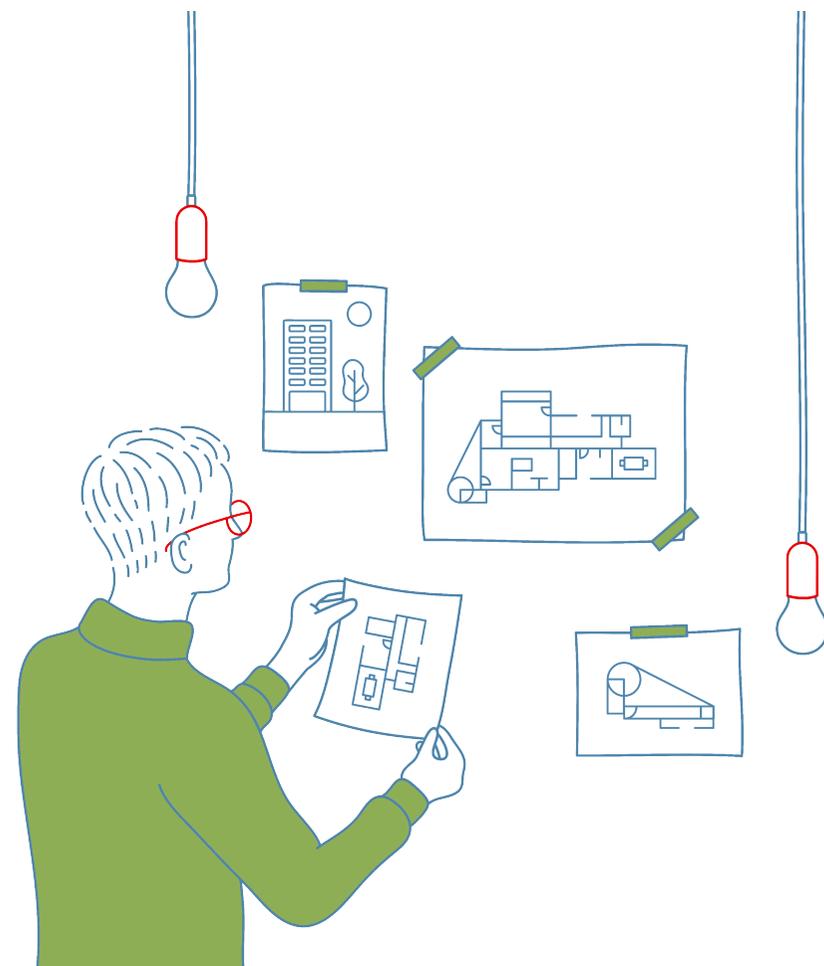


Erlend Ketilson Stuve  
Senior Consultant

**EGDE**  
CONSULTING



Egde Consulting er Sørlandets ledende selskap innen digitale tjenester og er spesialisert innen teknologi, rådgivning, utvikling og design.



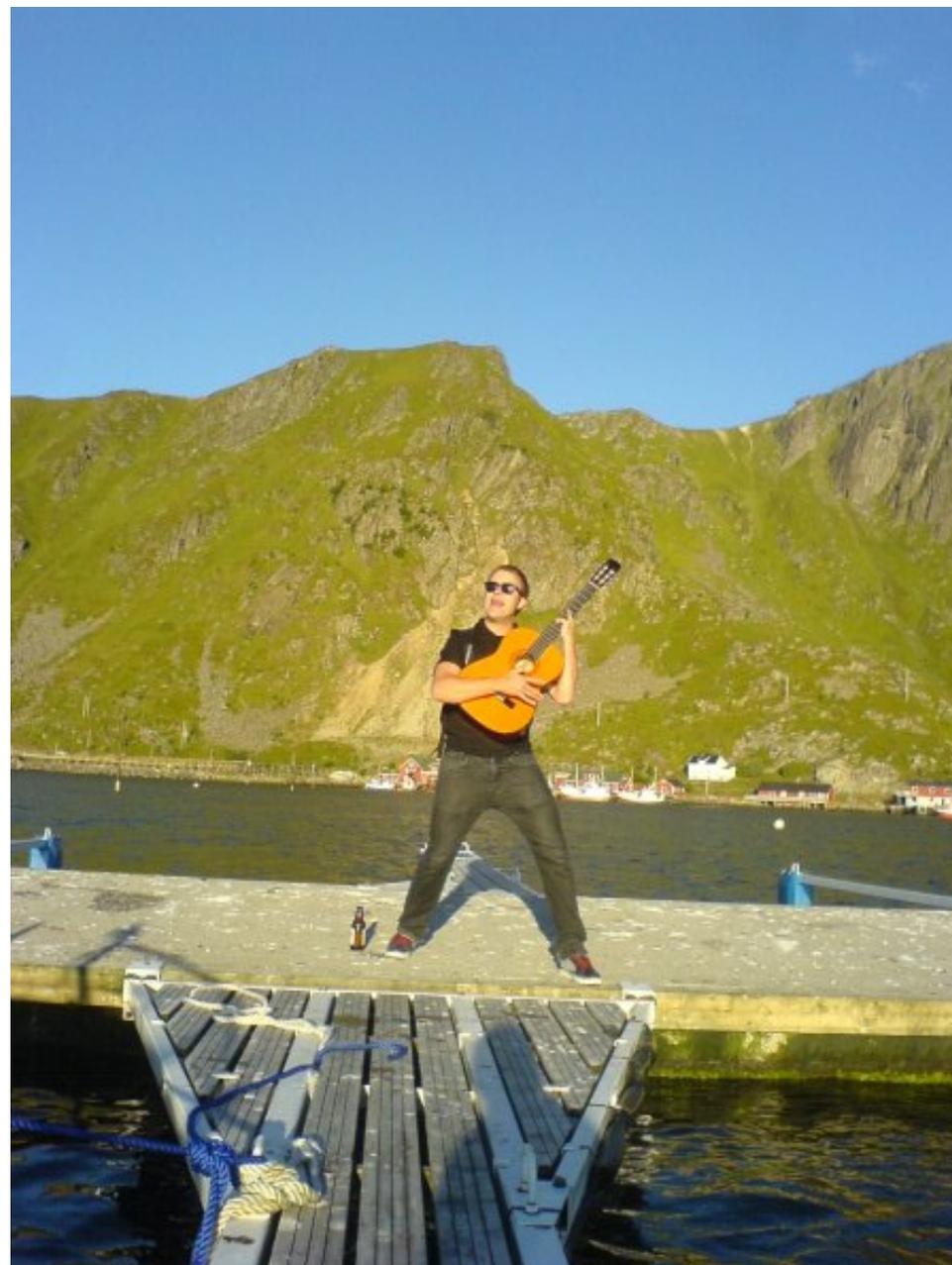
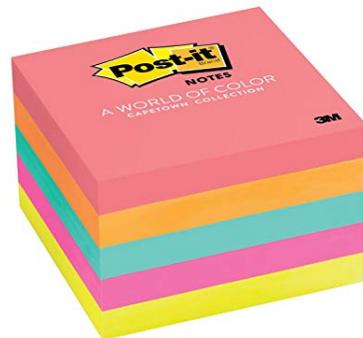
Social Anthropologist,  
University of Oslo



