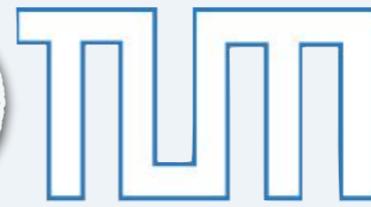


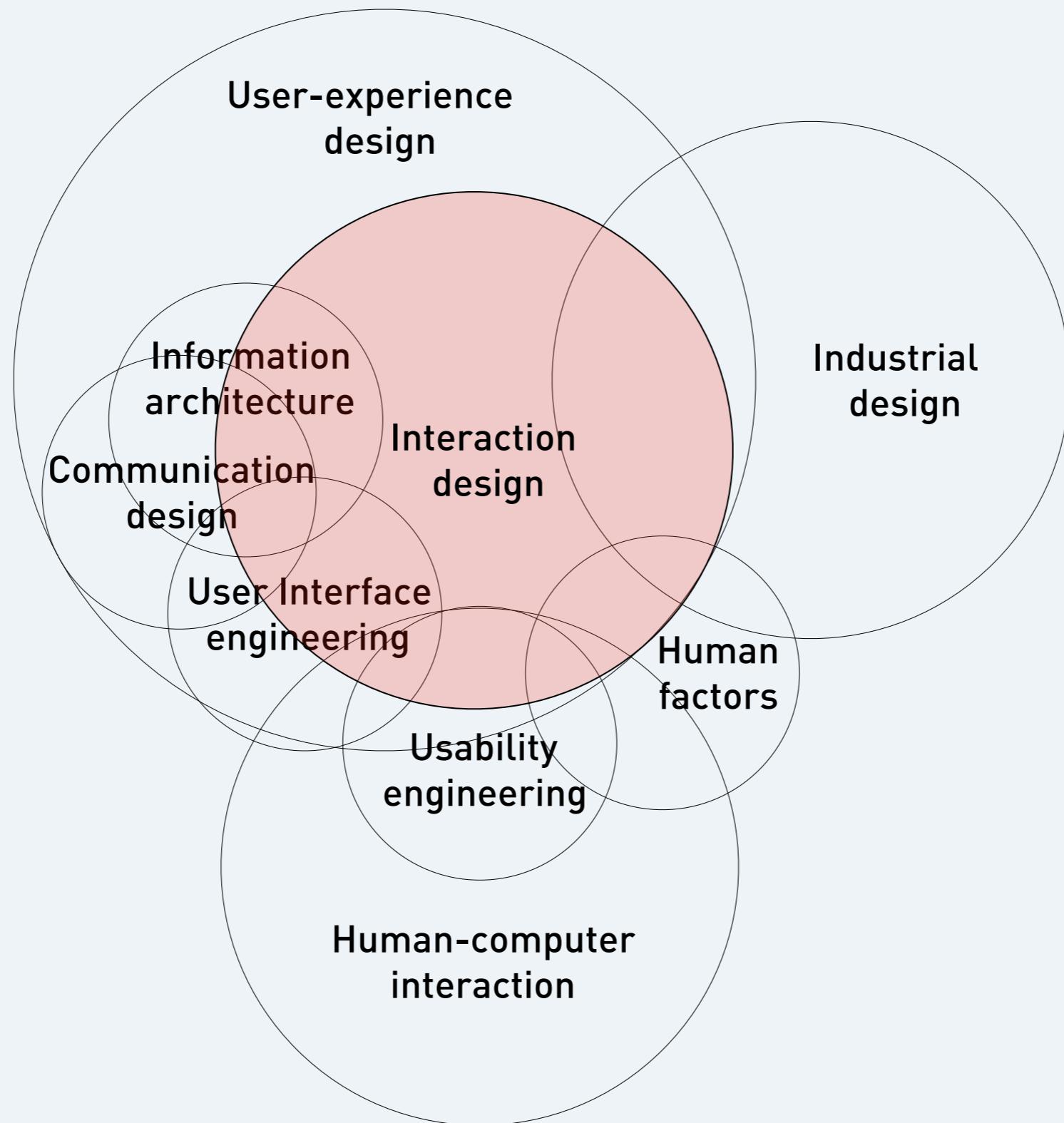
# Welcome!

# Designworkshop II



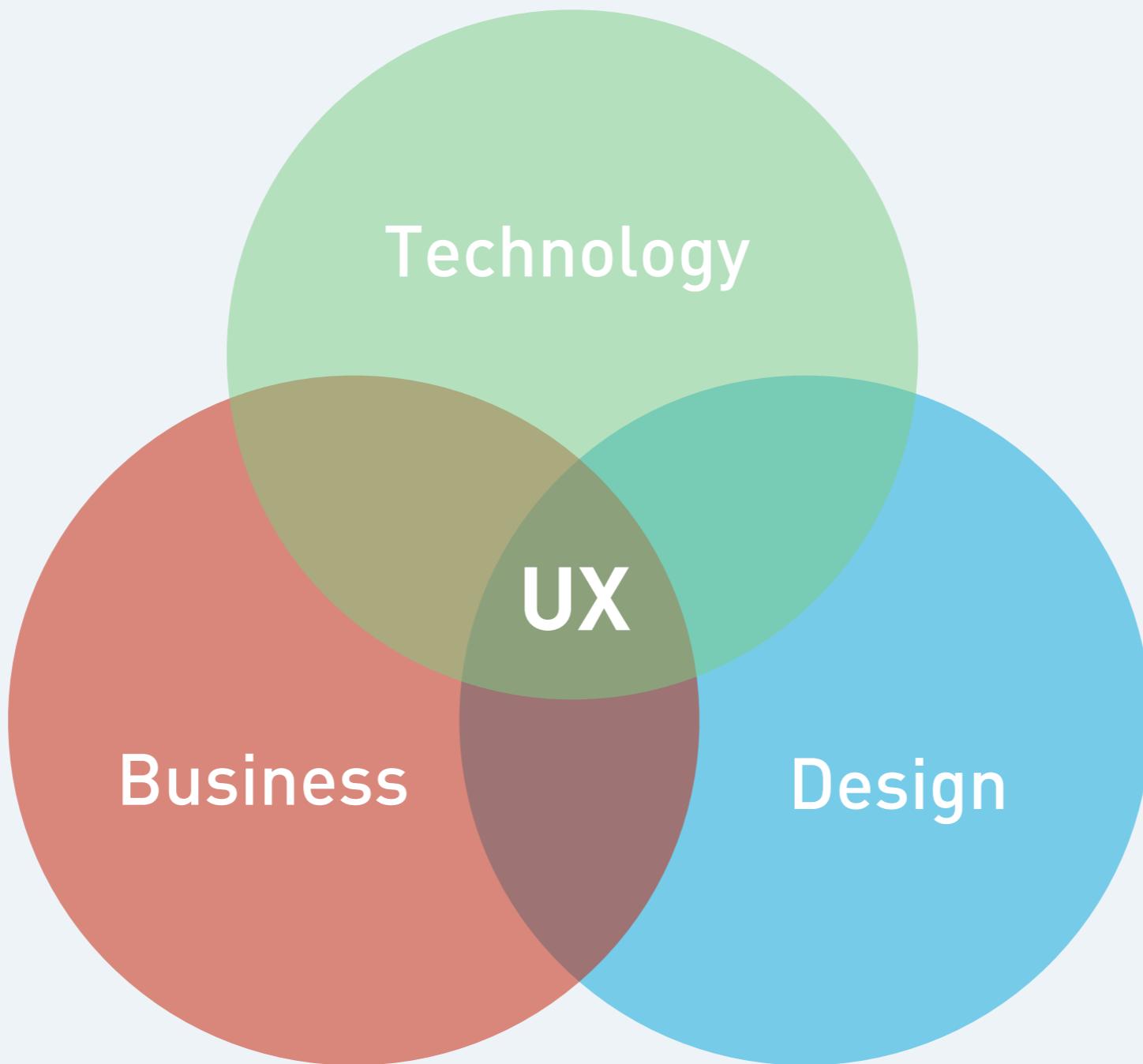
Audi

What are we doing here ?



source: [11]

