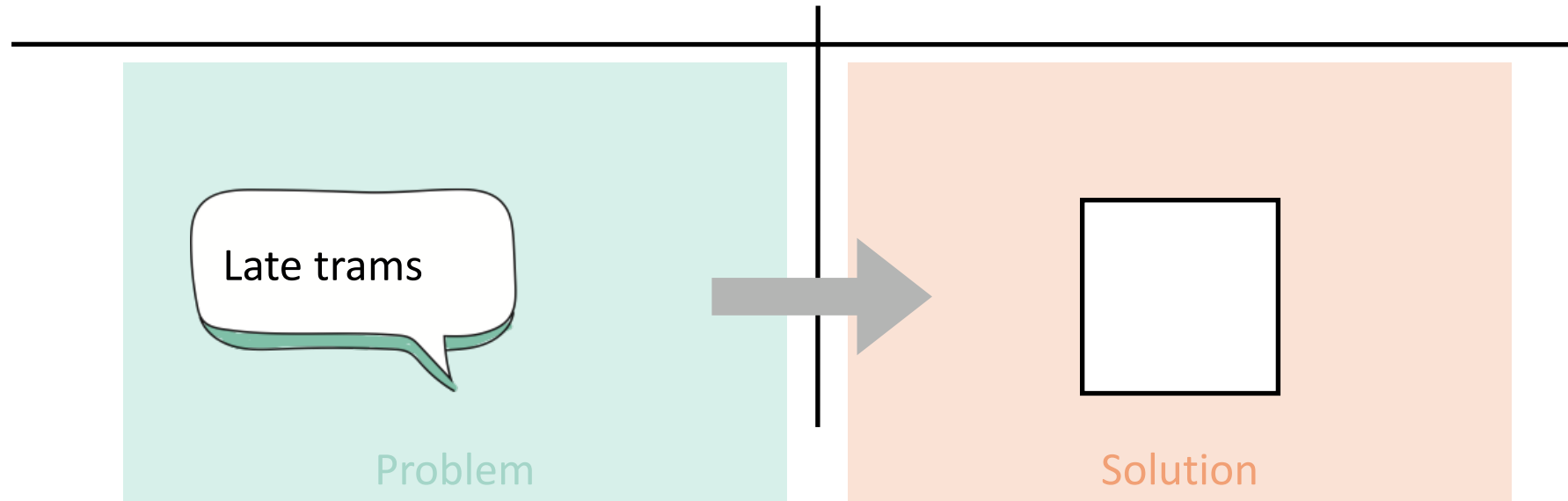
Solution seduction



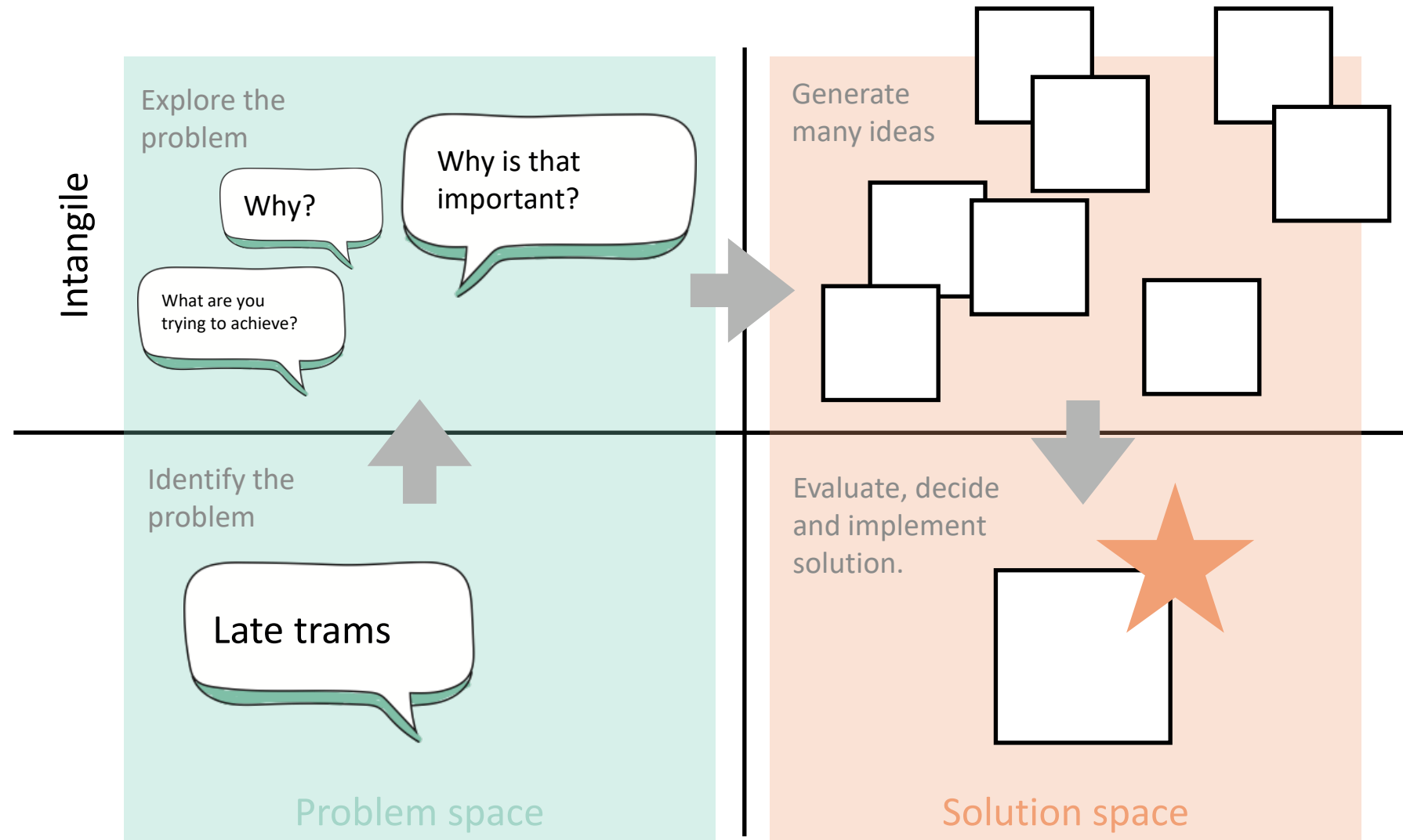
Ambiguity



Examples of HCD

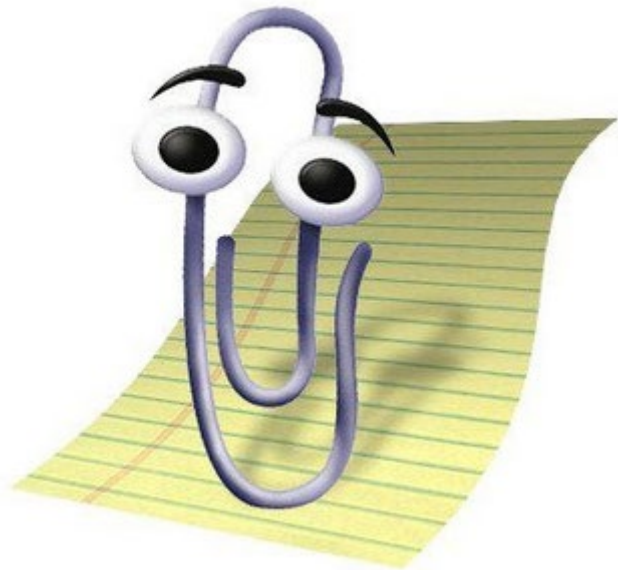