Web-related projects

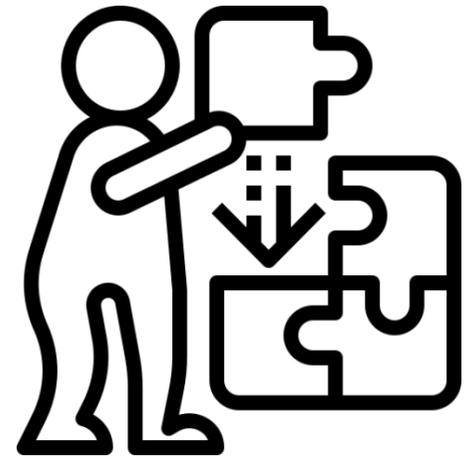
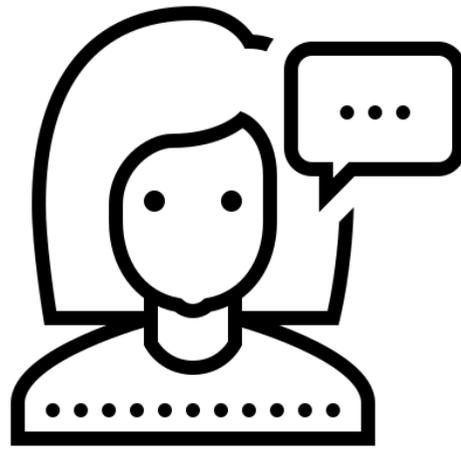
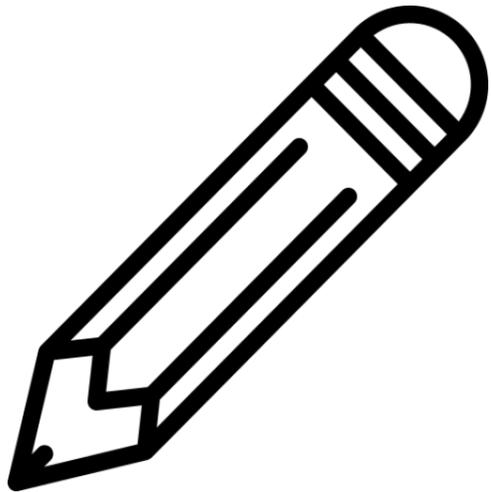


