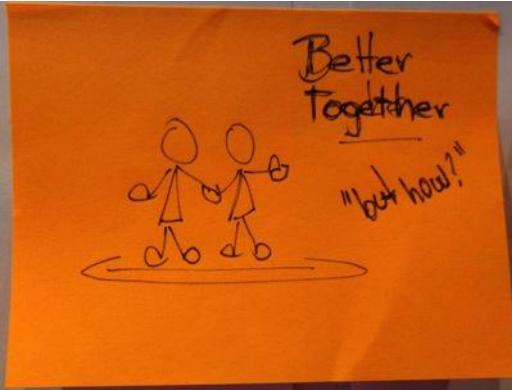


# Willkommen zu SAP Design Thinking 2013 in Karlsruhe



## AGENDA

09:00am – 09:15am	Welcome	2:00pm – 3:00pm	Ideation
09:15am – 09:30am	What is Design Thinking?	3:00pm – 3:30pm	Validation
09:30am – 09:45am	Challenges & Teams	3:30pm – 4:30pm	Prototyping & Pitch
09:45am – 11:10am	360° Research	4:30pm – 5:30pm	Presentation!
11:10am – 11:40am	Storytelling & Analysis		
11:40am – 12:00am	Storytelling & Analysis		
12:00am – 01:00pm	Mittagessen		
01:00pm – 02:00pm	Synthesis		





HASSO PLATTNER  
Institute of Design at Stanford

## TED – David Kelley – dschool

External link: [http://www.ted.com/talks/david\\_kelley\\_how\\_to\\_build\\_your\\_creative\\_confidence.html](http://www.ted.com/talks/david_kelley_how_to_build_your_creative_confidence.html)



**WHAT WE EXPECT** Be open. Do it. Try it out.

AUSENLIA DÉ  
HIERNZVIA

## WHY WE DO THIS To meet the user's needs.

CONCENTRATOR

(WAR ROOM)

Peace Room

CONCENTRATOR

# Things to Remember

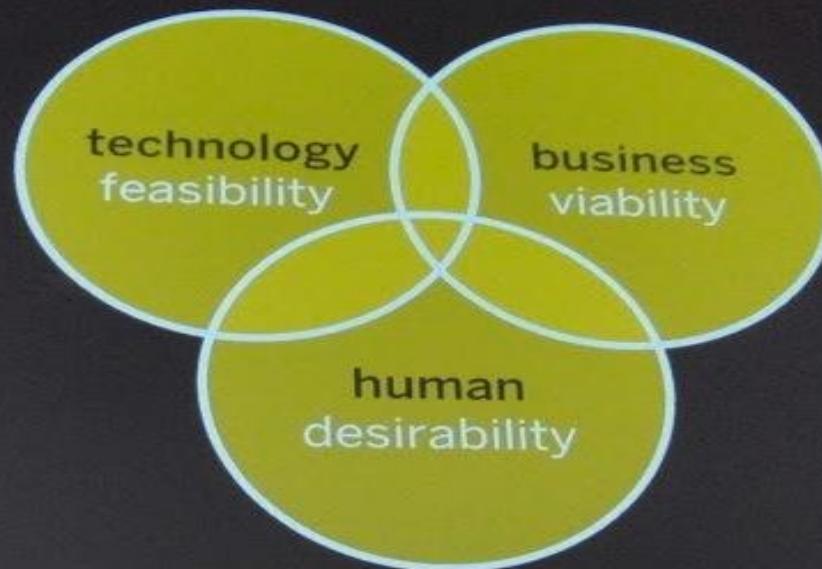
- USE THE WHOLE SPACE. Do not limit yourself to the white board.
- Active participation by everyone
- Be VISUAL
- TIME-BOXING – yes, you will not have enough time
- Please – minimal use of cell phones, computers, iPads



# **DESIGN THINKING**

Create Innovation by combining the right  
**PEOPLE**, the needed **SPACE** and a  
supporting **PROCESS**.