Examples of HCD



Icebreaker

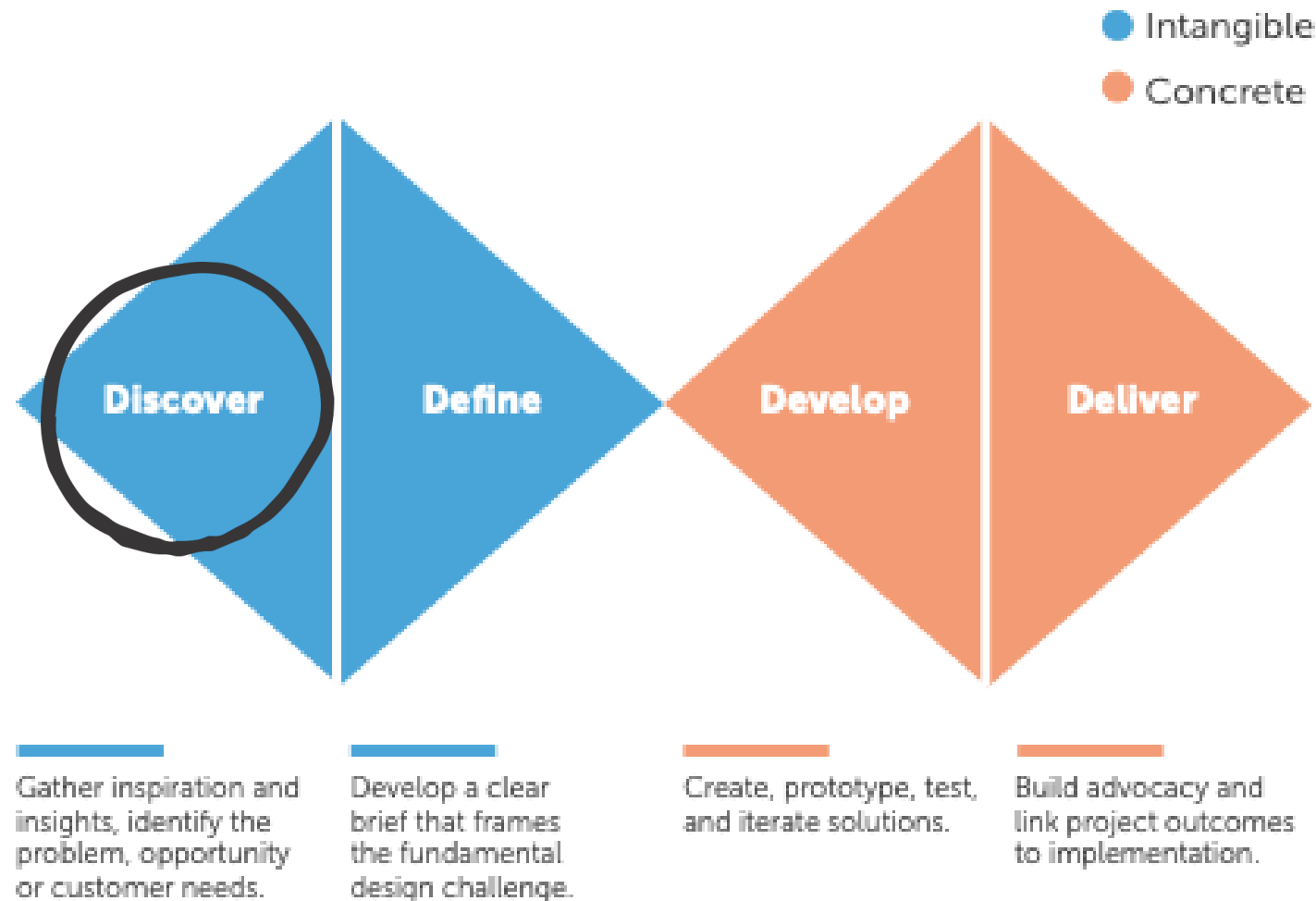
Instructions: you have 2 minutes to think of 25 uses for paperclips