# User Experience Design



# User Experience Design



# Getting the right Design and the Design right...

Bill Buxton - Sketching User Experiences

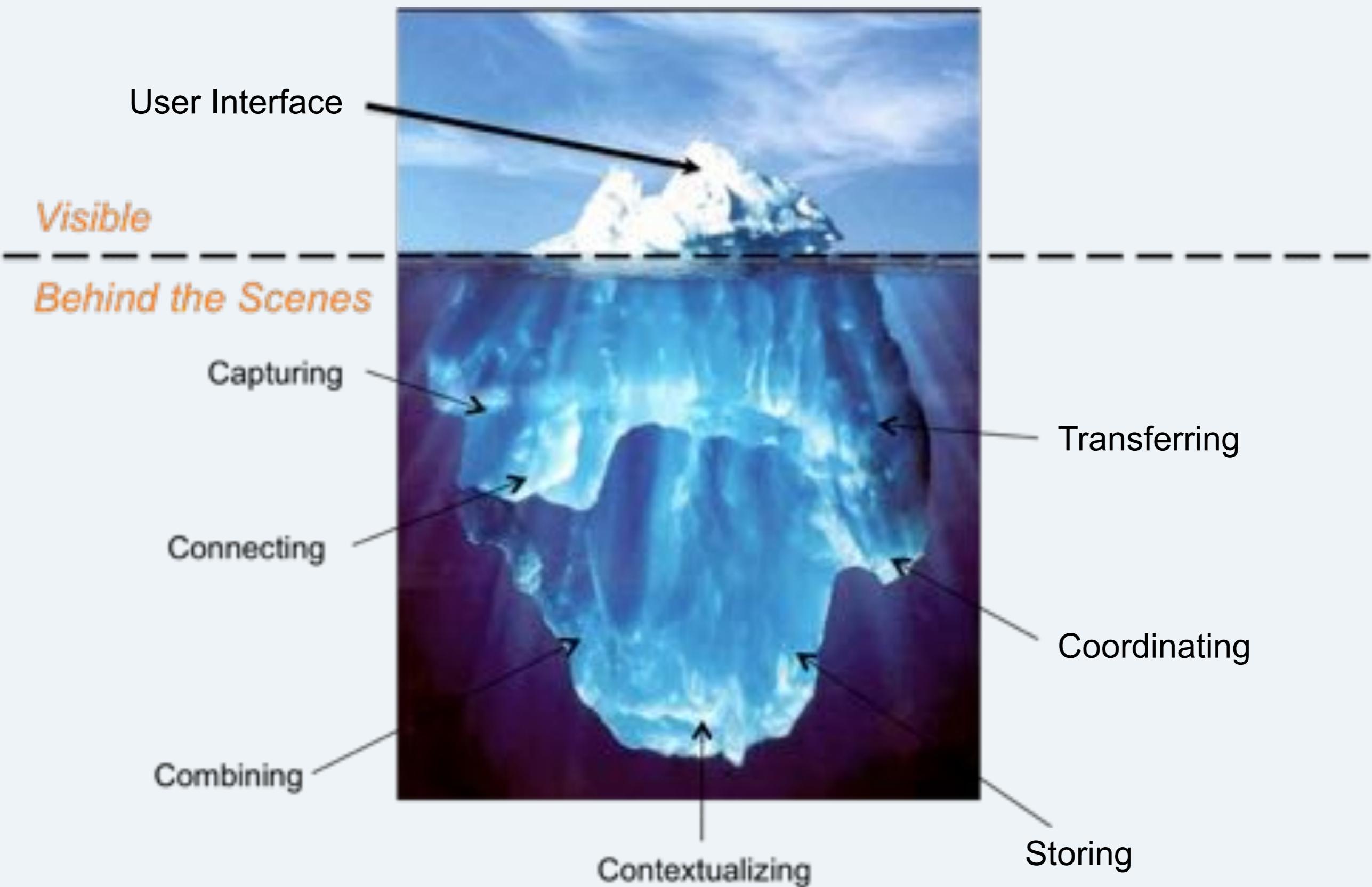


# Front Stage

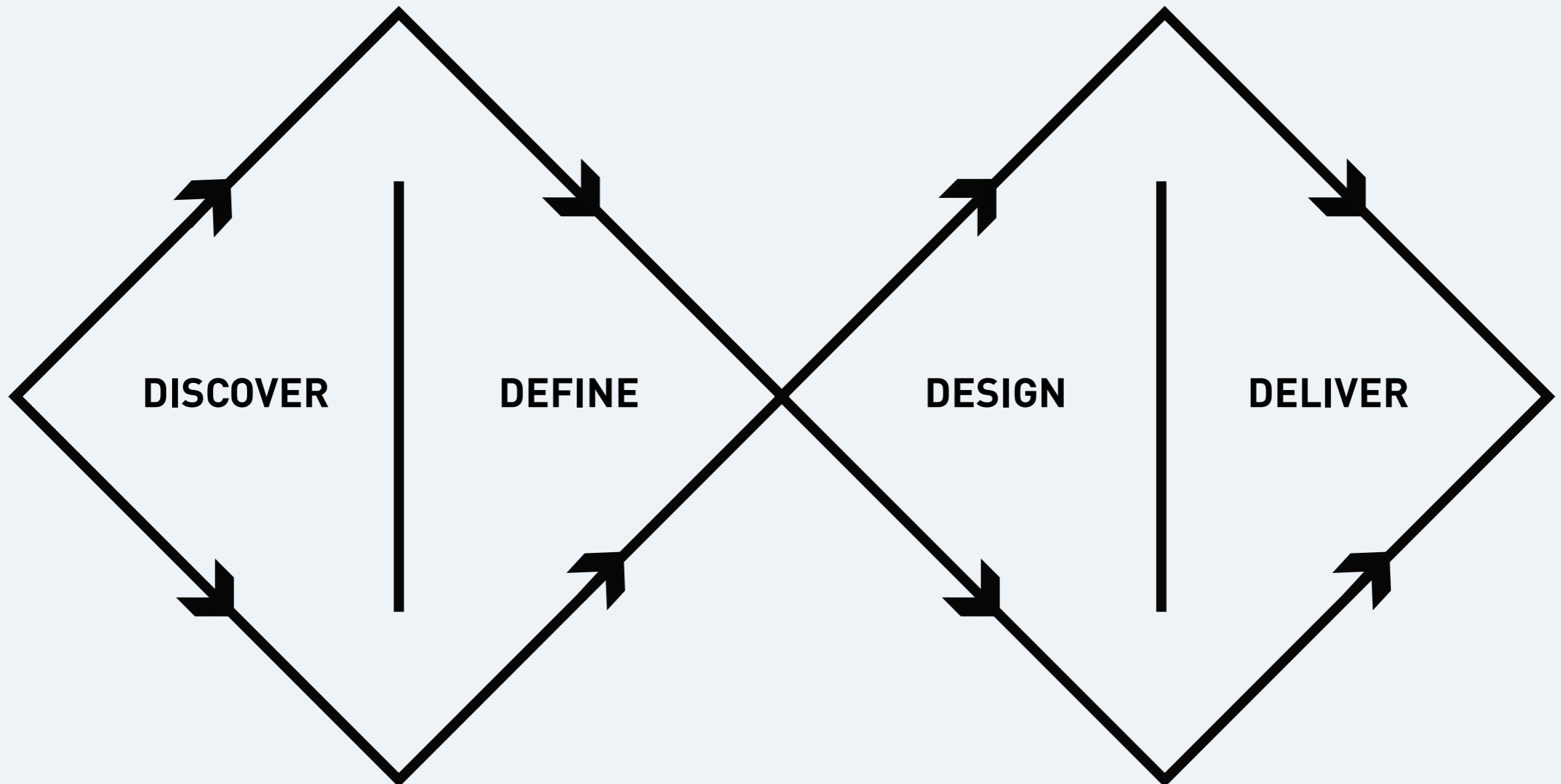


# Back Stage

<http://blog.entrepreneurhearts.com/etablog/wp-content/uploads/2010/08/backstage.jpg>

