

A person with short, dark hair, seen from the back, wearing a grey and black striped sweater. They are looking at a wall covered in various design sketches, diagrams, and photographs. The wall is filled with creative work, including flowcharts, wireframes, and images of people. The overall scene is dimly lit, with the person's head and shoulders in the foreground, slightly out of focus, against the busy background of the wall.

User Centric Innovation with Design Thinking

15.06.2021 / University Frankfurt / Manuel Heß

*What do you know about **design**
thinking?*


Have you ever used it?

What is Design Thinking?

„Design Thinking manages to address problems at their source, not just by treating some of the symptoms.“

Hasso Plattner
(SAP / Founder HPI)

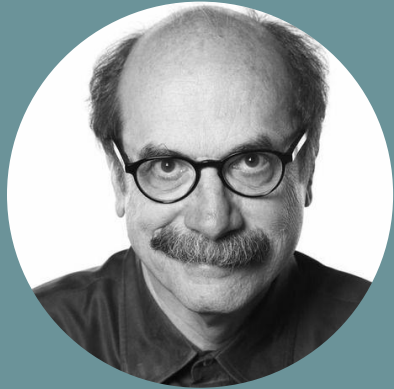
What is Design Thinking?

A photograph of Tim Brown, CEO of IDEO, sitting in a workshop. He is wearing a dark blue button-down shirt and has his hands clasped. In the background, a red bicycle is hanging on the wall, and there are various tools and equipment in a workshop setting.

Design Thinking is “a discipline that uses the **Designer’s** sensibility and **methods** to match **people’s needs** with what is **technologically feasible** and what a **viable business strategy** can convert into **customer value** and market opportunity.”

Tim Brown (IDEO)

Design Thinking is not new. It has a history of 30 years



IDEO

1991



d.