UX-Designer



# Stanford d.school



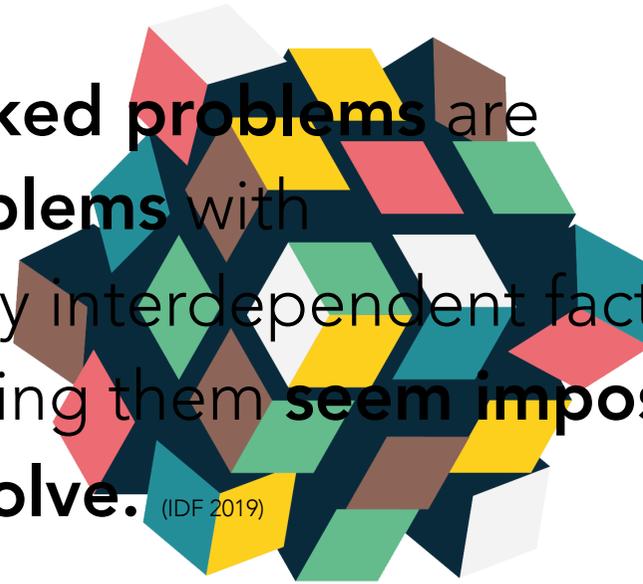


**Draw a portrait of your neighbour**

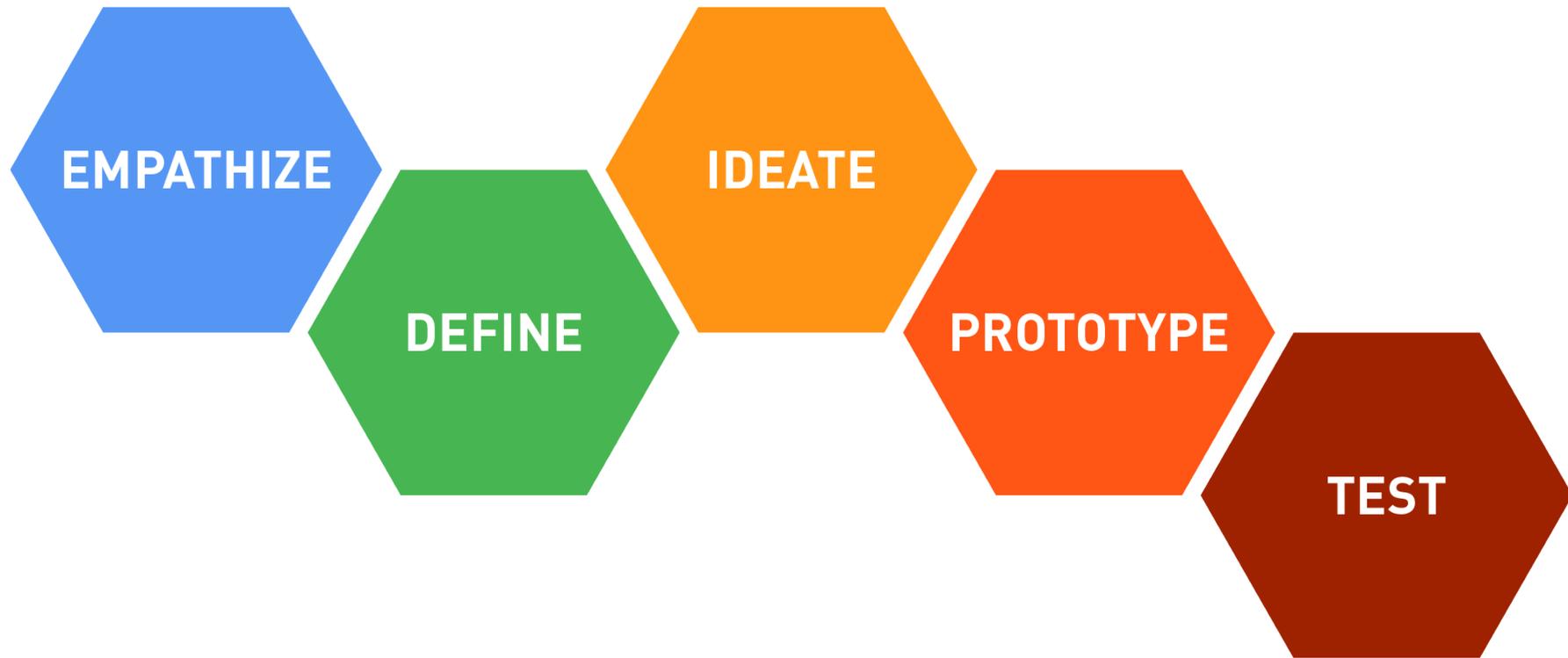
# Wicked Problems



**Wicked problems** are  
**problems** with  
many interdependent factors  
making them **seem impossible**  
**to solve.** (IDF 2019)



# Design Thinking



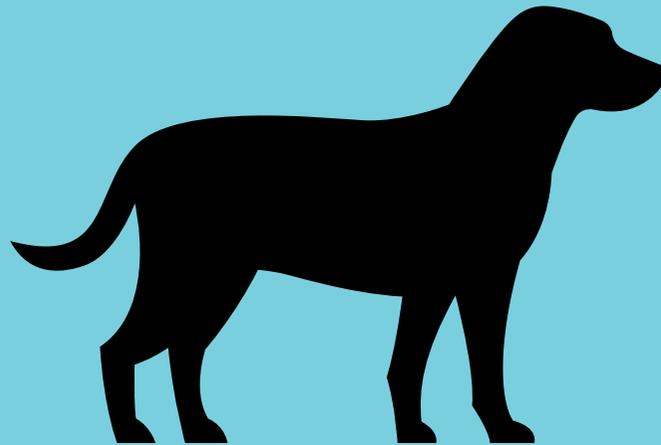
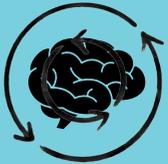
## DESIGN THINKING METHODS