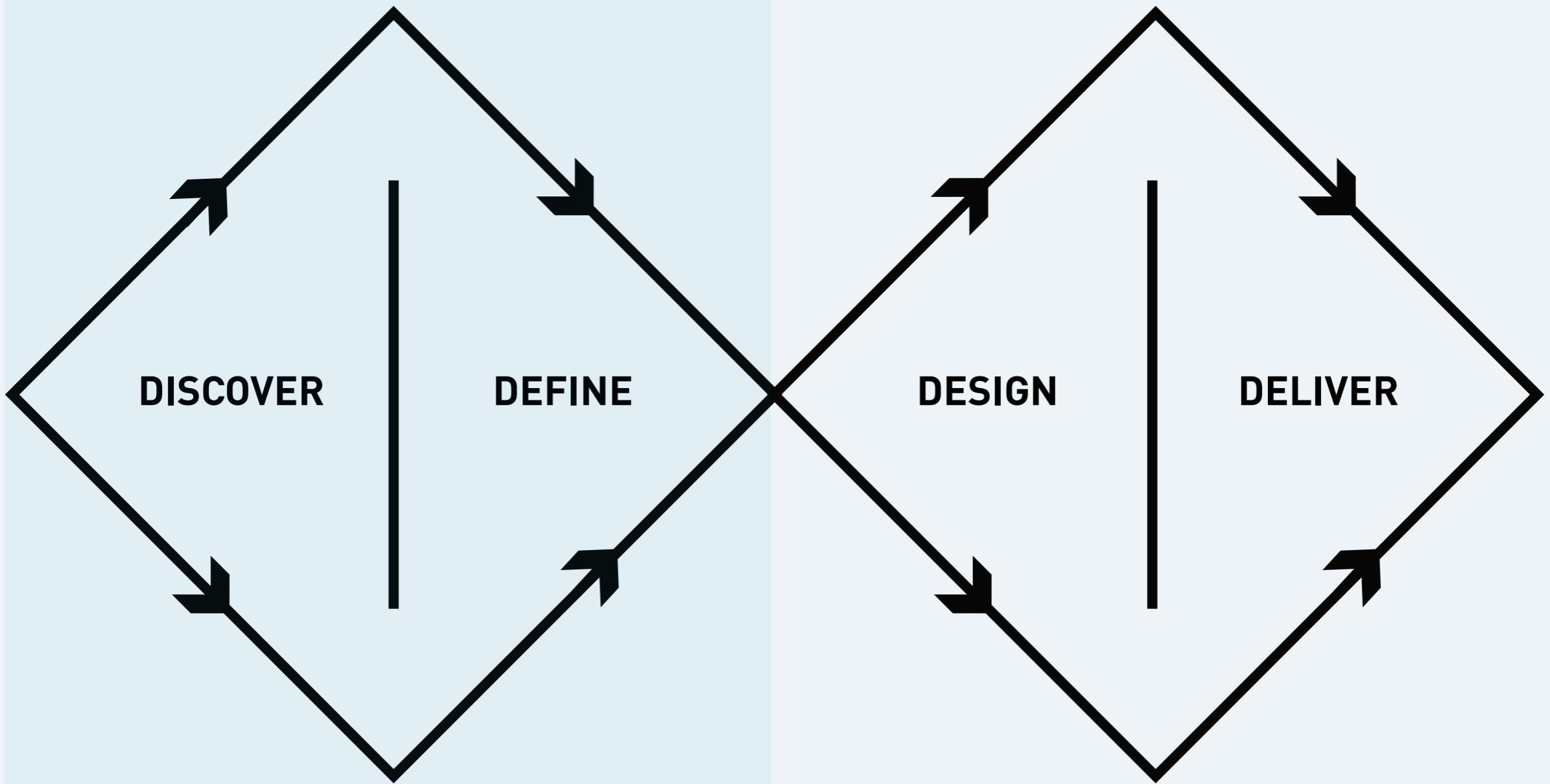


# Double Diamond



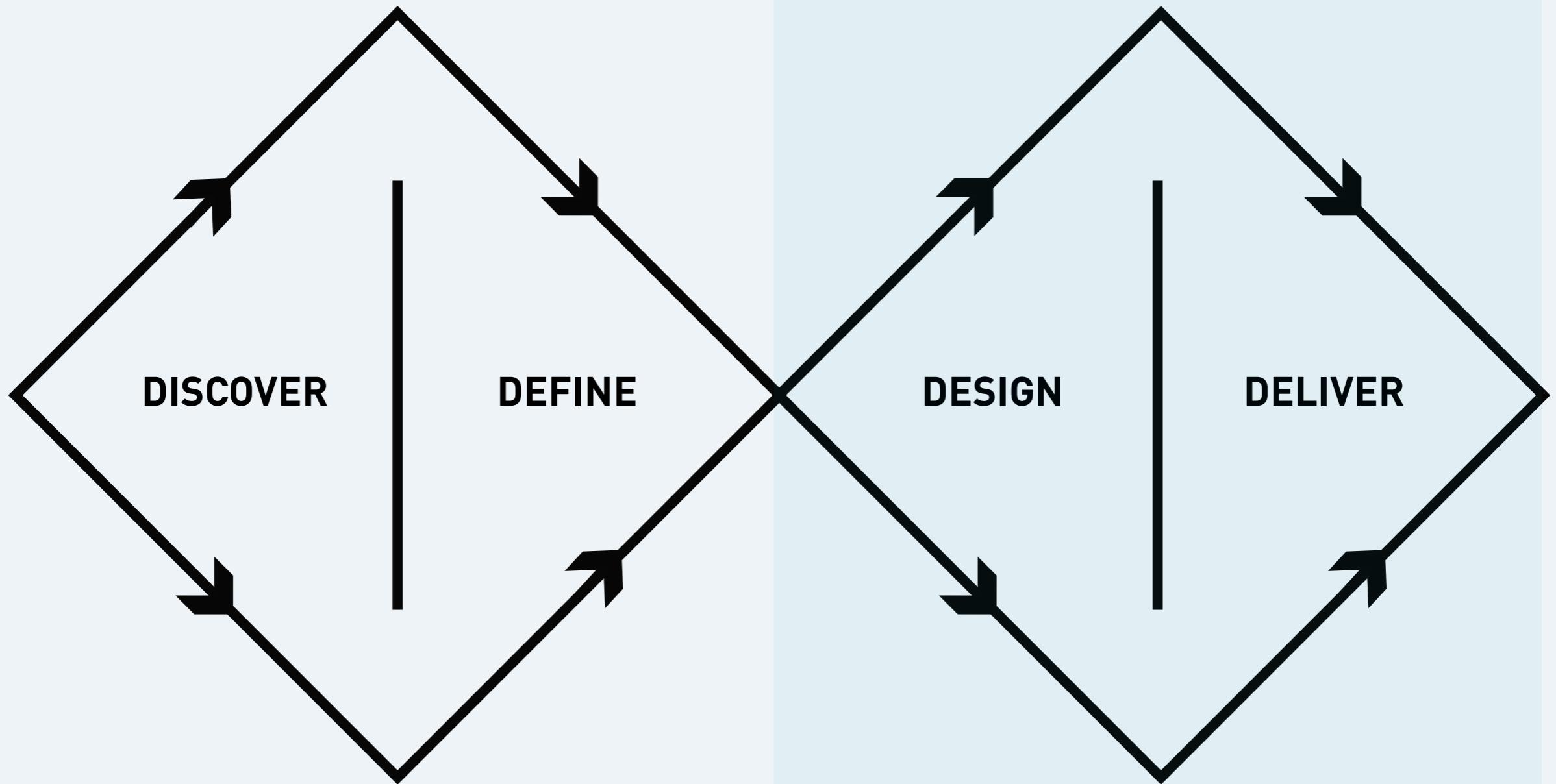
source: [8]