2005



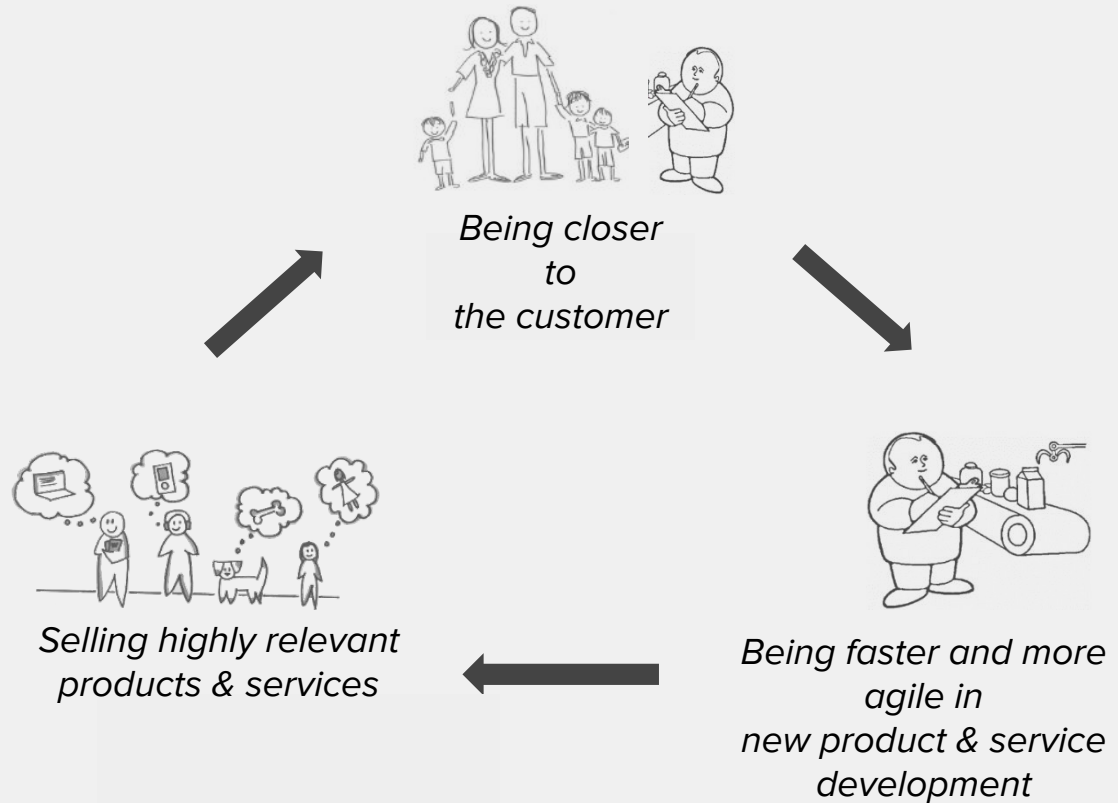
2007



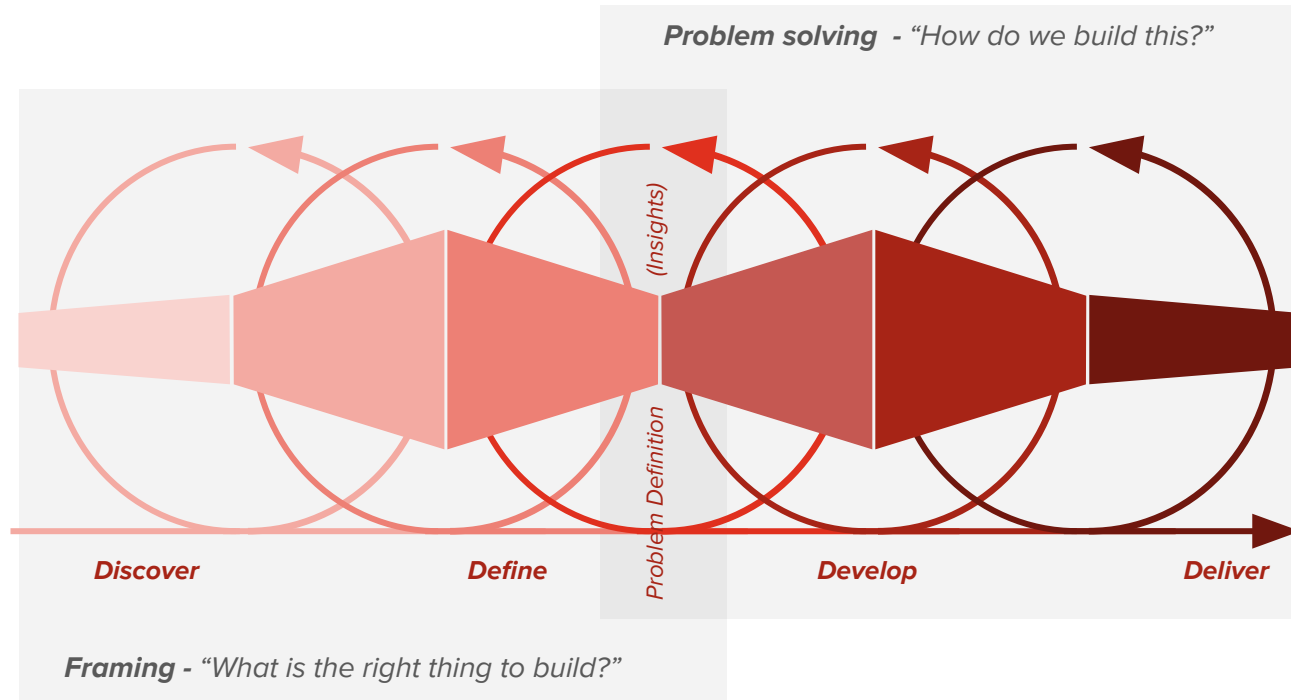
“Design thinking is an essential tool for simplifying and humanizing. It can’t be extra; it needs to be a core competence.”

Harvard Business Review. Design Thinking becomes of age. September 2015.