STAGE	DESIGN THINKING METHODS	TRADITIONAL HCI METHODS
<b>Empathise</b>	<ul style="list-style-type: none"> <li>• Assume a beginner's mindset</li> <li>• What-How-Why</li> <li>• Conduct interviews with empathy</li> <li>• Build empathy with analogies</li> <li>• Photo and video user-based studies</li> <li>• Personal photo and video journals</li> <li>• Engage with extreme users</li> <li>• Story share-and-capture</li> <li>• Bodystorm</li> <li>• Journey map</li> </ul>	<ul style="list-style-type: none"> <li>• Problem statement definition</li> <li>• User observation</li> <li>• User interviews and questionnaires</li> <li>• Site visits</li> </ul>
<b>Define</b>	<ul style="list-style-type: none"> <li>• Share inspiring user stories</li> <li>• Affinity diagrams</li> <li>• Empathy map</li> <li>• Personas</li> <li>• Point of view (POV) or Problem Statement</li> <li>• Point of View (POV) mad-lib</li> <li>• "How might we?" Questions</li> </ul>	<ul style="list-style-type: none"> <li>• Personas and user roles</li> <li>• Use cases, user stories and scenarios</li> <li>• Affinity diagrams</li> </ul>
<b>Ideate</b>	<ul style="list-style-type: none"> <li>• Point of View (POV)</li> <li>• Point of View (POV) mad-lib</li> <li>• "How might we?" Questions</li> <li>• Brainstorm</li> <li>• Braindump</li> <li>• Brainwrite</li> <li>• Brainwalk</li> <li>• Challenge assumptions</li> <li>• SCAMPER</li> <li>• Mindmap</li> <li>• Sketch</li> <li>• Storyboard</li> <li>• Analogies</li> <li>• Provocation</li> <li>• Movement</li> <li>• Bodystorm</li> <li>• Gamestorm</li> <li>• Cheatstorm</li> <li>• Crowdstorm</li> <li>• Co-creation workshops</li> <li>• Prototype</li> <li>• Creative pause</li> <li>• Worst possible idea</li> <li>• Post-it voting</li> <li>• Four categories method</li> <li>• Bingo selection</li> <li>• Now Wow How matrix</li> <li>• Six thinking hats</li> </ul>	<ul style="list-style-type: none"> <li>• Brainstorm</li> <li>• Focus group discussions with users</li> </ul>
<b>Prototype</b>	<ul style="list-style-type: none"> <li>• Prototype for empathy</li> <li>• Prototype to decide</li> <li>• Storytelling</li> <li>• Bodystorm</li> </ul>	<ul style="list-style-type: none"> <li>• Create prototypes (wireframes, functional prototypes, etc.)</li> </ul>
<b>Test</b>	<ul style="list-style-type: none"> <li>• Prototype to test</li> <li>• Feedback capture grid</li> <li>• I like, I wish, what if</li> <li>• Share inspiring user stories</li> <li>• Storytelling</li> </ul>	<ul style="list-style-type: none"> <li>• User testing</li> <li>• Usability testing</li> <li>• Remote tests</li> </ul>

# Design Thinking

Understanding what it is **NOT**

REPEAT



Dismantle  
parts of the  
truck?

Chip away  
parts of the  
bridge?



MISCELLANY / THE TRUCK THAT COULDN'T

*Hoffa-hoffa-hoffa-hoffa-hoffa* throbs the engine of the big trailer truck, hurtling down from Ypsilanti and on into Ann Arbor. *Beck-beck-beck-beck-beck* clack the tires on the pavement along State Street, a sound to fill a teamster with reverie and maybe set him to thinking of pulling in soon for a bite . . . you know what the truck drivers always say: if you

want a good meal in Ann Arbor, look for a place where the University of Michigan football players eat . . . easy now, underpass coming . . . sign says 12-foot clearance . . . plenty of room—this rig stands only . . . what was the figure? . . . got it here someplace . . . ah, here . . . 12 and a half feet . . . let's see . . . that gives six inches to spare so . . . RUMPF!

"Why not  
just let the  
air out of the  
tires?"

**Design Thinking** offers us a means of **digging that bit deeper**; it helps us to do **the right kind of research** and to **prototype** and **test** our products and services so as to **uncover** new ways of **improving** the product, service or design. (IDF 2019)

**BABY**

**HOUSE**

**INNOVATION**

# Design the IDEAL backpack

1) Design a **BETTER** backpack

Sketch your best idea here:

4 MINUTES

# EMPATHIZE

- with your users

# EMPATHIZE



The intellectual identification with or vicarious experiencing of the **emotions, thoughts, or attitudes** of another (IDF 2019)

# EMPATHIZE

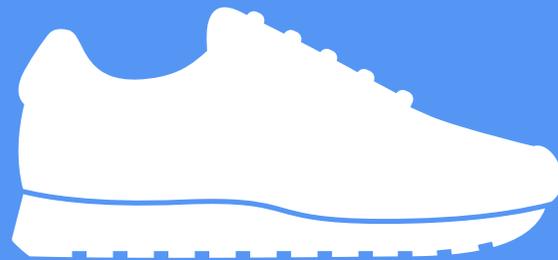


The intellectual identification with or vicarious experiencing of the **emotions, thoughts, or attitudes** of another

When you **FEEL** what the other person is feeling.  
When you can **MIRROR** their expression, their opinions, their hopes.