# Double Diamond



**Why? and How?**

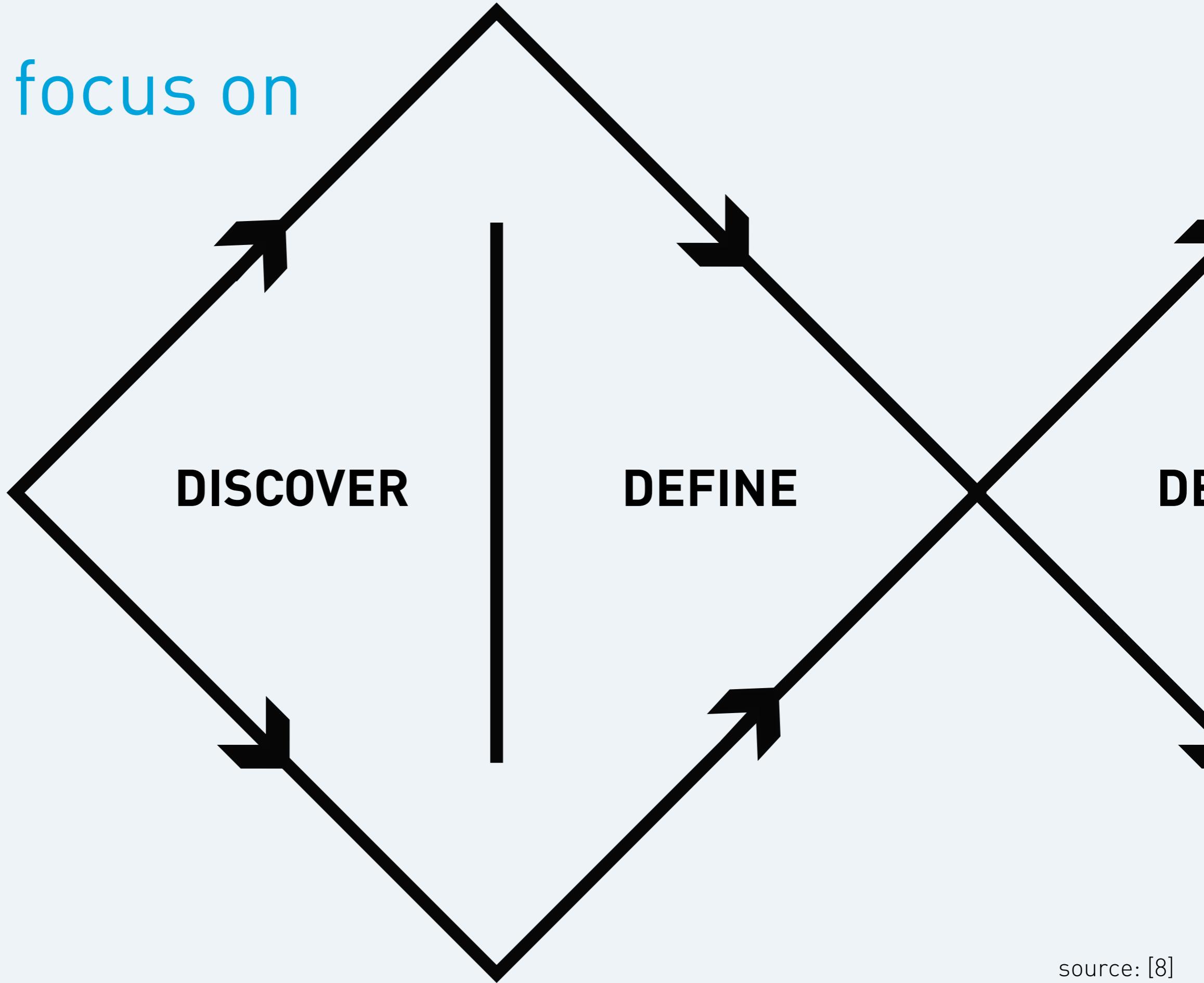
# Double Diamond



**What?**

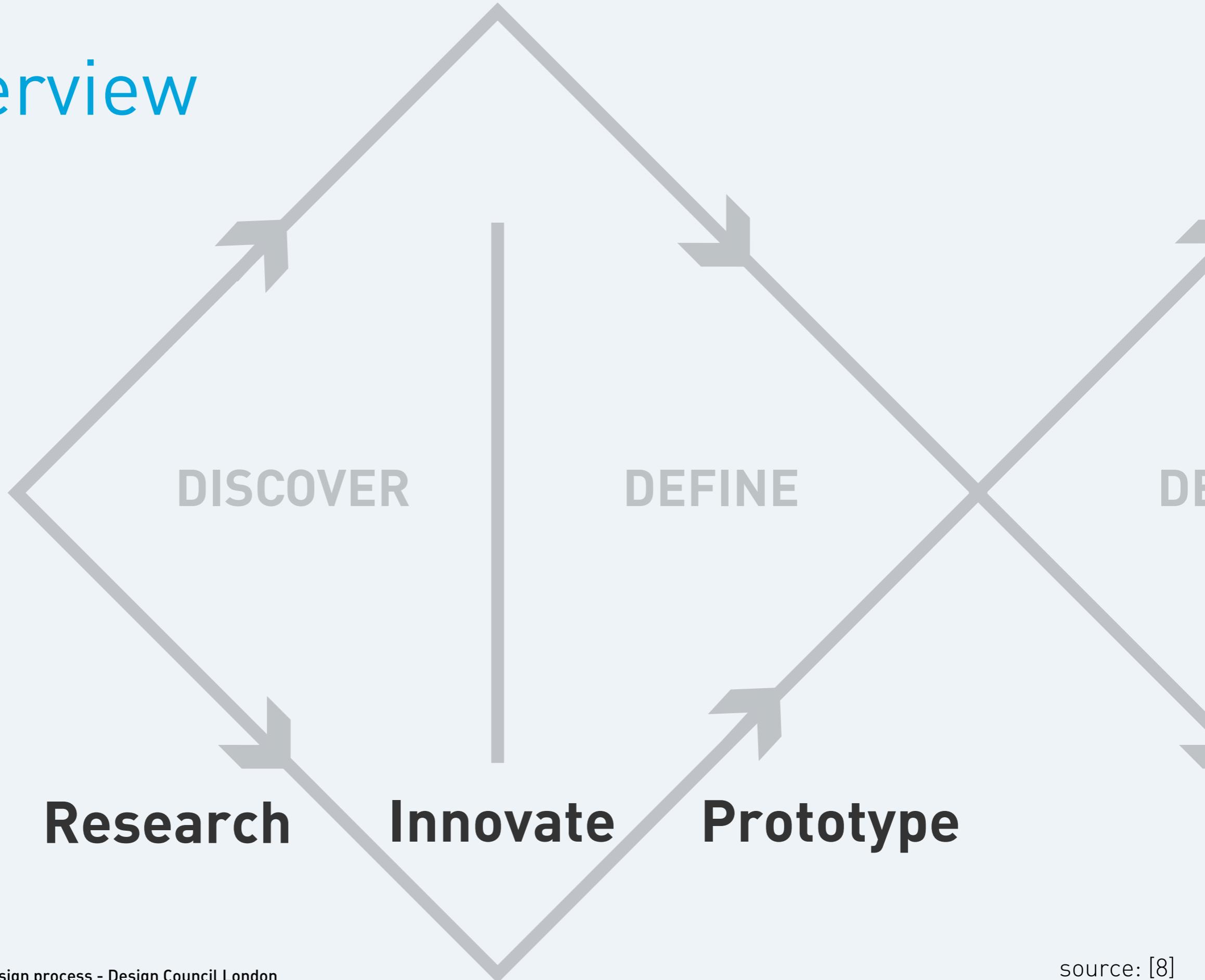
source: [8]

We focus on



source: [8]

# Overview



# Overview



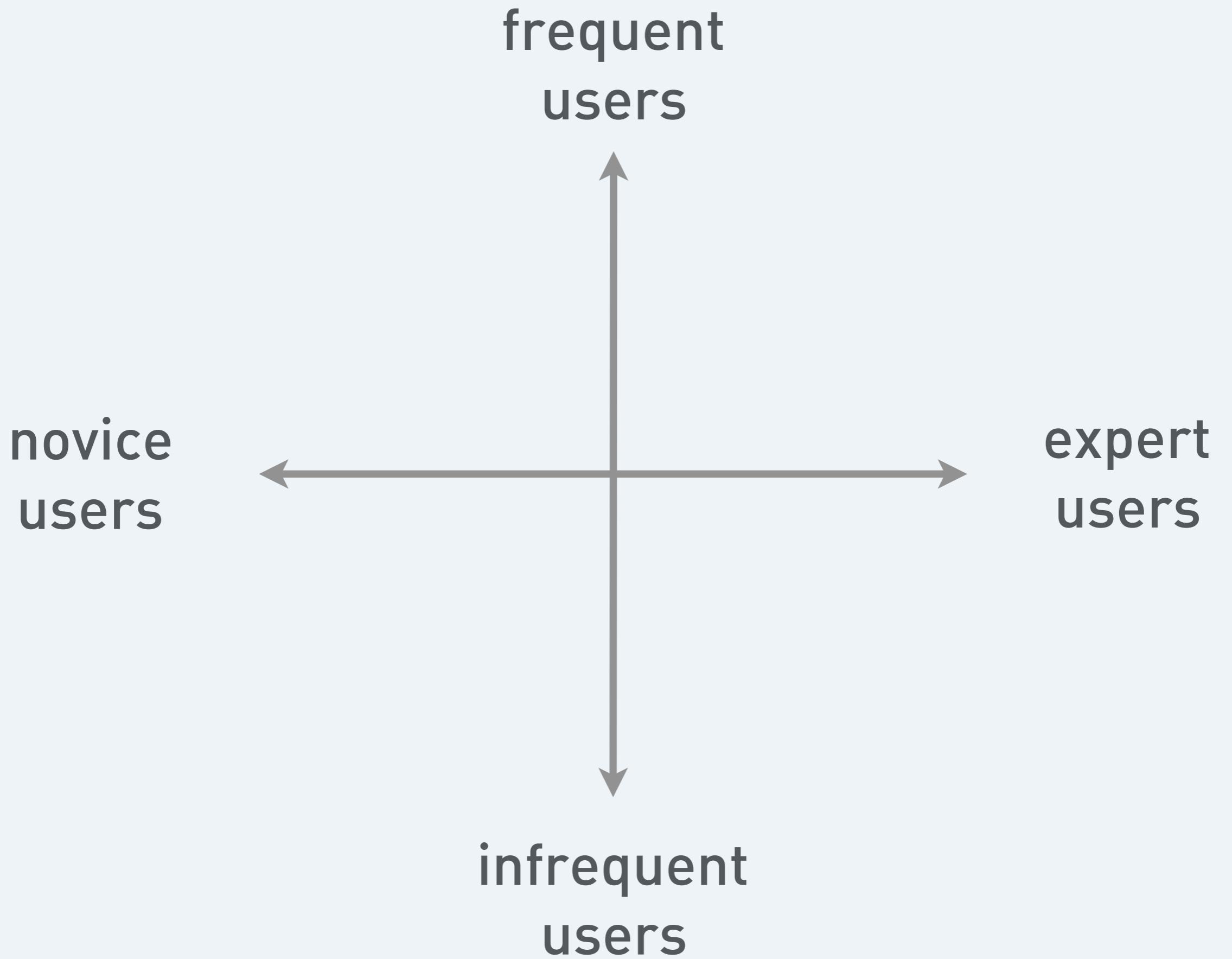
## Research

Get to know your problem/  
subject

Gather insights about the  
user and their life

Collect artefacts &  
impressions

Record tasks



source: [2,4]



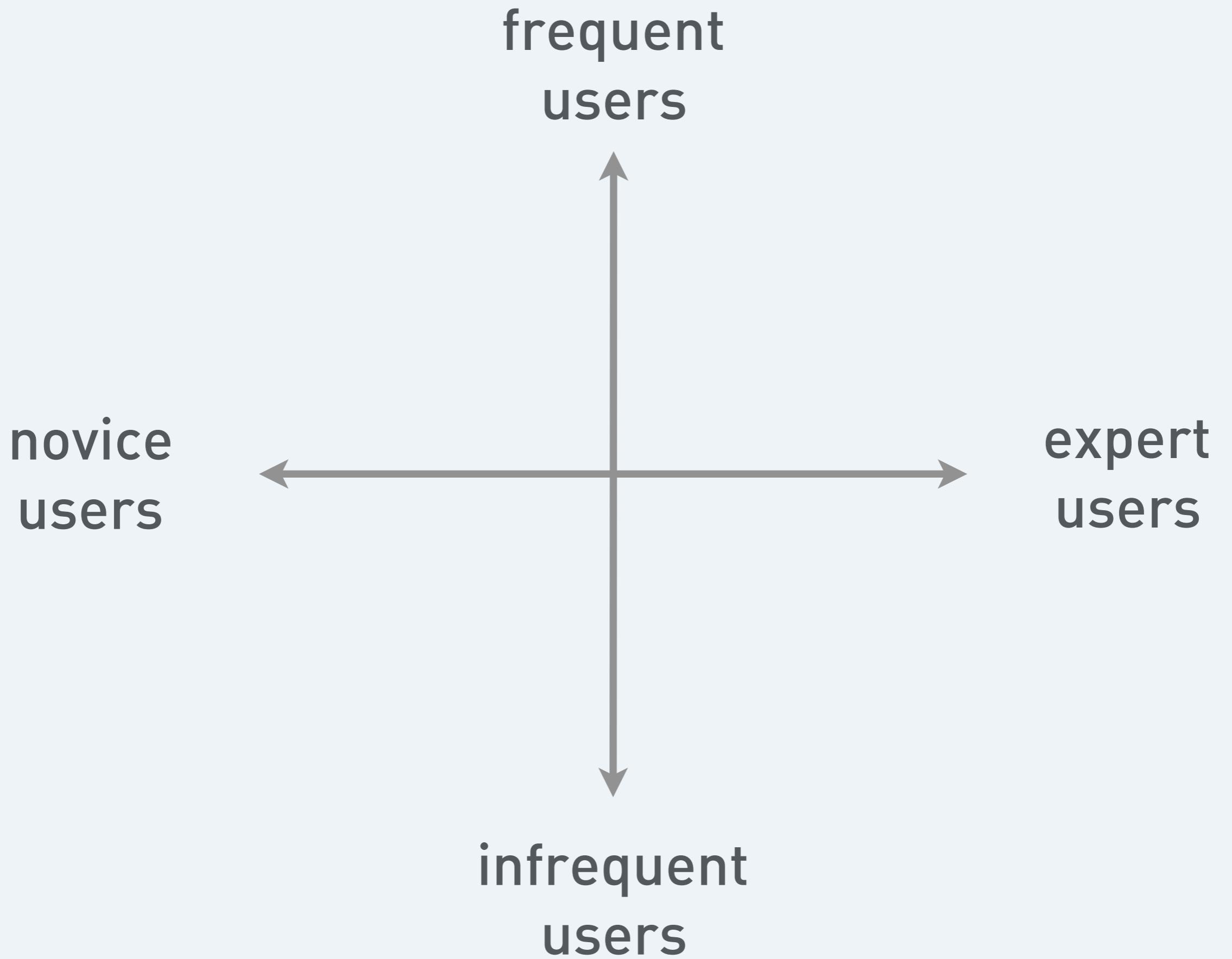
## Audi A4 Series Cockpit

<http://www.audicomparisons.com/wp-content/uploads/2013/10/2014-Audi-A4-interior.jpg>