Design Thinking has an increasing relevance for corporate businesses

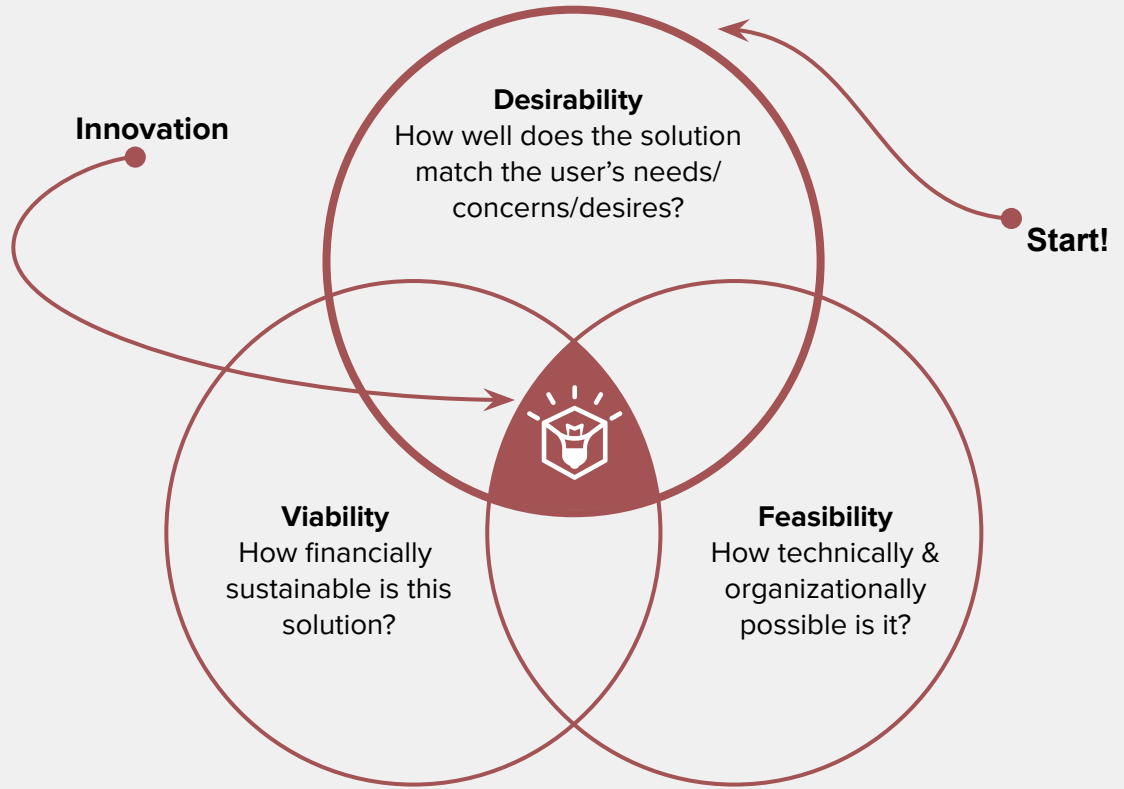


The Design Thinking process can be divided into four phases, each with iteration loops



Design Thinking considers three lenses to create innovations.

At the beginning focus should be on desirability



In an increasingly digital world characterized by constant changes in markets, businesses and customers, product and service innovation must be fast and agile.

Design Thinking can enable this.

Key benefits for companies using Design Thinking



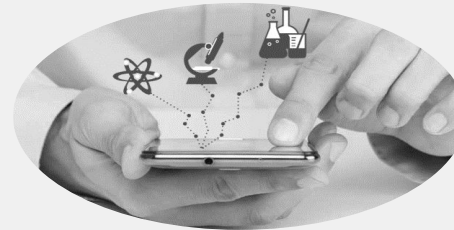
Fast Decision-Making



Interdisciplinary Teams



Relentless Innovation



End-to-End Ownership



**Entrepreneurial/
Start-Up Spirit**

Design Thinking Principles

“

Progress is impossible
without change,
and those
who cannot change
their minds
cannot change
anything

GEORGE BERNARD SHAW



Empathy



**Problem
Focus**



Culture of Failure



Experiment

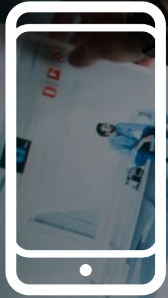


Visualize



**Cross-functional
Teams**

Design Thinking can be used in many areas of application ...