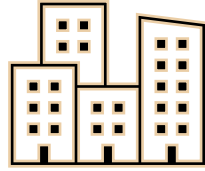
Design challenge

“How might we improve the student experience in library spaces for your cohort?”

Where are we on the Double Diamond?

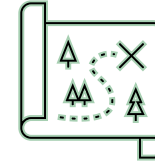


Problem Diagnosis



Build context

What do we already know?
Desk research
Future trends



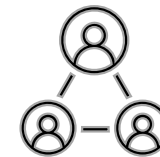
Problem space mapping

What is the problem?
What is the scope of the problem?
What do we think is the actual issue?



Assumptions

What do we believe to be true?
What do we perceive to be true?
What is the highest risks?



Stakeholders

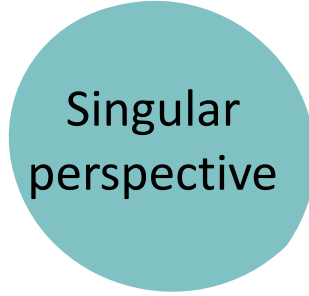
Who are they?
What influence do they have?

Blockers to user-centric mindsets




Experience

When we rely too much on experience which can prevent seeing things anew.



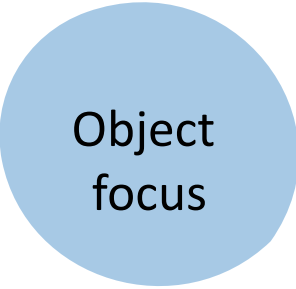
Singular perspective

Believing that your perspective is the only one.



Gaps in self & team awareness

Not being mindful and aware of the whole situation and our own behaviours.



Object focus

Focus on the thing, rather than the system.



Holding back

Not being bold enough to push a new move, or speak up for what you believe in



Externalisation

Believing that the solution or problem is external to you.

Activity: problem space & assumptions

Problem space (5 minutes)

- Discuss the challenge and decide, as a group, what you think the core issue is.
- Some prompts:
 - why is it a problem?
 - who are the people involved?
 - what is it not about?

Assumption storming (5 minutes)

- What are you own assumptions about the issue?
- Prompts: what do you believe to be true?

What is Design Research?

Design research allows you to uncover your customers' needs, motivations and behaviours so that you can create optimal solutions.

This style of research is not about quantitative data or what people say they like. **Rather, it's about engaging directly with our customers to observe them in their environments and to hear the stories they tell about themselves.**

Our customers can't always imagine what they want or need, but their stories are strong indicators of their deeply held beliefs.