# EMPATHIZE

Put yourself in some one else's shoes



# EMPATHIZE

Designers approach to empathy



Without judgment



Beginner's eyes



Curiosity



Respectfully

# Design something meaningful and useful for your partner.

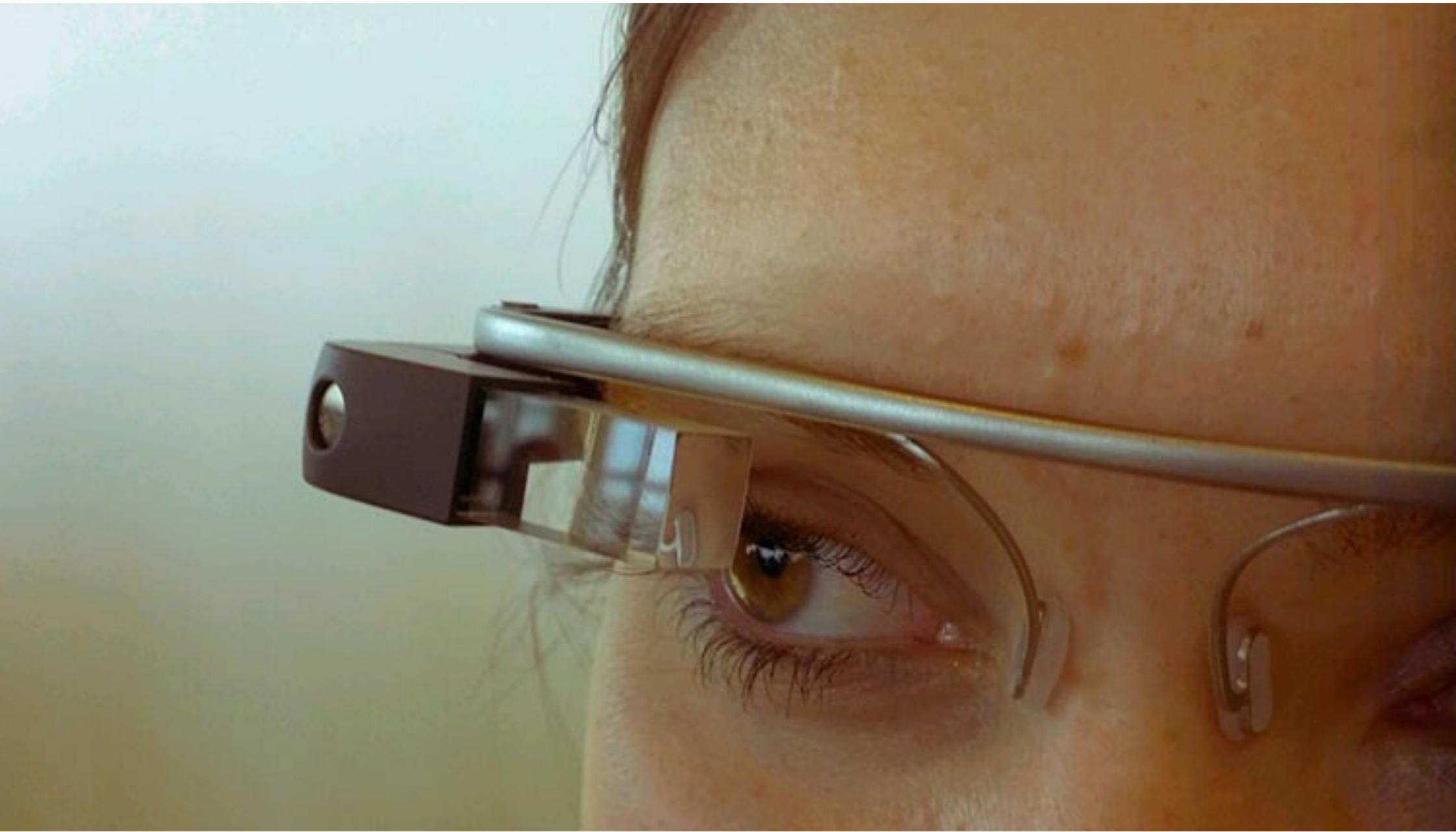
## 1) Interview 1

Ask your partner to introduce themselves by walking you through the contents of their bag or backpack

Scetch and notes

5 minutes

Insights: What stood out to you?















# Design something meaningful and useful for your partner.

## 1) Interview 1

Ask your partner to introduce themselves by walking you through the contents of their bag or backpack

Scetch and notes

5 minutes

Insights: What stood out to you?

## 2) Interview 2

Learn more about your partner. Forget about the backpack. Try to dig for specific stories

WHY?

3 minutes



# DEFINE

- your users' needs, their problem, and your insights



Photo: Joe Thorn, Flickr

# DEFINE

## Needs...

- ◎ are human physical and emotional necessities.
- ◎ captures the goals and motivations of the person for whom you are designing
- ◎ are verbs, not nouns  
(opportunities, not solutions; ladder vs. to reach)

# DEFINE

Design for the individual, not for the middle



# DEFINE



DEFINE

# Point of view



# Point of view



## User

teenager

## Need

To eat healthy food

## Insight

Certain nutrients are necessary for physical and cognitive health and development

# Point of view

## User

9th grade girl at a new school

Specific user



## Need

She needs to **feel** social accepted while eating healthy food

Deep need. Hers, not ours

## Insight

In her world a social risk is more dangerous than a health risk.

Surprising finding based on empathy work

# Articulate a current POINT OF VIEW:

<b>User</b> Partner description	<b>Need:</b> Things they are trying to do	<b>Surprising Insight:</b>
20 year old male student	To use a computer to study	The user believes that computers are evil.

20 year old male student needs a secure way to carry a PC because he thinks they can be evil and dangerous.

.....  
User (descriptive)      needs      Need (verb)      because      Insight (compelling)      .....