**Digital Products
& Services**



Processes

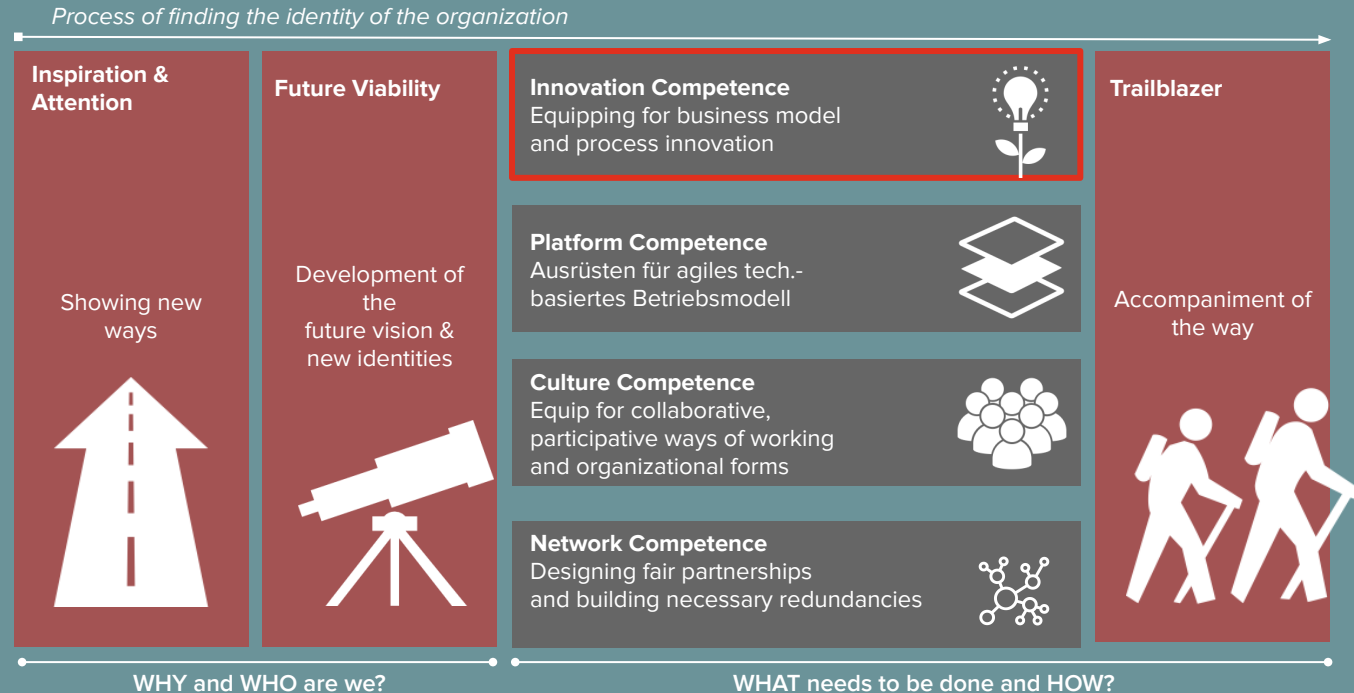



**Organizations
(New Work)**



Spaces

... and it can be the main tool for establishing a sustainable innovation competence





Instead of just telling you about ***design thinking***, we want to immediately have you ***jump right in*** and ***experience*** it for yourself.

We are going to do a ***design project*** for about the next hour.

Ready? Let's go!



The most important part of designing for someone is to **gain empathy** for that person.

Try to dig for **stories, feelings, and emotions.**

Ask 'WHY?' often



Observe & Understand

Description

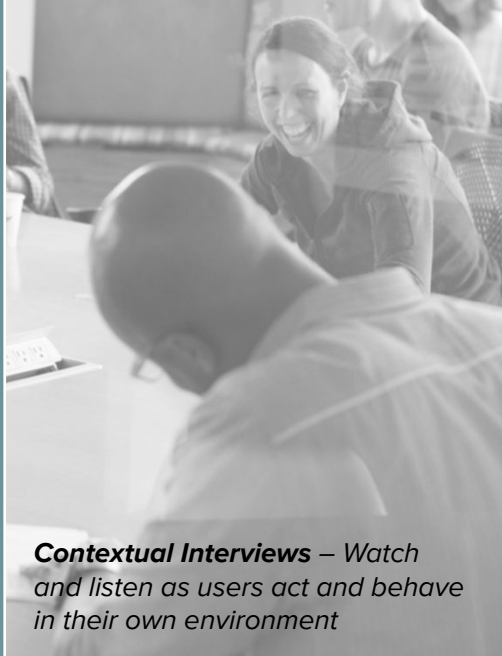
Gaining a clear understanding of the situation **from the perspective of current and potential customers/ employees** of a digital product/service.

Benefit

- Find the **true motivations** behind a customer's/employee's behavior
- Develop **empathy** as a basis for human-centered digital products or services

Prerequisites

- Knowledge about ethnographic research methods
- Interview skills
- Access to customers and other potential stakeholders



Contextual Interviews – Watch and listen as users act and behave in their own environment



Work Shadowing – By accompanying stakeholders implicit problems and wants are revealed



Journey Mapping – Create a visual representation of a customer experience of a service



Cultural Probes – Probes are given to research participants who can then document their daily experiences

Your mission: Design the recruiting experience of the future.
Start by gaining empathy. Interview a user/ customer.