Design Research: Primary & Secondary

Primary research

(research conducted by you)

This type of data is collected through:

- Interviews with individuals or small groups
- Surveys
- Questionnaires
- Observations

Secondary research

(research conducted by others)

This type of data is sourced through:

- Your own institutions data
- Government or NGO reports
- Statistics
- Academic articles or books (look for first person accounts in the data)

Design Research Methods

Longitudinal

Diary or observational studies that observe behaviours/interventions over time

Ethnographic study

Total immersion in lifestyle & environment of your customers

Diary study

Participants document their own observations of a subject

Discovery workshops

Conducting research in large groups using activities & discussions

Observational fieldwork

Observing customers in their environment

Shadowing

Shadowing users through tasks/routines to gain deeper understanding

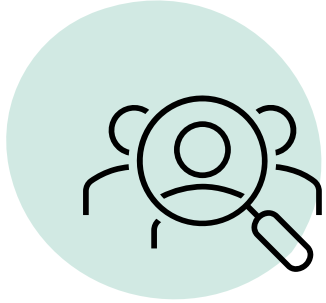
1:1 Interviews

Deep and focused interviews with individuals

Guerrilla research

Stopping people for ad-hoc questions

Customer recruitment & interviews



Customer Recruitment

- Who are your customers? Are they students, academics, professional staff or subsets of these? E.g. graduate students, first year students
- How many do you need to interview?



Interviews and workshops

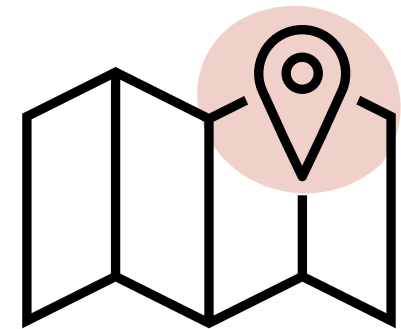
- Develop powerful research questions and workshops
- In interviews: need to listen & observe, ask open questions, use prompts/tools, know (and check!) your biases, and follow their lead

Journey Mapping

Journey mapping is a great tool for getting a single view of a customer's end to end experience of a service or product.

It can help you:

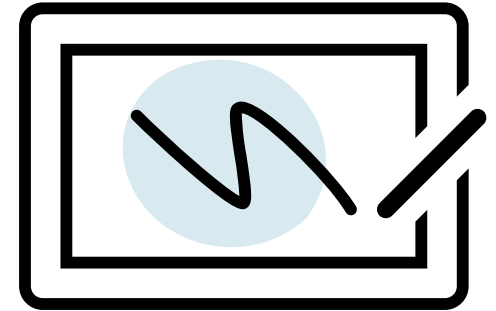
- understand the sequence of actions for different users
- gauge consistency of experience across different users
- identify problems in their user experience
- Identify opportunities for change or impact within the user journey