# IDEATE

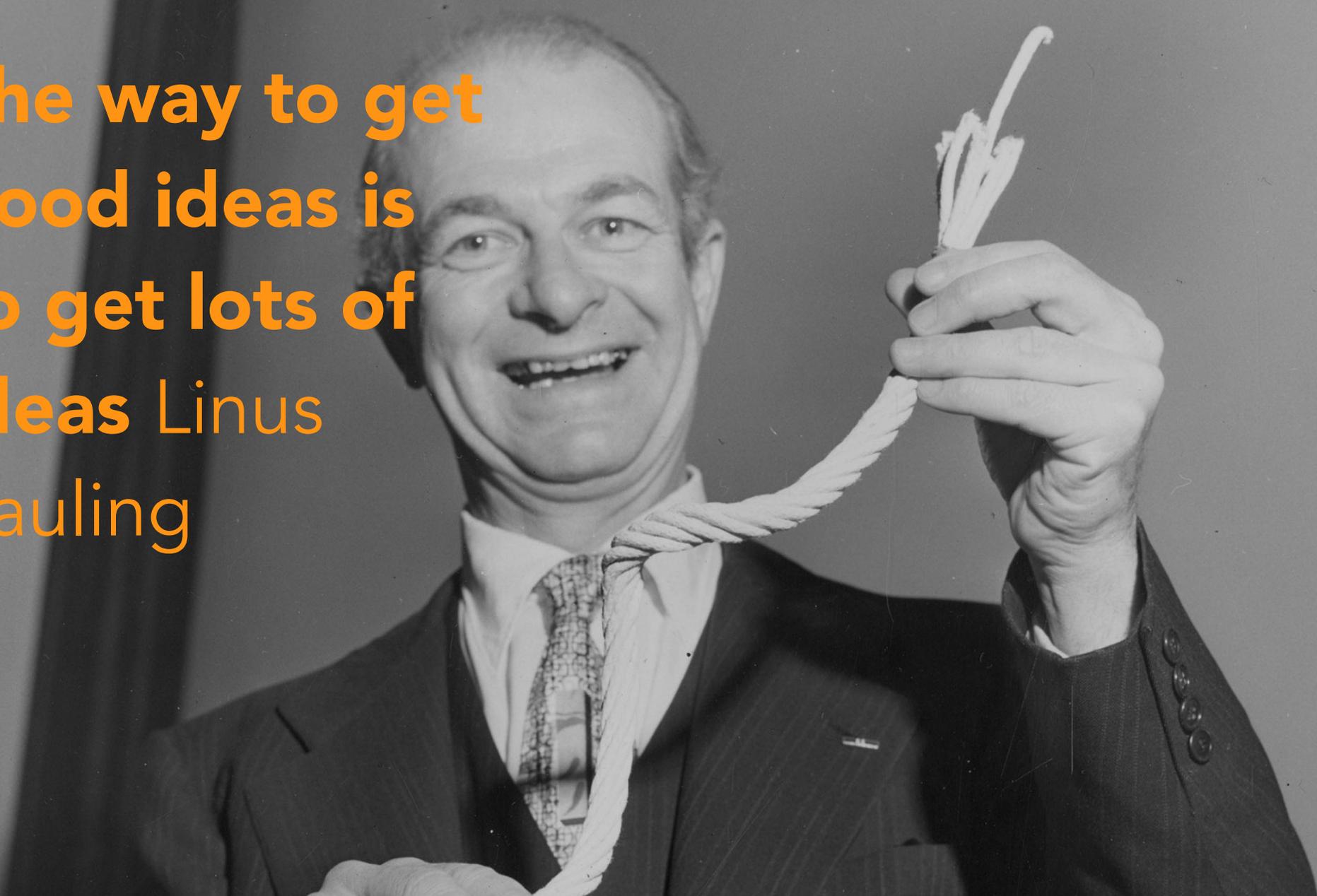
- by challenging assumptions and  
creating ideas for innovative solutions



**IDEATE**

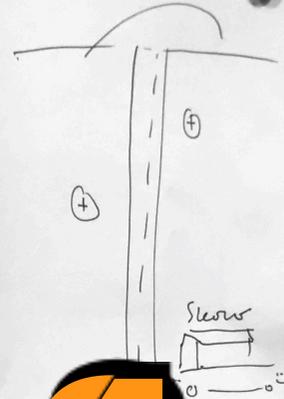
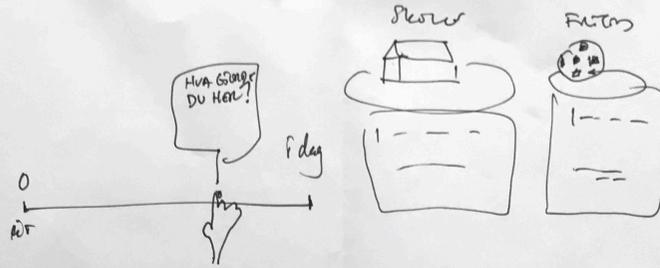
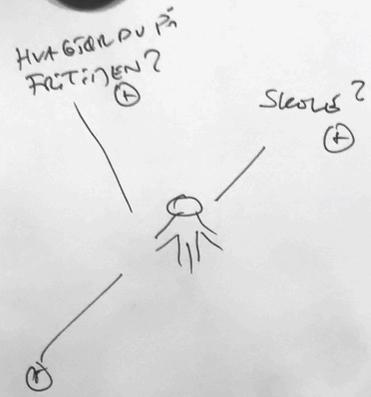


The way to get  
good ideas is  
to get lots of  
ideas Linus  
Pauling

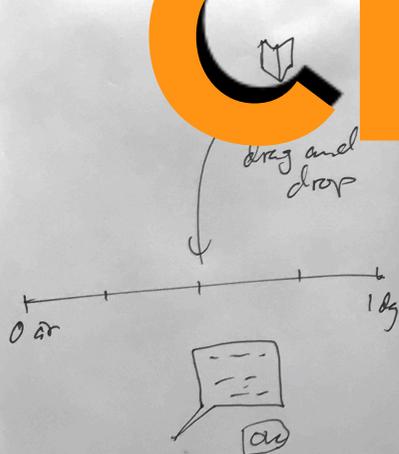


# IDEATE

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



# CRAZY @



- 2017
- 2016
- 2015
- 2014
- 2013


- 
- 
- 

Teckig

# CRAZY 4

5) Sketch 4 Radical ideas  
Based on the problem  
statement.