## Audi R15 Racing Cockpit

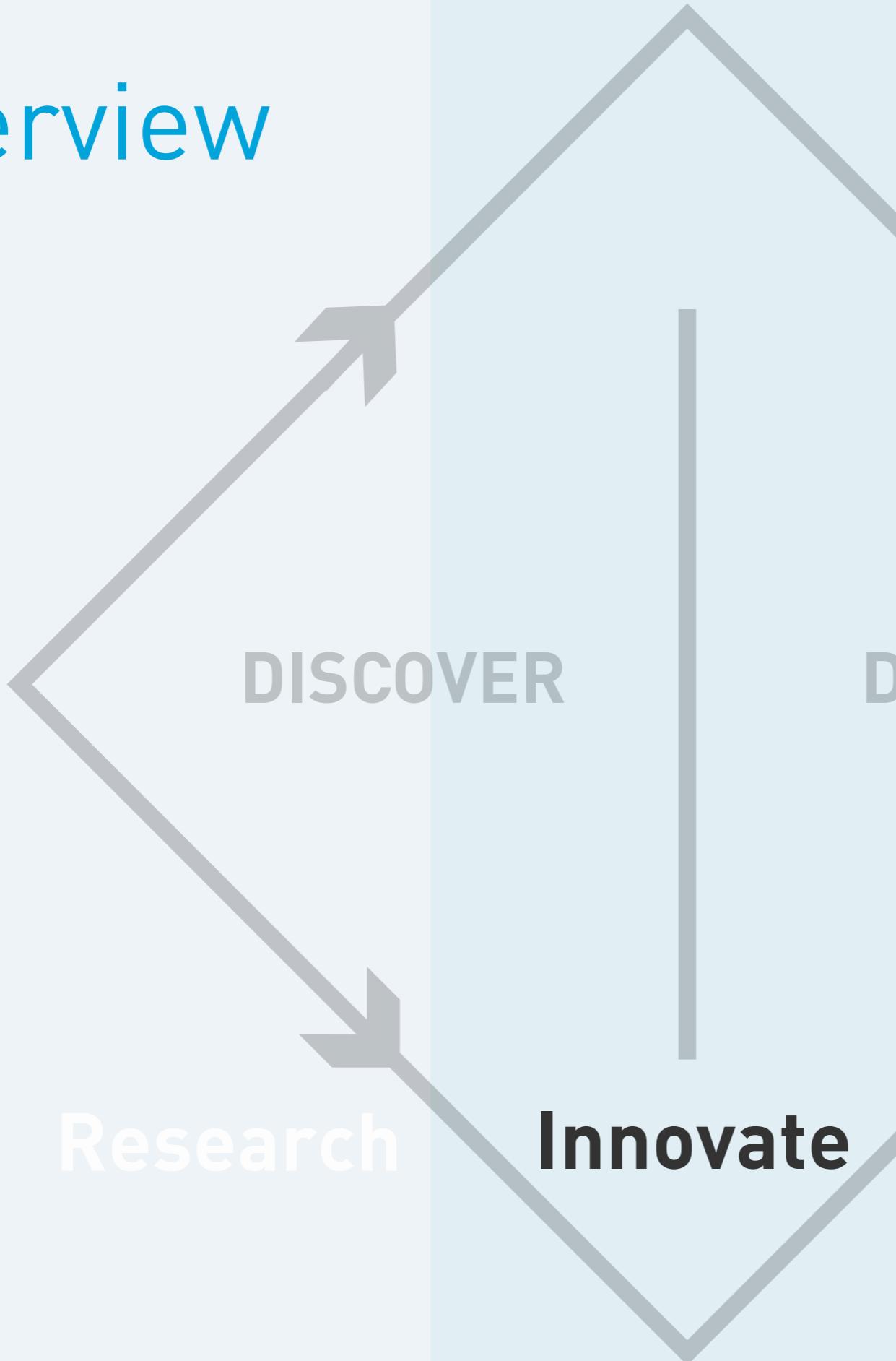
[http://2.bp.blogspot.com/\\_SM9A\\_sqVGgM/S9XON6I\\_WtI/AAAAAAAADww/HcrQgfpuHgI/s1600/Audi+R15+Plus+Cockpit.jpg](http://2.bp.blogspot.com/_SM9A_sqVGgM/S9XON6I_WtI/AAAAAAAADww/HcrQgfpuHgI/s1600/Audi+R15+Plus+Cockpit.jpg)



source: [2,4]

Different, usage contexts, user types  
and usage frequency will require  
dedicated solutions.