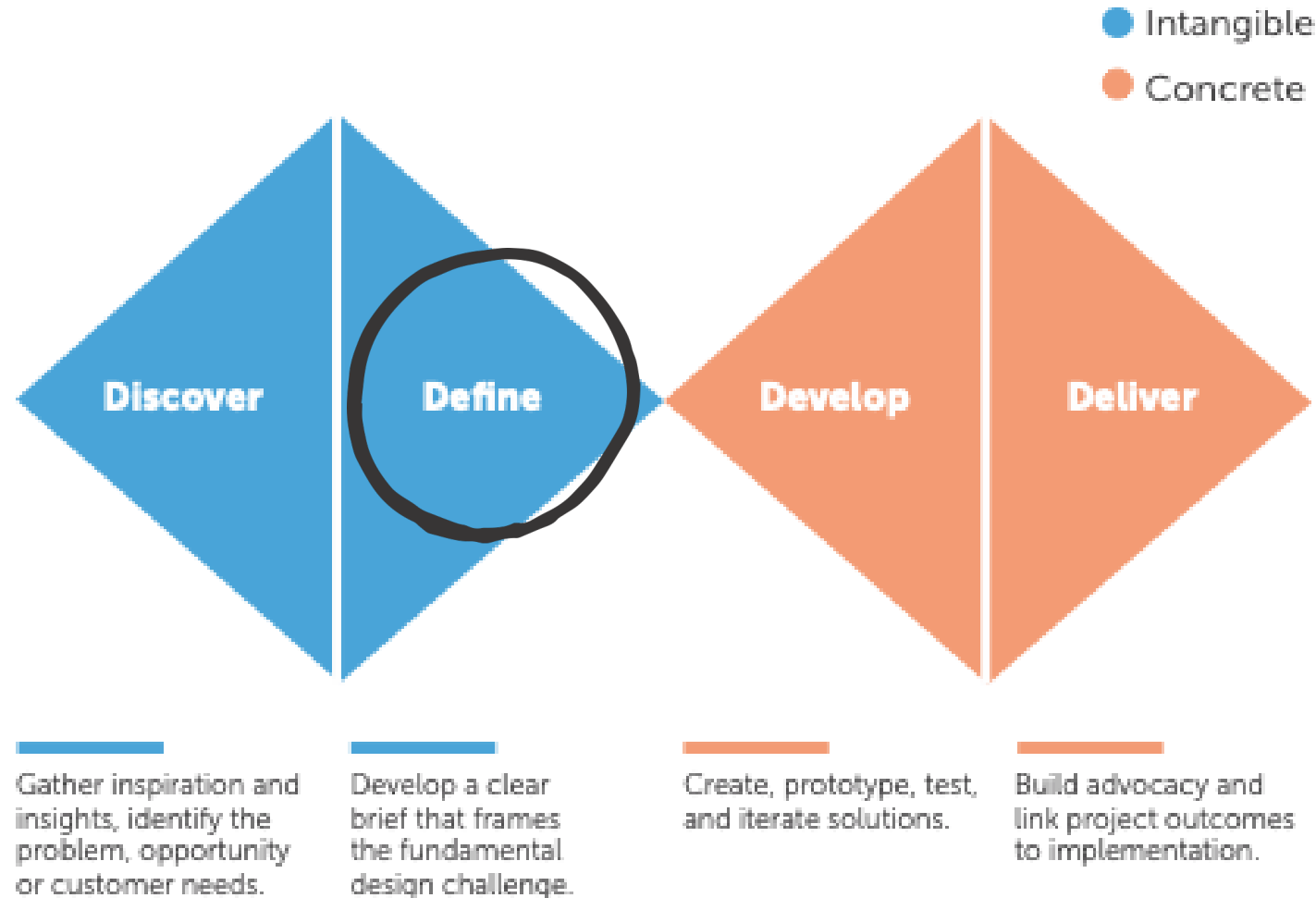


Well done! You've completed your research

In your packs on your tables is the research you've completed on your particular student cohort. You'll get to look at them soon!



Where are we on the Double Diamond?



Sense-making

Sense-making or synthesis is the process of looking for patterns, themes and deeper meaning in your research data

There are 3 main phases:

1. Clustering like-data points
2. Theme-ing
3. Insights (asking the 'why')

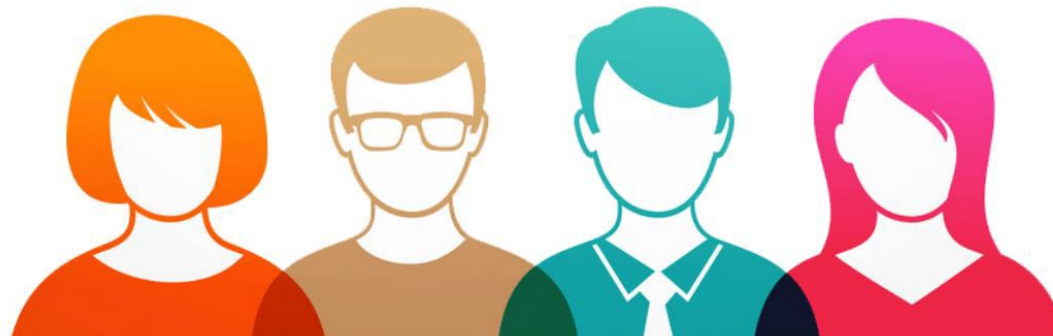
Insights are the goal of synthesising your research. They are the 'so what' of your research and is what sits beneath your data



Activity: Create a persona

- Personas add the human touch to what would largely remain cold facts in your research
- They represent the people who might use your service or product. Creating personas will help you understand your users' needs, experiences, behaviours and goals. It can help you recognize that different people have different needs and expectations.
- Personas make the design task less complex, as they help focus your ideation processes, and help you to create a good user experience for your target user group.

You now have 15 minutes to create a persona based on your primary and secondary research



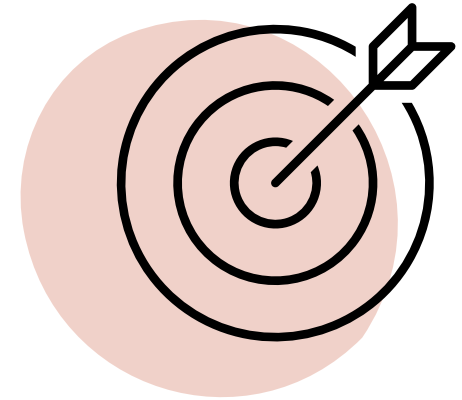
Activity: Refine the problem

Now that you have completed your research and synthesised it. You'll need to revisit the problem!