4 minutes, 1 minute per  
sketch






# PROTOTYPE

– to start creating solutions



# TEST

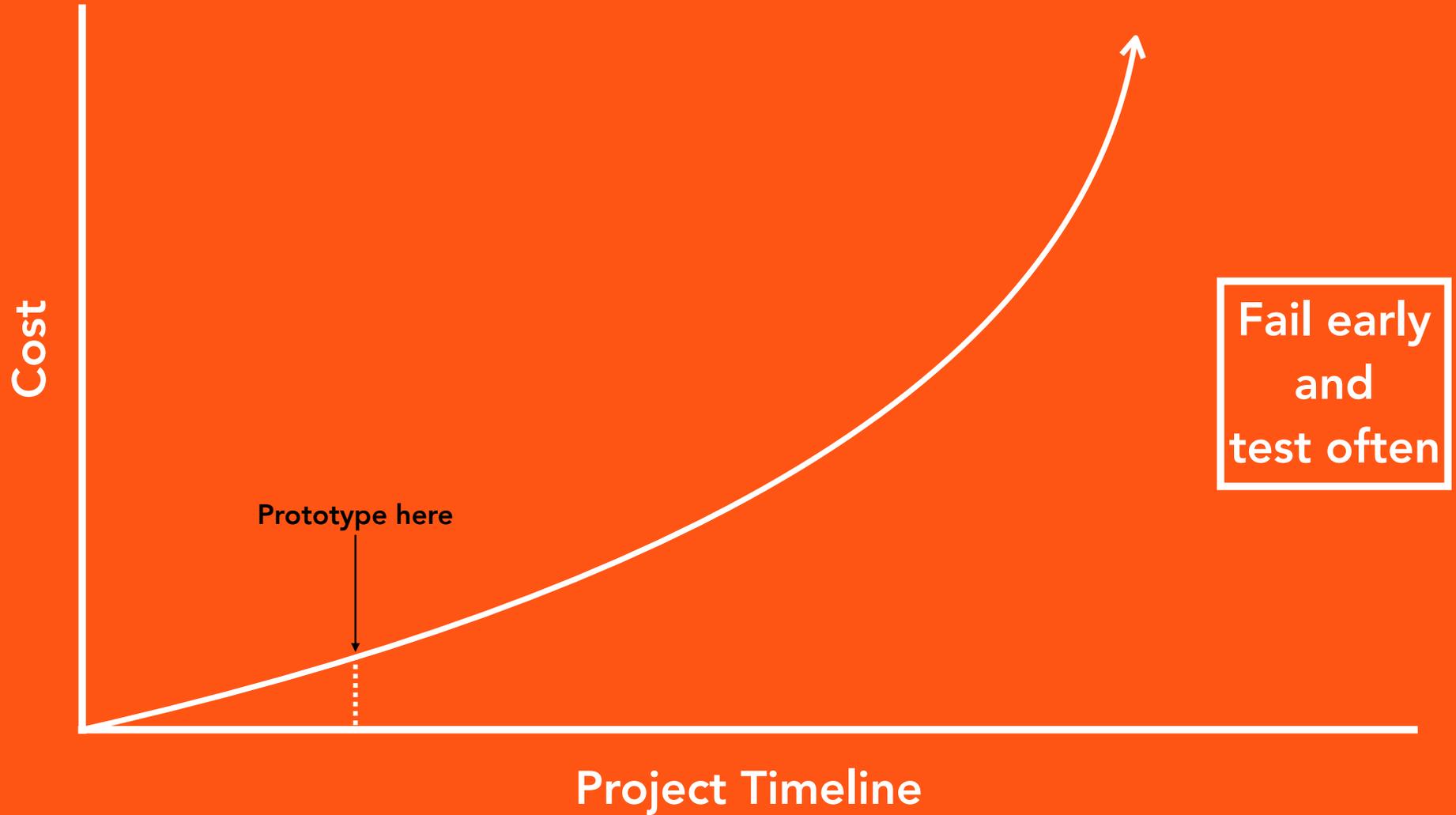
– solutions

# PROTOTYPE



## Low-fidelity vs High-fidelity

# PROTOTYPE





Du er her: [Forside](#)

"Jeg ville ikke ha kunnet kombinere idrett og skole hvis det ikke hadde vært for NTG."

*Karoline Dyhre Breivang, OL-vinner, Europamester.*



#### Hvorfor begynne på NTG?

NTG tar vare på og utvikler talentene.

[Les om DEN STORE FORSKJELLEN.](#)



#### Velg din idrett

NTG har 26 forskjellige idretter.

#### Velg skole

NTG har 6 skoler.

#### Søk på NTG

Søknadsfrist 1. mars.

**IKKE ALLE LIKER UTFORDRINGER**  
Vi søker de som gjør det!



#### Mats Møller Dæhli årets akademispiller i Manchester United

15.05.2012

En strålende første sesong på ungdomsakademiet til Manchester United ble kronet med utmerkelse som årets spiller.