1. Interview

8 min. (2 sessions x 4 min. each)

Notes from your first interview

Switch roles & repeat Interview



2. Dig deeper

6 min. (2 sessions x 3 min. each)

Notes from your second interview

Switch roles & repeat Interview





Synthesize

Description

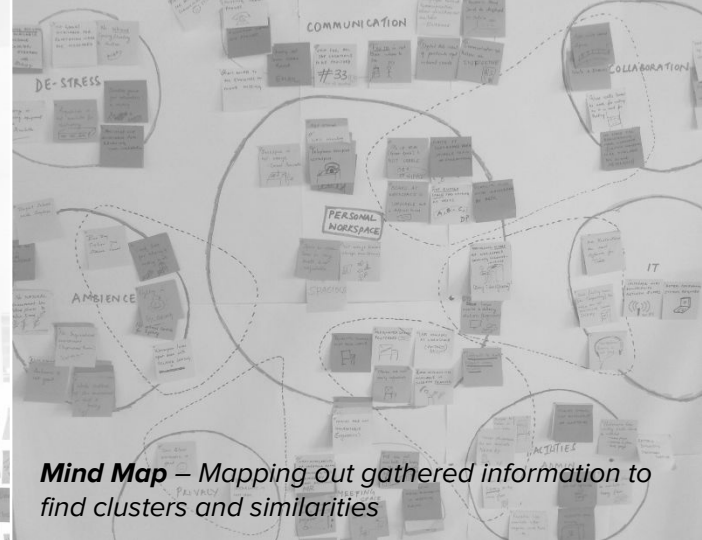
Drawing conclusions from research or prototype testing by sharing observations across the team, cluster the information and finally **condense to insights**.

Benefit

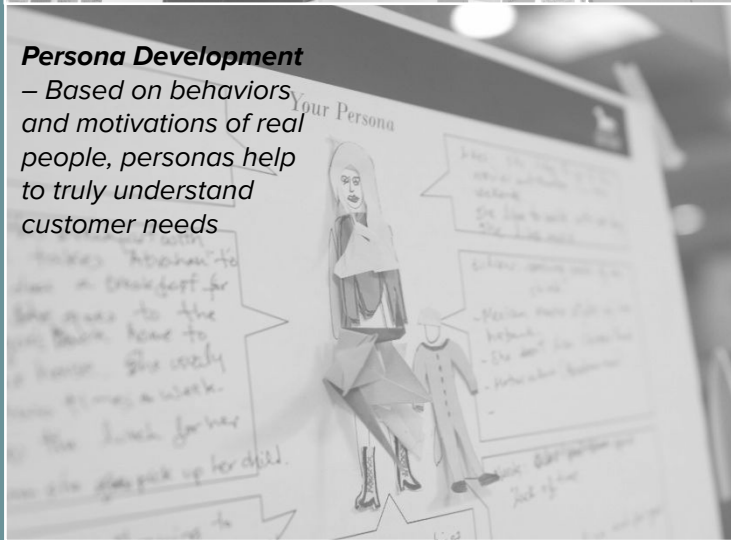
- **Simplify and frame** complex and intangible processes/problems
- Narrow down to **core content**

Needed tools and outcome

- A lot of post-it notes to write down observations, findings, etc.
- Whiteboards
- Outcome: **Point-of-View statement**



Mind Map – Mapping out gathered information to find clusters and similarities



Persona Development

– Based on behaviors and motivations of real people, personas help to truly understand customer needs

Point-of-View statement formulated as hypothesis

USER
+
NEED
+
INSIGHT

The background features a stylized illustration. At the top, a person in a red suit stands on a white boat, looking through a large red telescope. Below the boat is a large, white, scalloped-edged cloud. The lower half of the image is a dark blue underwater scene. A diver in a red suit is swimming, with bubbles rising from their tank. In the bottom center, another person in a red suit is holding a flashlight, illuminating the water. The overall theme is exploration and discovery.

Insights are discoveries that you might be able to ***leverage*** when creating solutions.

Take a stand by specifically stating the ***meaningful challenge*** you are going to take on.

This is the statement that you're going to ***address with your design***, so make sure it's ***juicy and actionable!***

Your mission: Design the recruiting experience of the future.

Reframe the Problem.

3. Capture findings

3 min.

Goals & Wishes:

What are the customers expectation regarding the recruiting process?