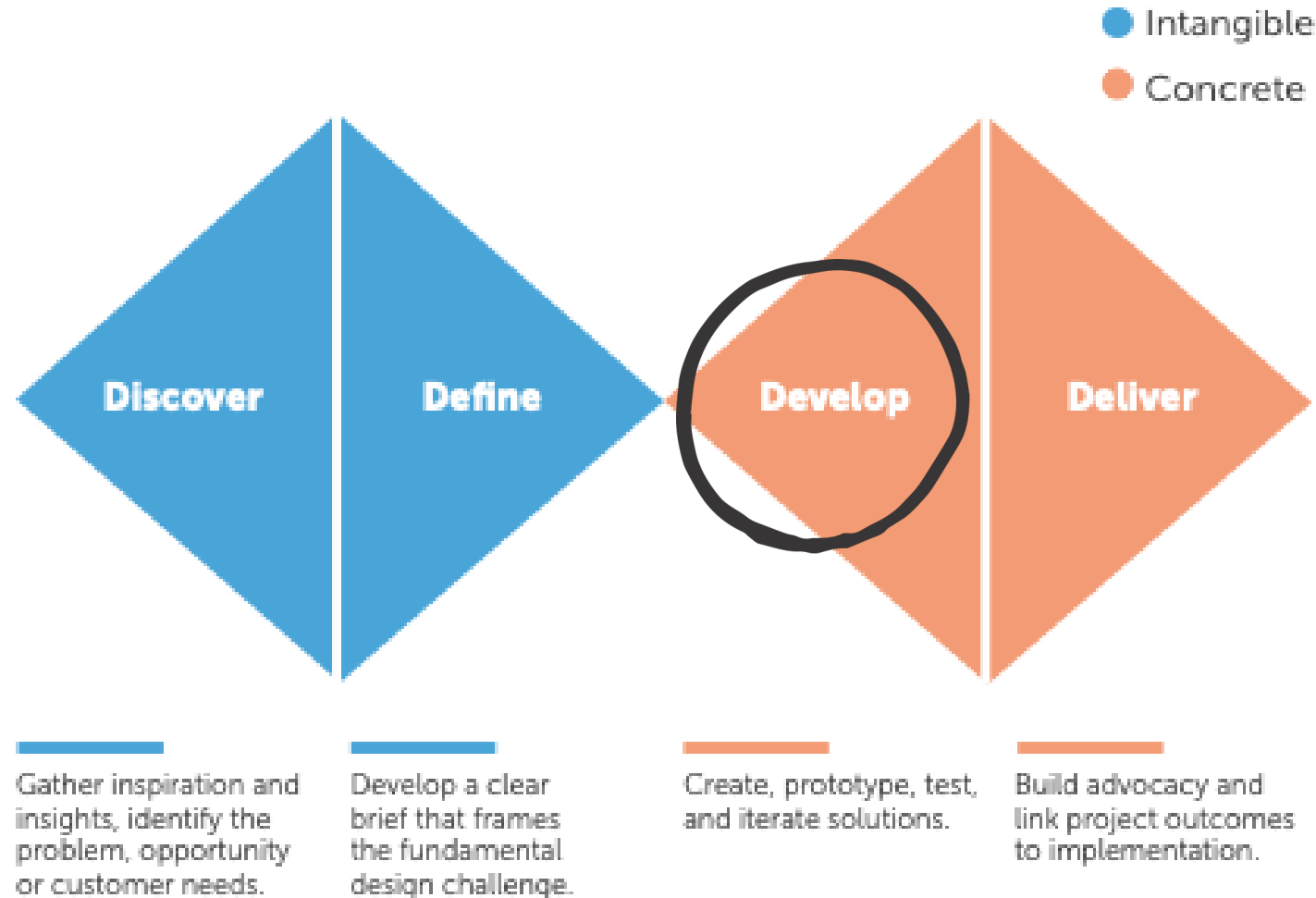
Ask yourself:

- Was my initial understanding of it correct?
- Have we uncovered a specific area or aspect we can focus on?
- Do users have other needs that aren't being met?

Activity: refine what the problem is you'll be developing solutions for in 8 minutes



Where are we on the Double Diamond?



Ideation & Idea Generation



Ideation is about exploring as many different possible solutions to your challenge or problem. We start off by focusing on quantity over quality and can refine as we go along.

You can start off with solo ideation, then share your ideas with your group, then iterate and refine, landing on an idea to take forward to prototyping

Activity: Idea generation

Time to ideate!

Aim for as many ideas as possible within 2 minutes

- | | |
|-----------------|---|
| Adapt | Is there something we already offer that could be refined? |
| Combine | Can you combine two of your ideas to create something different? |
| Magnify | Can you make something bigger or stronger? Can you exaggerate one aspect? |
| Minimise | Can you omit an aspect of your idea? Make something understated? |
| Reverse | Turn your idea backwards, upside down or reverse roles? |

Remember you are designing for your person within an environment. Consider senses such as **smell, touch, taste, hearing, sight**. Does this change any of your ideas?

Share your ideas and begin voting on a single solution with your group.

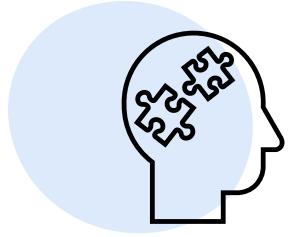
Prototyping & prototype testing

Prototype is a solution in a tangible form that you create in order to learn from your users. It's where you can leave your assumptions and ideas behind and DO.

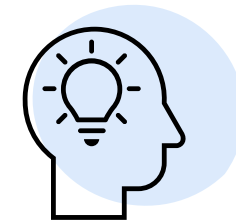
It's creative, fast and challenging for some and fun for others!

It's what you will take to your users to test – testing your prototype will help you understand your users more deeply and identify how your solution will need to be tweaked. It's an iterative process so you might need to test and refine a few times!

What is a prototype & why do it?