[Les mer](#)



#### Frida, Henriette og Truls imponerte i World Cup

14.05.2012

Terrangsykling. Henriette Elvrøm Handal og Frida Rønning tok 5. og 8. plass i juniorklassen i Nove Mesto. Truls Engen Korsæth ble nummer 19. i U-23.

[Les mer](#)



#### To nye NTG debutanter

14.05.2012

#### Nyttige snarveier

[Antidoping Norge](#)

[Skadefri!](#)

[Sunnjenteidrett.no](#)

[Utdanningsdirektoratet](#)

[Fronter](#)

[SkoleArena](#)

[Brik CMS](#)



Norges Toppidrettsgymnas



# VILJE GLEDE RESPEKT

LES OM NTG →

SKOLEPORTAL →

📍 SØK PÅ NTG →



## Velg skole



Norges Toppidrettsgymnas

🔍 Søk

☰ Meny

# Vilje Glede Respekt

Din drøm - vår lidenskap

Les om NTG →

Søk på NTG →

Skoletilbud →

Kostnader →

Kontakt oss →

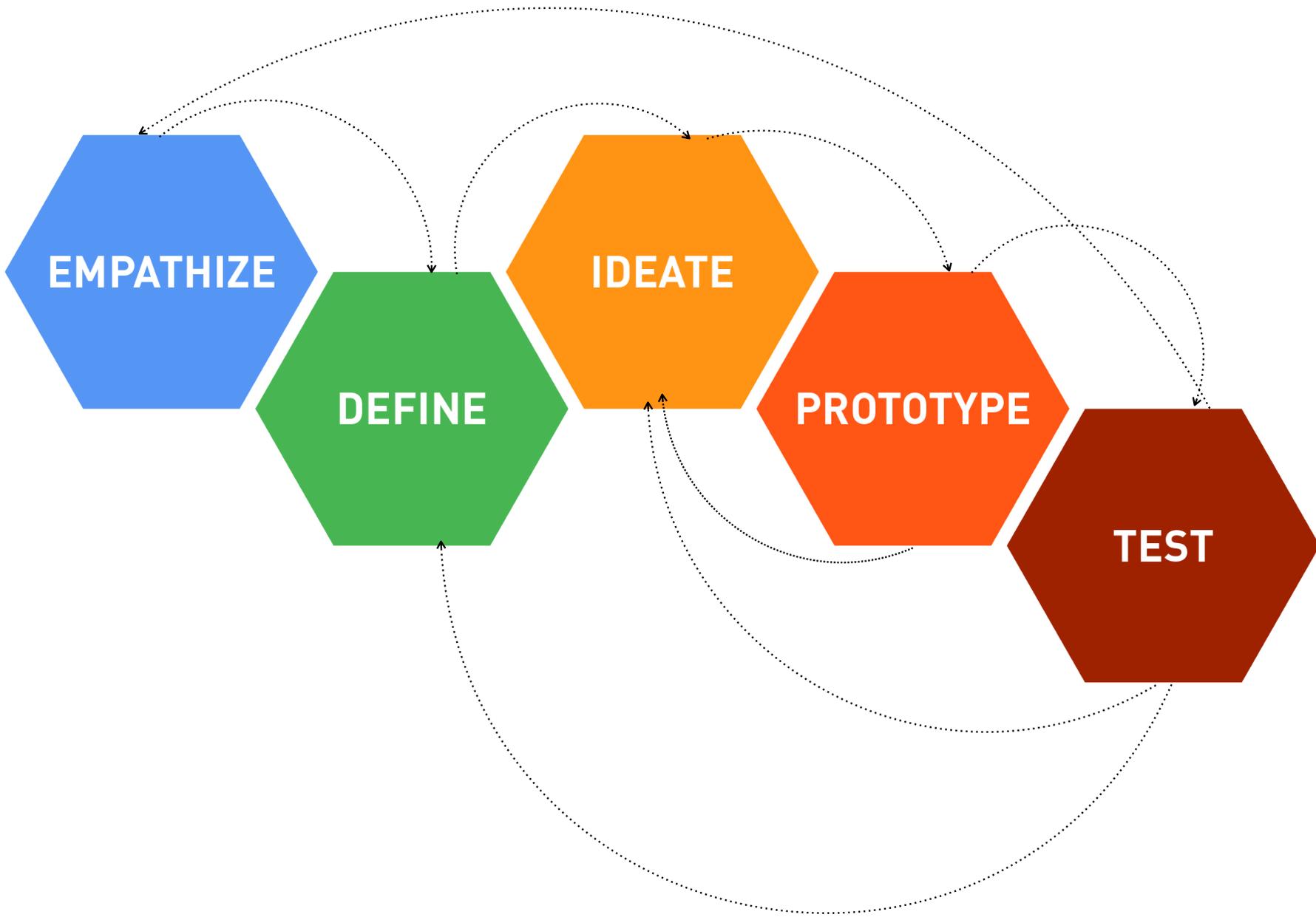


NTG er et samlingssted for dem som elsker det de driver med.

MALIN WESTERHEIM, SKYTING

Velg skole/idrett

NTG-modellen



**EMPATHIZE**

**DEFINE**

**IDEATE**

**PROTOTYPE**

**TEST**

[designthinking.ideo.com](http://designthinking.ideo.com)

[dschool.stanford.edu/](http://dschool.stanford.edu/)

[interaction-design.org](http://interaction-design.org)

**So Long, and Thanks for All the Fish!**