Insights:

New learnings about your partner's feelings and motivations.
what's something you see about your partner's experience that maybe s/he doesn't see? (Make inferences from what you heard)

4. Take a stand with a point-of-view

3 min.



customer's name/description

wants to

User's need

because (or „but...“ or „surprisingly...“)

Insight



Ideate

Description

Generating **various solution concepts** of potential digital products or services by combining gathered insights and **facts** with **imagination** and creativity.

Benefit

- Quick and structured idea generation
- Get to know the **different perspectives** on one topic at once
- Go **beyond obvious** solutions

Setting

- Space for creativity
- Clear rules
- Strict time management



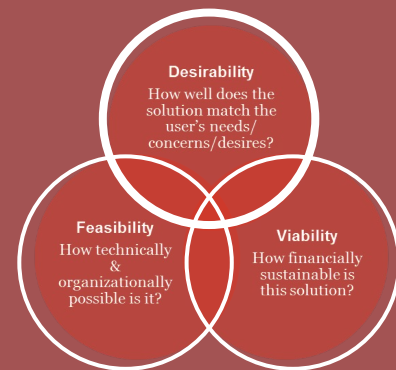
***Ideation sessions** – Jointly develop a vast amount of potential solutions with different creativity techniques...*

“

“It’s not about coming up with the ‘right’ idea, it’s about generating the broadest range of possibilities.

HASSO PLATTNER INSTITUTE OF DESIGN AT STANFORD

... and subsequently rate them according to the **three lenses of design thinking**





GO FOR VOLUME!

This is time for idea generation,
not evaluation — you can
evaluate your ideas later.


Be VISUAL!

Spend the time ***listening*** to your partner's
reactions and questions.

Your mission: Design the recruiting experience of the future.

Ideate: Generate alternatives to test.

5. Sketch at least 5 radical ways to meet your user's needs. 5 min.

 _____


Write your problem statement above

--	--	--	--	--

6. Share your solutions & capture feedback. 10 min. (2 sessions x 5 min. each)

Notes

Switch roles & repeat feedback interview





Now, take a moment to ***consider*** what you have ***learned*** both ***about your partner, and about the solutions*** you generated.

From this ***new understanding*** of your partner and his or her needs, ***sketch a new idea.***

Try to provide as much ***detail and color*** around your idea as possible.

Your mission: Design the recruiting experience of the future.

Iterate based on feedback.

7. Reflect & generate a new solution. 3 min.

Sketch your big idea, note details if necessary!





Prototype

Description

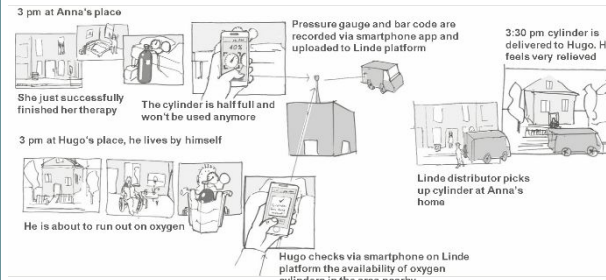
The prototype is an **early model or experiment** to rapidly create solutions to identified challenges and problems.

Benefit

- Make any business model, product or service idea **tangible and visualized**
- **Test** it with the potential customers or employees

Needed material

- Apps like Spark or LEGO® Movie Maker
- Paper & pencils
- Other arts & crafts material
- Divers physical artifacts like
- Others