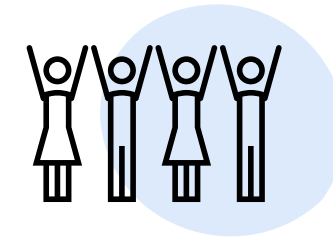
1. Test customer behaviours



2. De-risk solutions



3. Learn what the most important aspects of your idea are



4. Test, share, and socialise your idea inside your organisation

Some examples of prototyping

Physical Objects

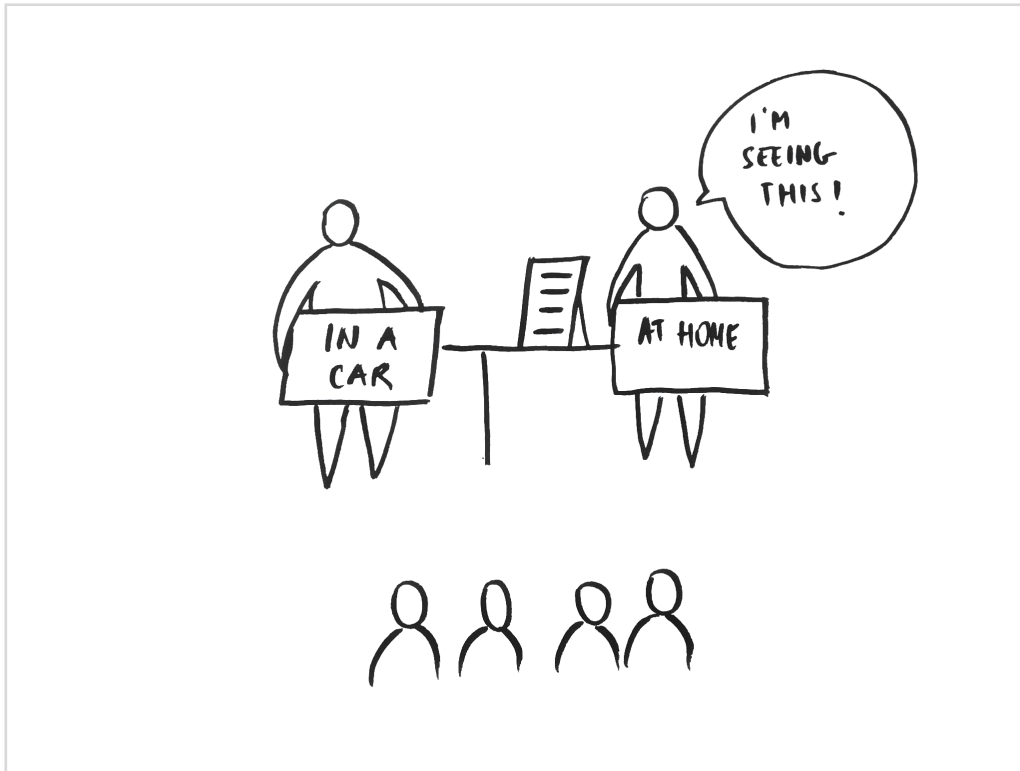


Paper prototyping

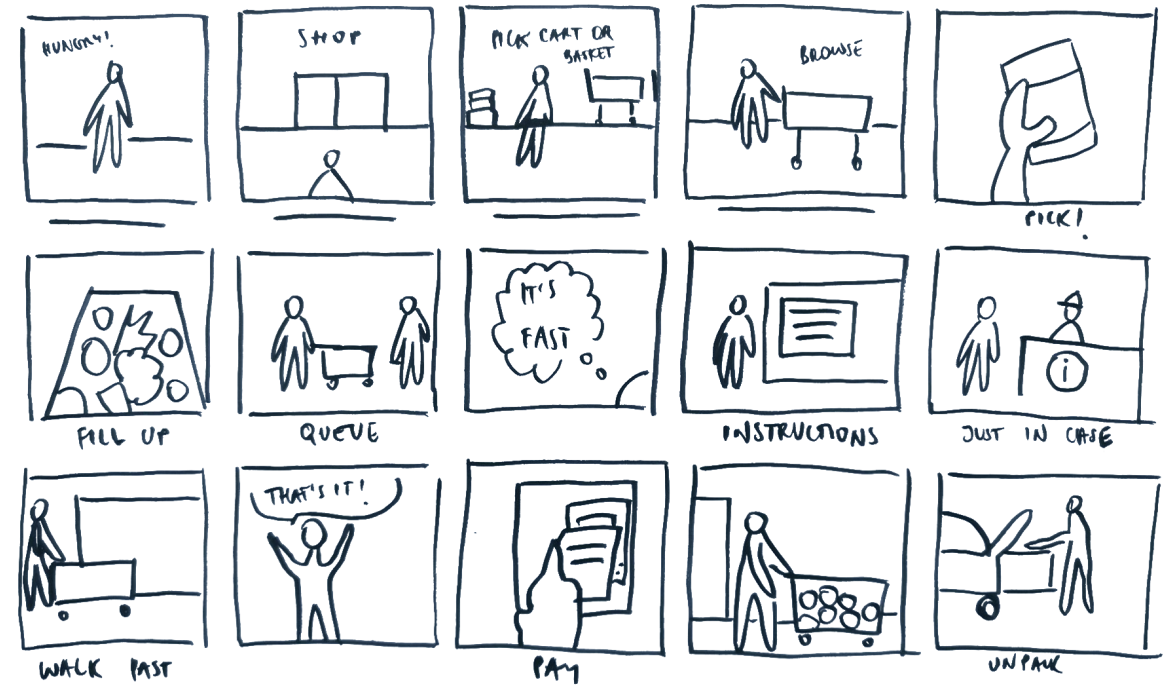


Some examples of prototyping

Service Simulation



Storyboards



Activity: Build your prototype