# Overview



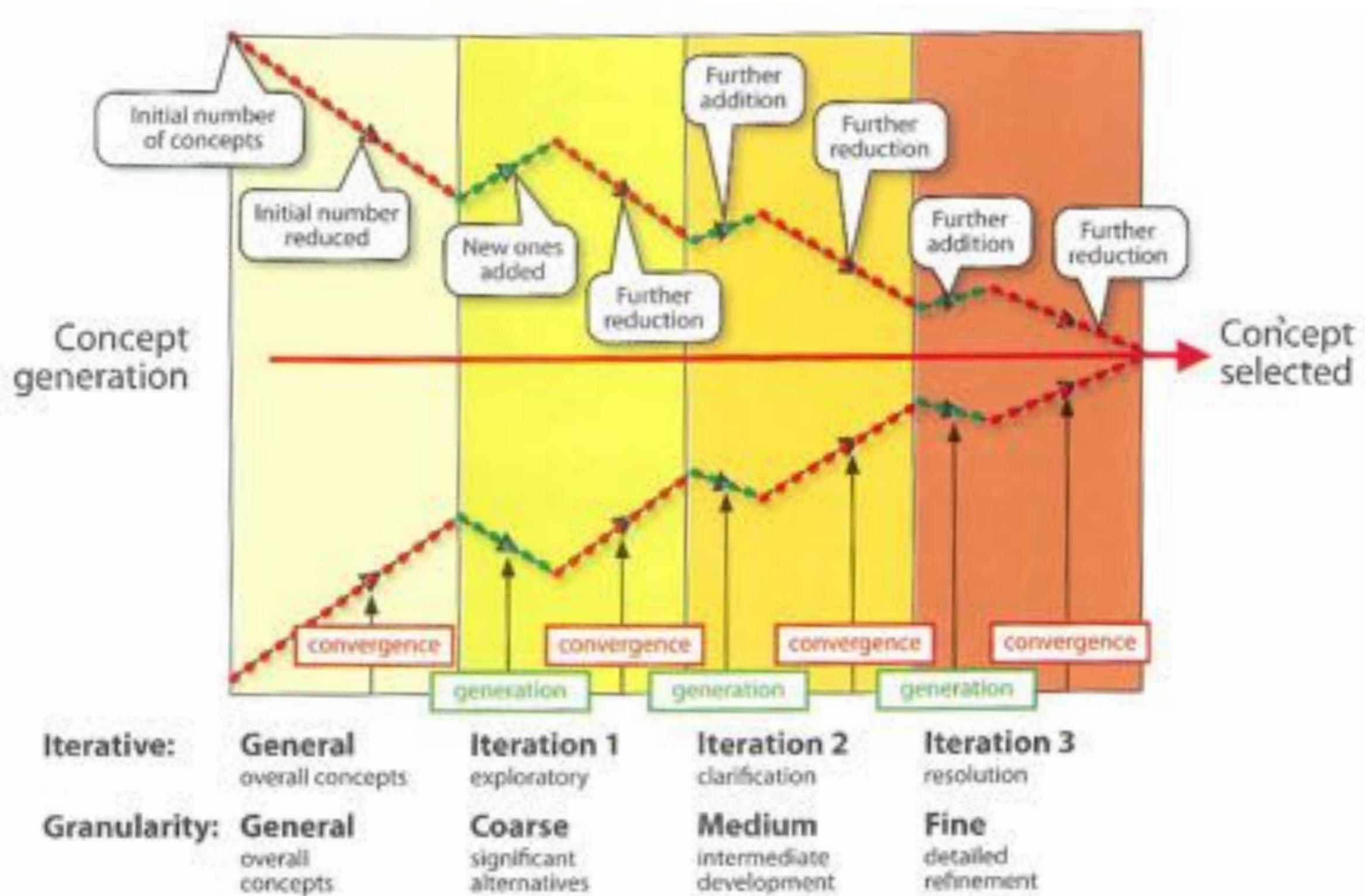
Make sense of  
your data

Identify  
important facets

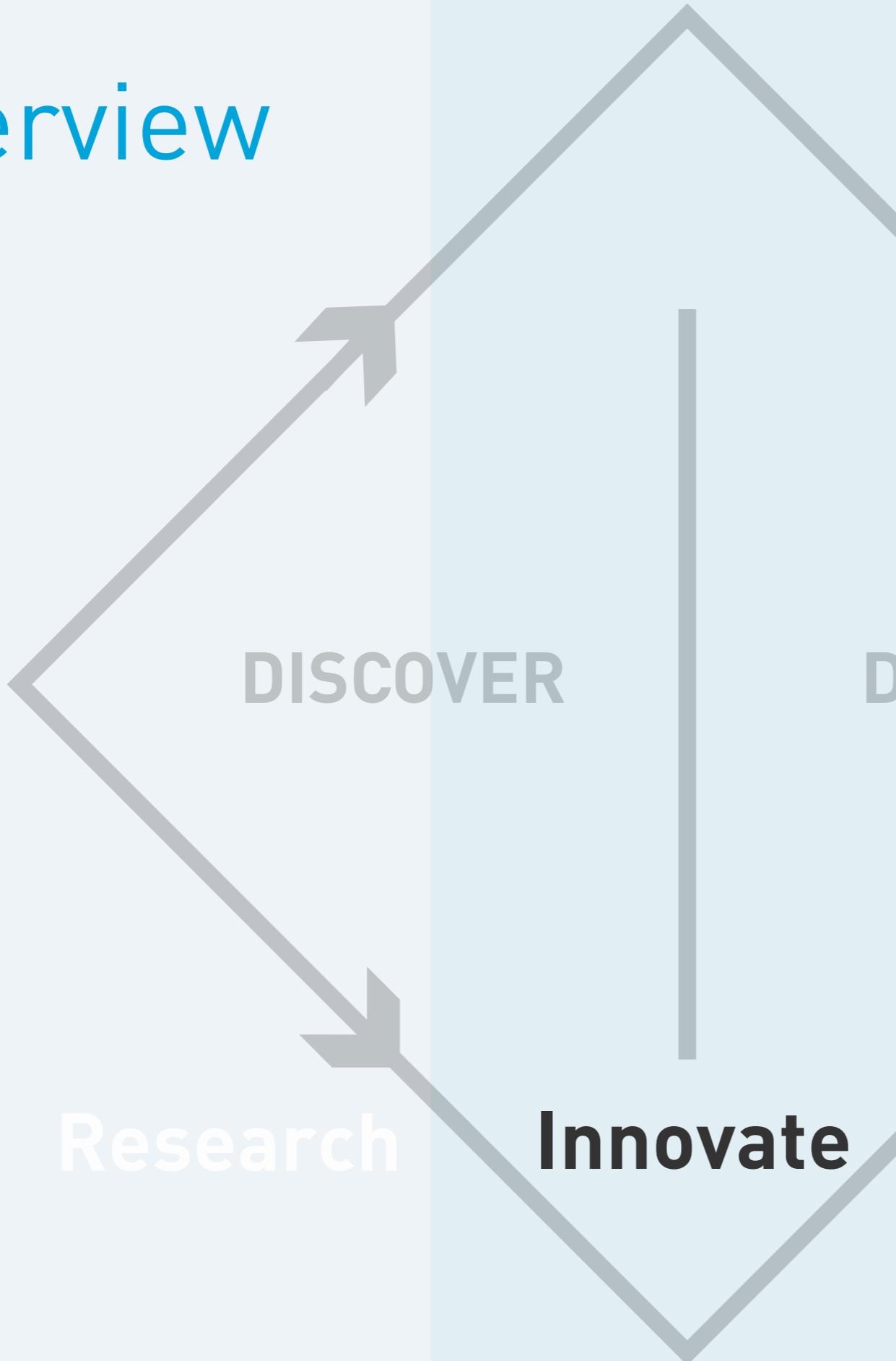
Keep all players  
in mind

Collect and  
prioritise ideas

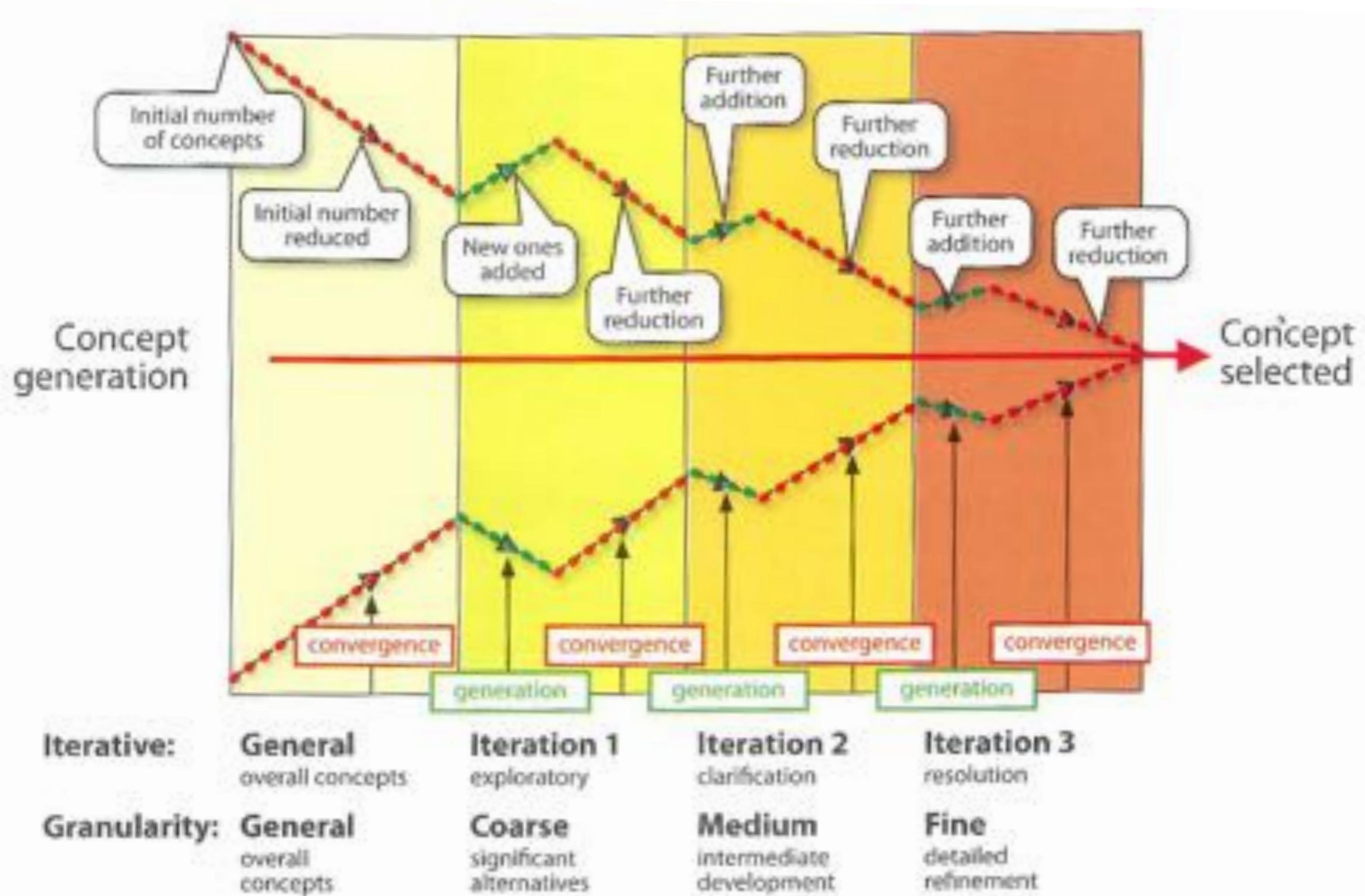
Develop &  
validate solutions

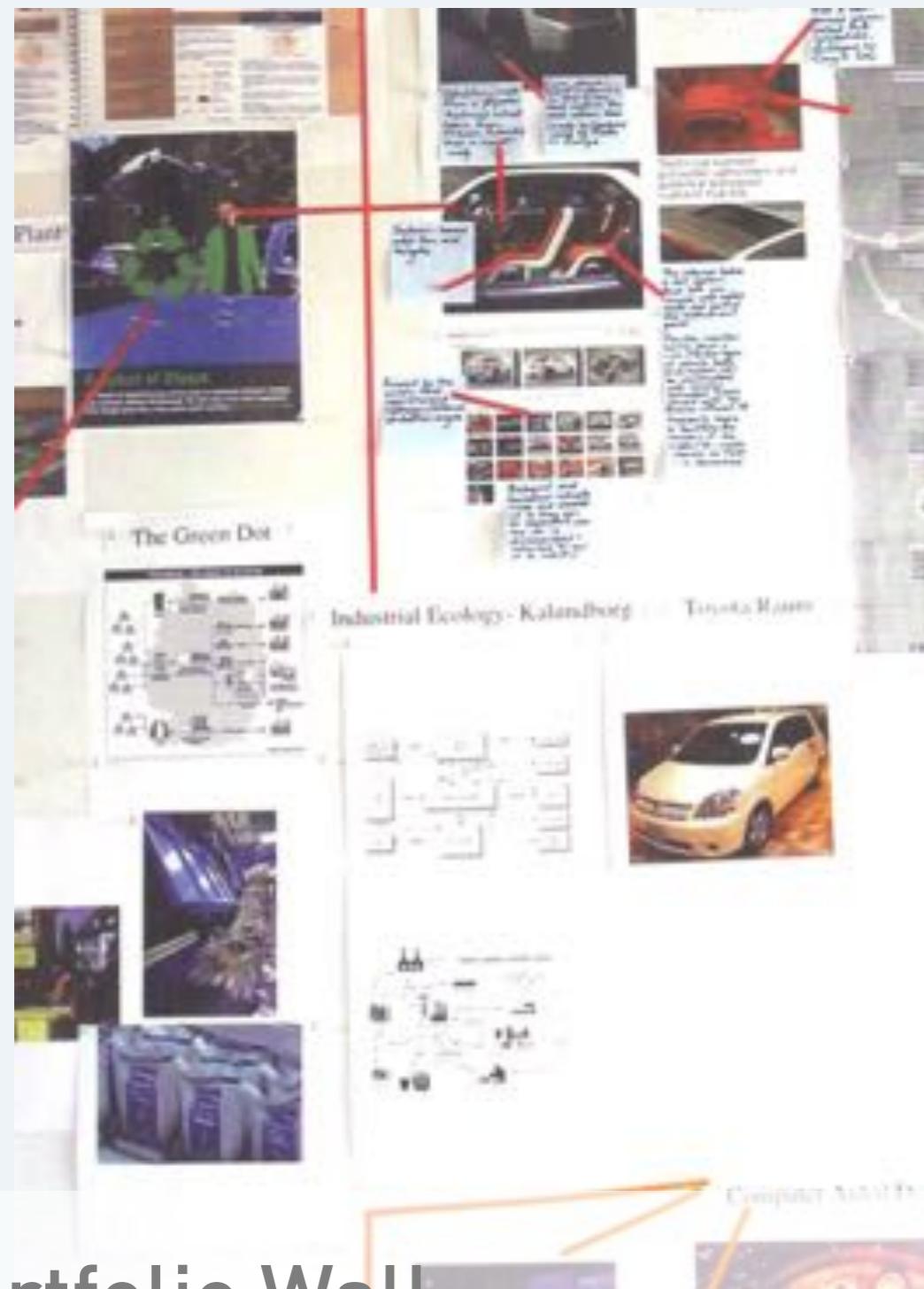


# Overview



Make sense of your data  
Identify important facets  
Keep all players in mind  
Collect and prioritise ideas  
Develop & validate solutions