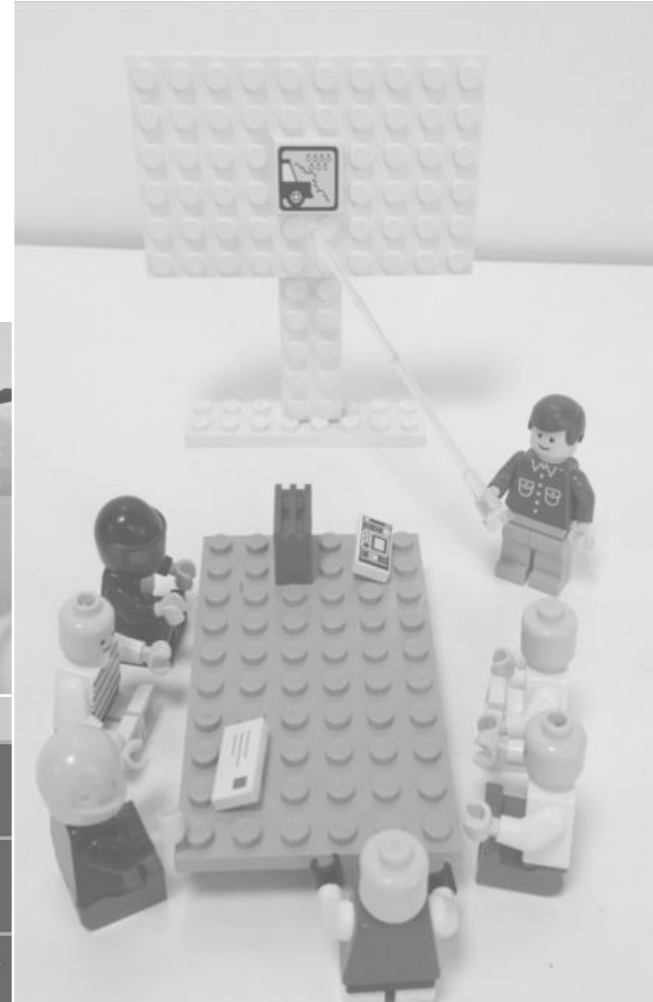
Paper-based prototype – Customer journey



Paper-based prototype - Click dummy



Video prototype - LEGO® Movie Maker



Behavior prototype - Simulation with physical artifacts



Test

Description

Bring prototypes and first ideas **in a context with stakeholders and their environment** for quick evaluations. The context (who and where) is very crucial.

Benefit

- Get **feedback** from people inside/outside the development team
- Testing allows to find flaws early and improve them in **further iterations**

Needed material/tools

- Create prototype to be tested (and device to show with)
- Create a test plan (what exactly to test and how)
- Stakeholders & location to test with

In Context – Prototypes that are presented to real users in context help to get more realistic feedback

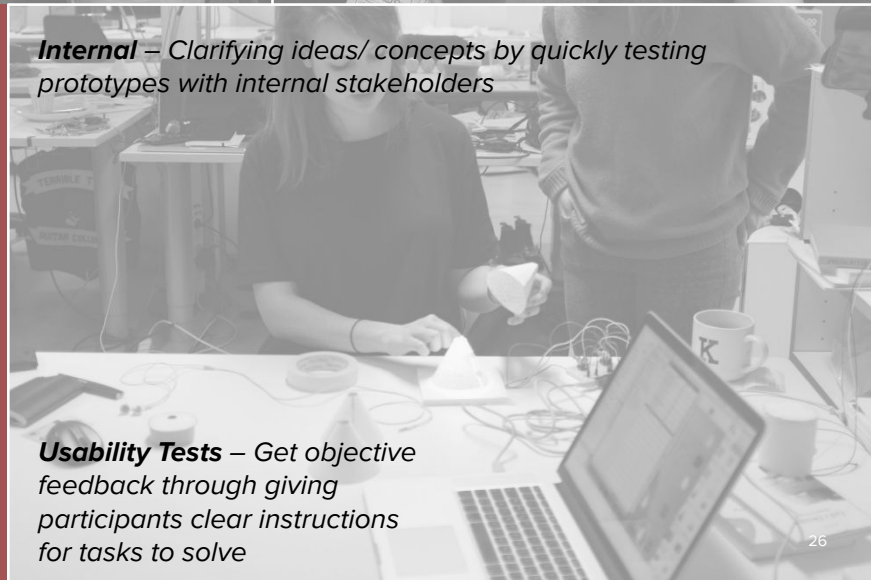


User Experience Testing – Walk through a digital service with users to get an understanding of their impressions

Iterations – Integrate test feedback into the generation of prototypes



Internal – Clarifying ideas/ concepts by quickly testing prototypes with internal stakeholders



Usability Tests – Get objective feedback through giving participants clear instructions for tasks to solve

Create a *physical prototype* of your solution.

If your solution is a service or a system, create a scenario that allows your partner to experience this innovation.”

When you test, **LET GO** of your prototype, physically and emotionally.

Your prototype is **NOT PRECIOUS**, but the feedback and new insights it draws out are!

Your mission: Design the recruiting experience of the future.

Build & test.

8. Build your solution.

7 min.

Design some kind of prototype!