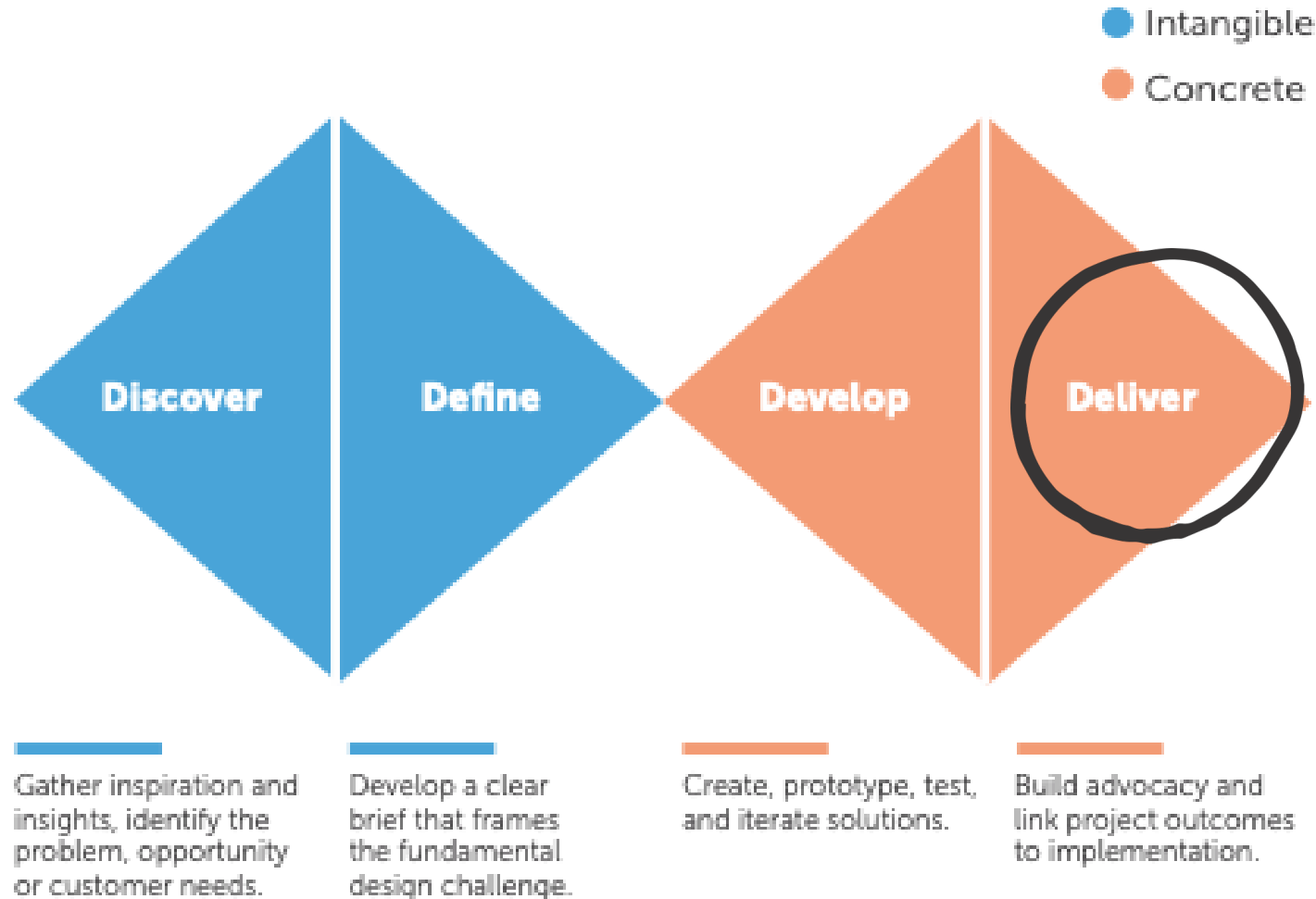
As a team, choose a prototype that would fit your solution and build it!

Quick and dirty is the key here. It doesn't need to be perfect.

It could be a service simulation, paper prototype, a storyboard



Where are we in the Double Diamond?





Present your group idea!

Groups will have 2 minutes to present their challenge and solution



Reflections?



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Thank you