## Portfolio Wall



## Competitive Analysis/Current Interface

**Four different adjustments**  
just to make AC right the  
way you like it.

**Too many buttons**  
Buttons could be simplified  
and grouped further.

**AC adjustments**  
do not show up on  
navigation screen.

**Turning Knob**  
for the screen on top  
is far back; Poor  
ergonomic.



**Buttons** with  
simple icons are  
centralized at a  
convenient location.



### What is working?

- Screen does not need to be at the same place as control.
- Tactile feel of button/Button grouping.
- Use of color, materials, textures, and lights can improve information hierarchy.

## Competitive Analysis

### What is NOT working?

- Appropriate position for frequently used buttons is important.
- Too many buttons are intimidating.
- Buttons are scattered and not intuitive position.
- Touchscreen requires too much attention.
- Buttons rely on small icons/text which is hard to read.



## Competitive Analysis / Car Trends

### Trends Insight

- More wireless connectivity to information and to others.
- More seamless integration between digital and physical world.
- Devices are more content driven and user centric.
- Better customization capabilities and mobile computing is more prevalent.

#### Interior Comforts

##### Communication between Driver and Passengers

Driving the comfort factor to higher place, models like the 2007 Ford Expedition have ensured better communication between passengers front-seat to third row by using improved materials in the carpet and other places.

##### Sound/Insulation from Exterior

The SUV provides more insulation behind the dashboard and door panels, thick glass and a sturdy roof panel, thus preventing heat from blocking the sounds.



# Competitive Analysis

# Literaturrecherche

Google / Google Scholar

<http://scholar.google.de>

ACM Digital Library

<http://portal.acm.org/dl.cfm> -> BibTex, Referenzen, Verweise

Citeseer

<http://citeseer.ist.psu.edu/cs>

IEEE Xplore

<http://ieeexplore.ieee.org/Xplore/guesthome.jsp>

# Literaturrecherche

Zugriff auf diverse Literaturdatenbanken (ACM, IEEE) über LRZ-VPN und –Proxy:

<http://www.lrz-muenchen.de/services/netzdienste/proxy/browser-config/>

Zugriff auf das ACM Portal und IEEE über LRZ-Proxy:

<https://docweb.lrz-muenchen.de/cgi-bin/doc/nph-webdoc.cgi/000110A/http/portal.acm.org/portal.cfm>

Zugriff auf Zeitschriften:

<http://docweb.lrz-muenchen.de/>

# Webrecherche

Techblogs:

[engadget.com](http://engadget.com)

[ted.com](http://ted.com)

Zugriff auf Zeitschriften:

<http://docweb.lrz-muenchen.de/>

# Intro Audi

# Workshop Theme: Erlebbarkeit von Pilotierten Fahrzeugen

A horizontal timeline is shown at the bottom of the slide, spanning from April to July. A vertical blue line with a red arrowhead points upwards from the timeline to a light gray callout box. The callout box contains the text "Now: Desk & Field Research".