[not here]



9. Share your solution & get feedback.

8 min. (2 sessions x 4 min. each)

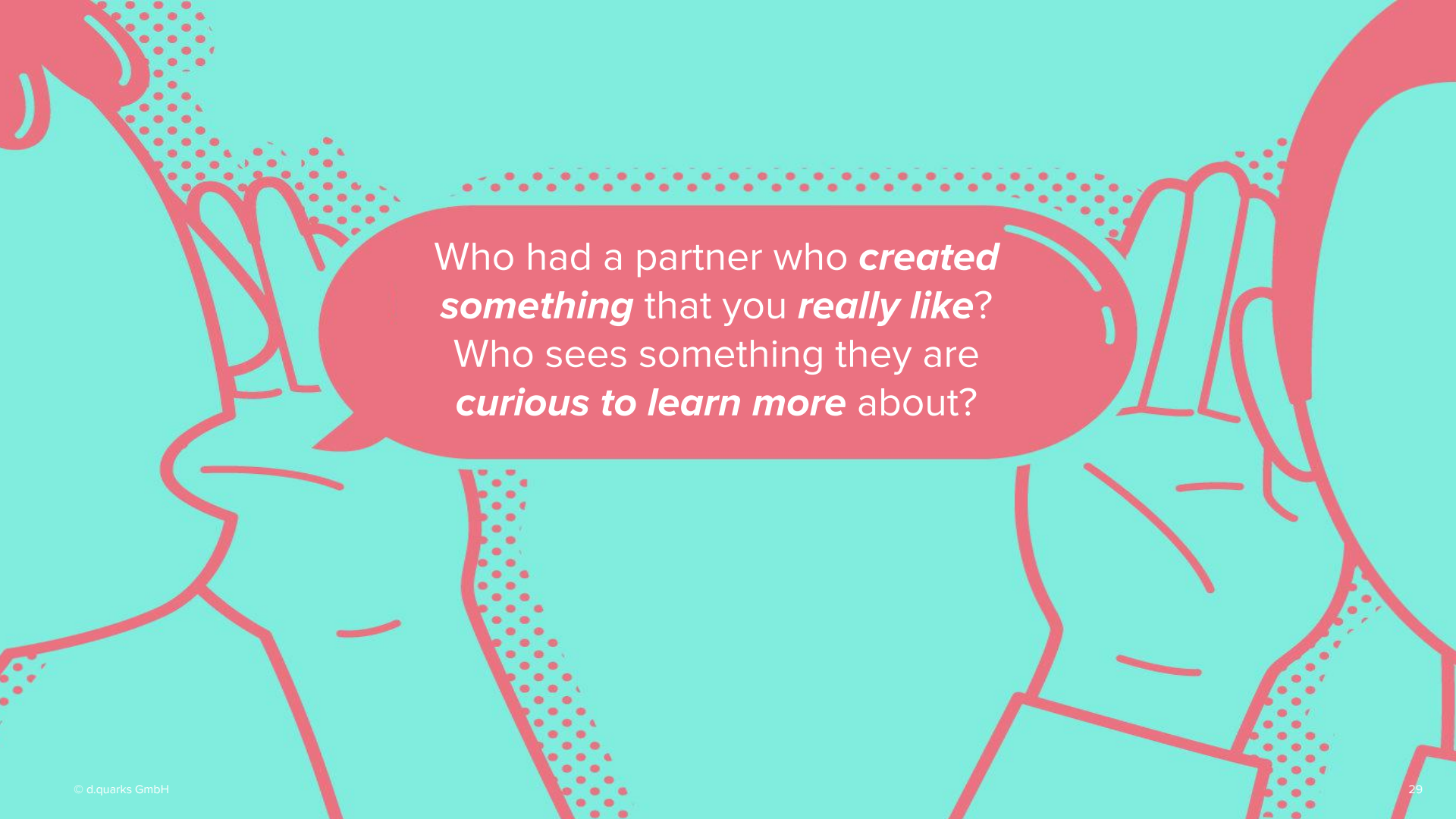
+ What worked...

- What could be improved...

? Questions...

! Ideas...



A stylized illustration of two hands, one on the left and one on the right, rendered in a dark red color. The hands are positioned as if holding a large, rounded speech bubble in the center. The background is a light teal color with a pattern of small, dark red dots. The speech bubble contains white text.

Who had a partner who ***created something*** that you ***really like***?
Who sees something they are ***curious to learn more*** about?



**More information
in the book or at:**

d.quarks GmbH
Ludolfusstraße 11
60487 Frankfurt

www.dquarks.com

Manuel Heß
manuel.hess@dquarks.com
+49 175 167 17 78