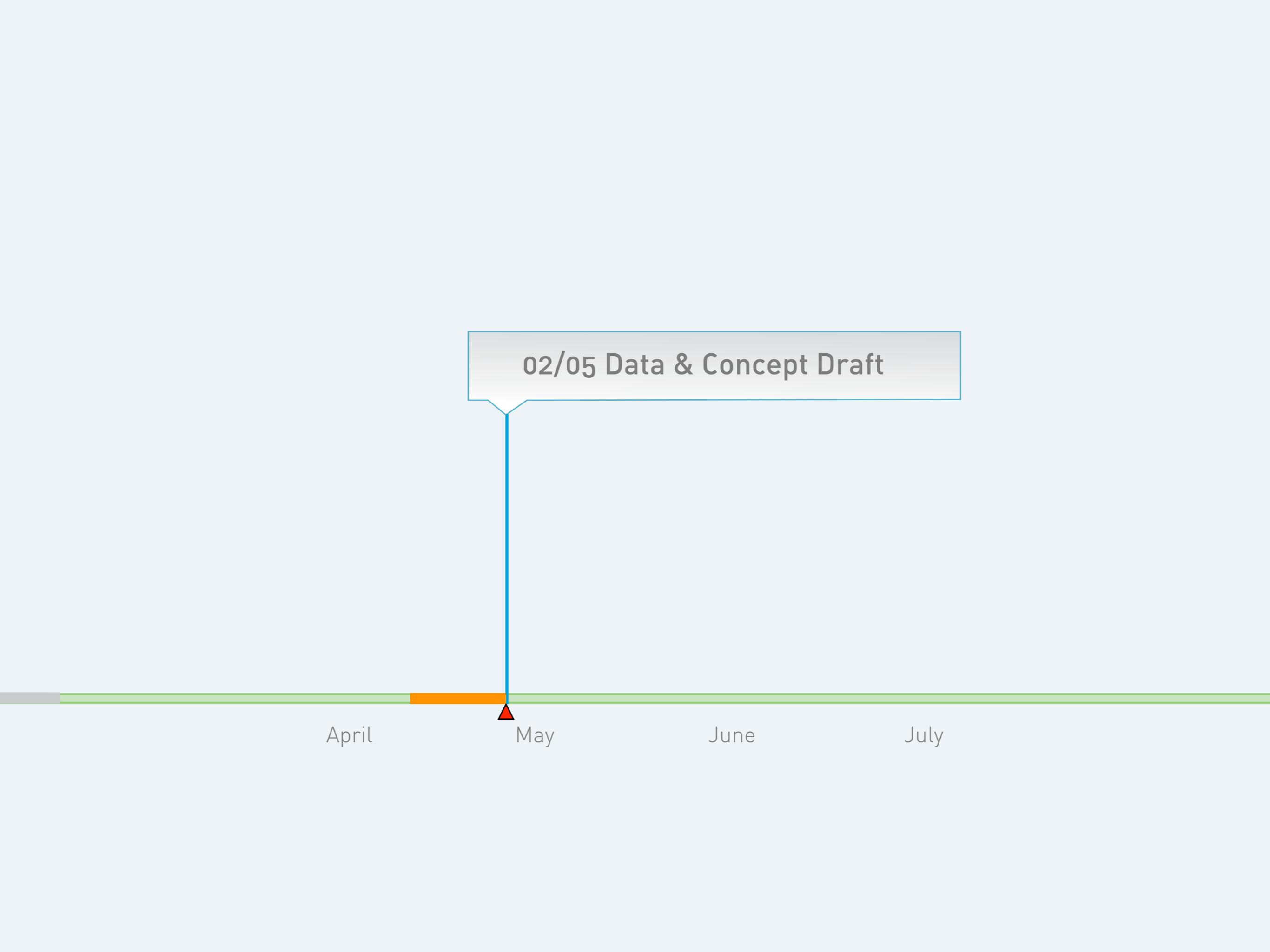
Now: Desk & Field Research

April

May

June

July



02/05 Data & Concept Draft

April

May

June

July

## 09/05 Design Concepts

April

May

June

July

## 06/06 Initial Prototypes

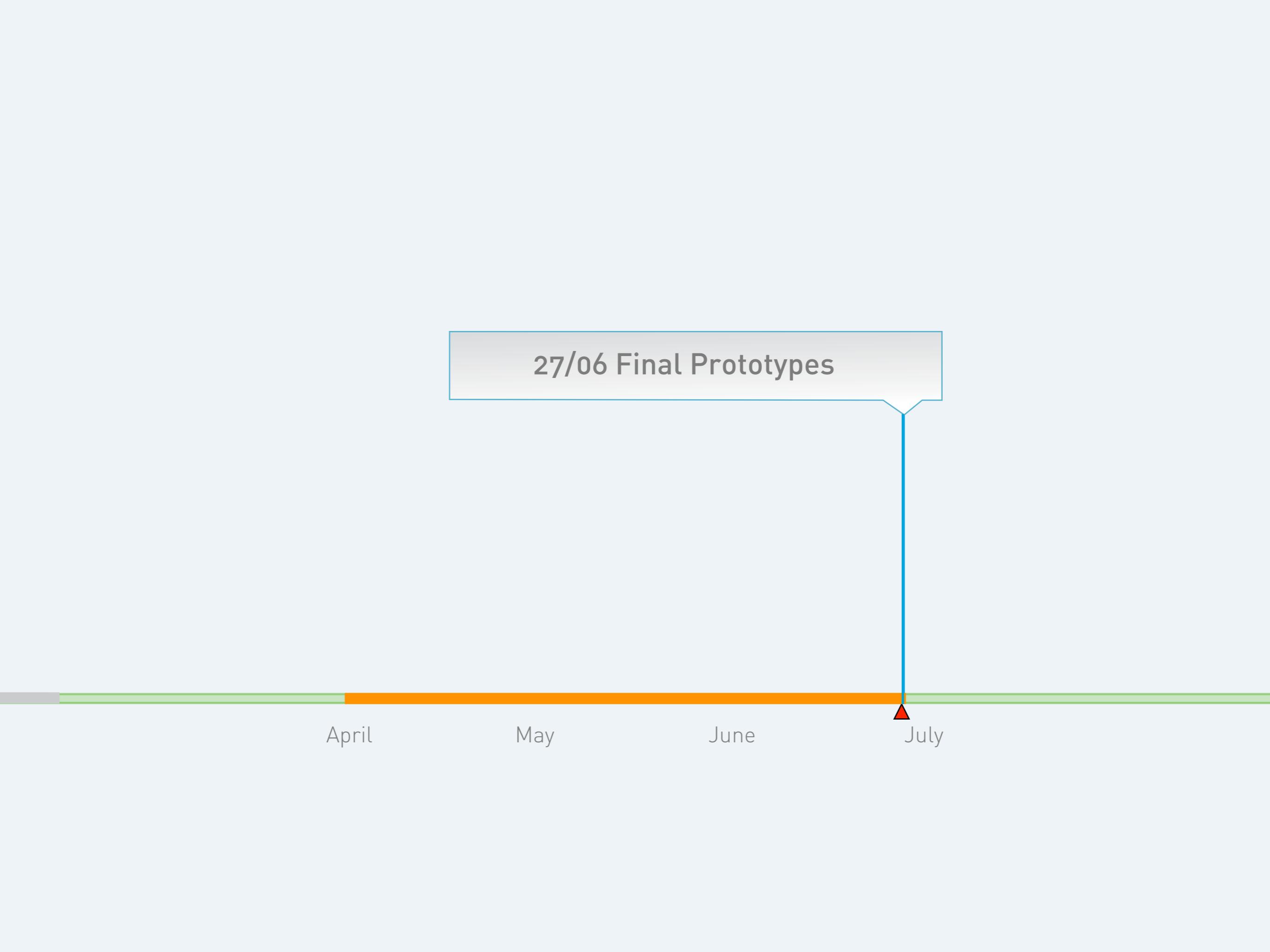
April

May

June

July





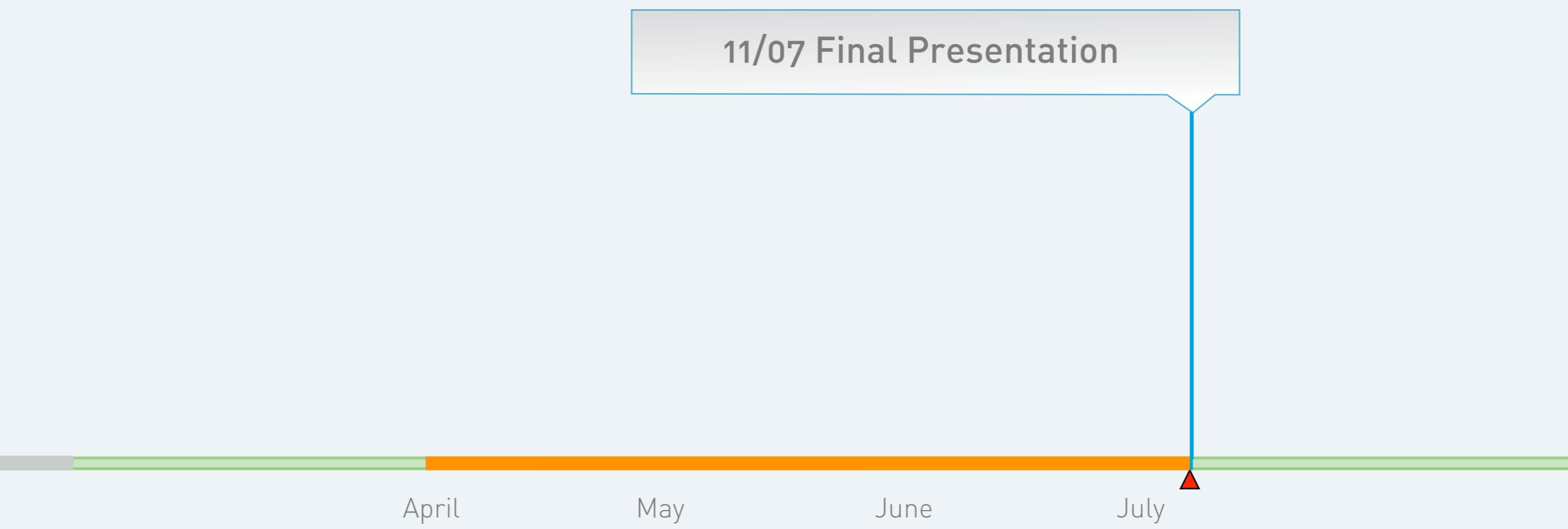
27/06 Final Prototypes

April

May

June

July



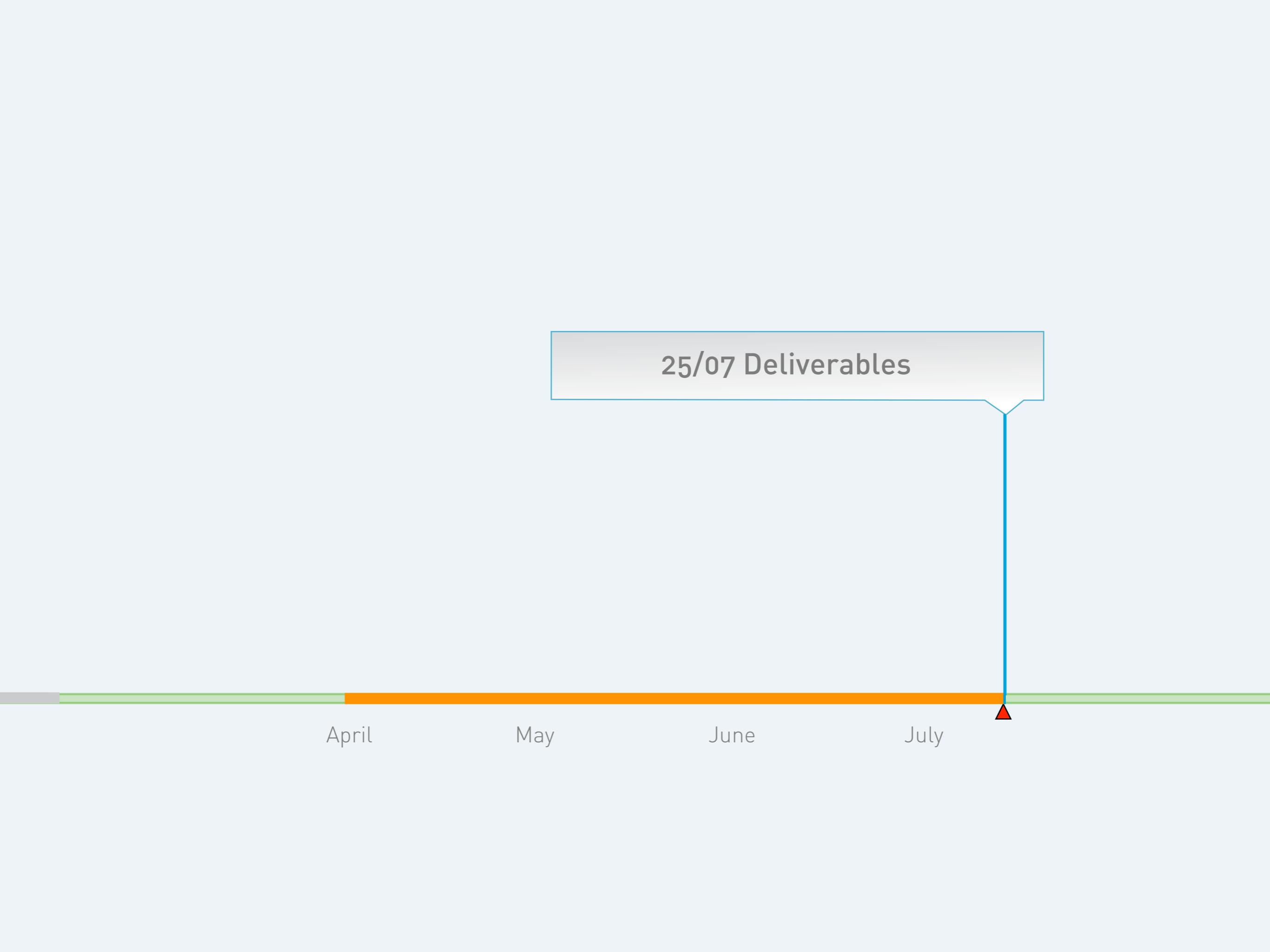
11/07 Final Presentation

April

May

June

July



25/07 Deliverables

April

May

June

July

# References:

- [1] Buxton, W. Sketching User Experiences, Morgan Kaufmann 2007.
- [2] Blom, J & Chipchase, J : Contextual and cultural challenges for user mobility research, ACM Press 2005.
- [3] CHI '10 Panel Discussion on User Research, 2010.
- [4] Copenhagen Institute of Interaction Design, User Research Workshop 2008.
- [5] Jonas, W. A Scenario for Design, MIT Press 2001.
- [6] Norman, D. The Psychology of Everyday Things, Basic Books 1988.
- [7] Moggridge, B. Designing Interactions, MIT Press, 2006.
- [8] Rogers, Y., Preece, J. & Sharp, H. Interaction Design, Wiley & Sons 2011.
- [9] Saffer, D. Designing for Interaction, New Riders 2009.
- [10] Walonick, D. Survival Statistics, 2004.