# From push to pull: design thinking





DISSENT WILL NOT  
BE TOLERATED

**HARRY POTTER**

# THERE IS NO MAGIC.



THE ONLY WAY  
IS REBELLION

**HARRY POTTER**

AND THE ORDER  
OF THE PHOENIX

THE REBELLION BEGINS



**SAP**

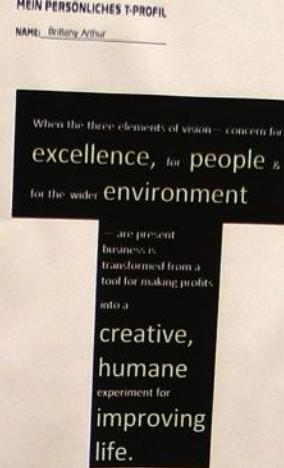
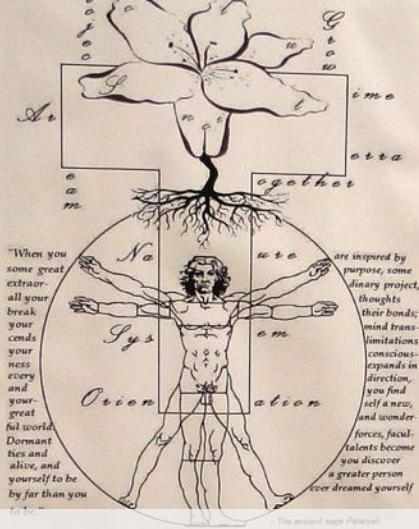
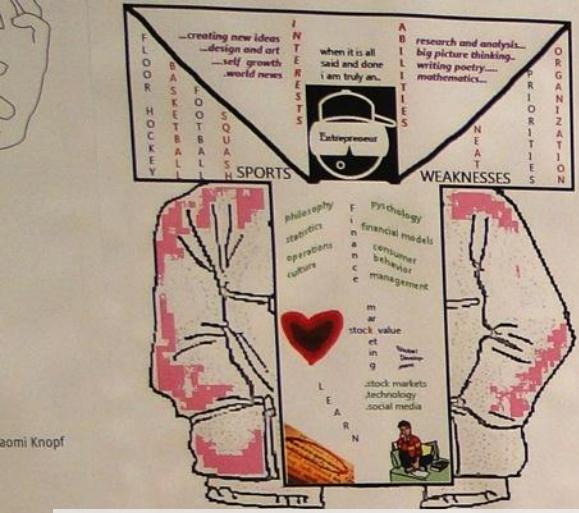
A collage of images from Las Vegas. The top half shows the iconic "Welcome to Fabulous LAS VEGAS NEVADA" sign against a clear blue sky. In the background, various Las Vegas landmarks are visible, including the Stratosphere tower and several high-rise buildings. The bottom half of the collage features a Egyptian-themed statue of a pharaoh's head, palm trees, and the Eiffel Tower replica at the Paris hotel.

AND IT'S NOT ABOUT LUCK.

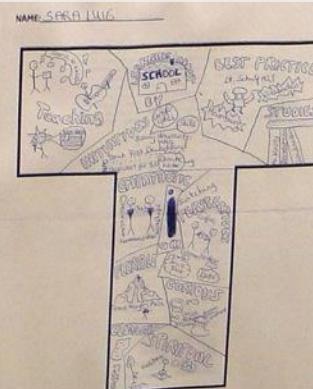
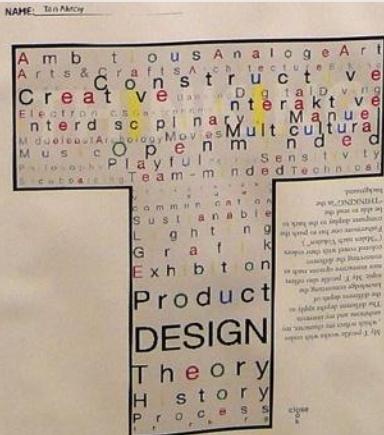
# THE RIGHT PEOPLE.

# NO LONESOME RESEARCH.





# INTERDISCIPLINARY TEAMS of T-shaped people.





# DIFFERENT MINDSETS & EXPERIENCES.

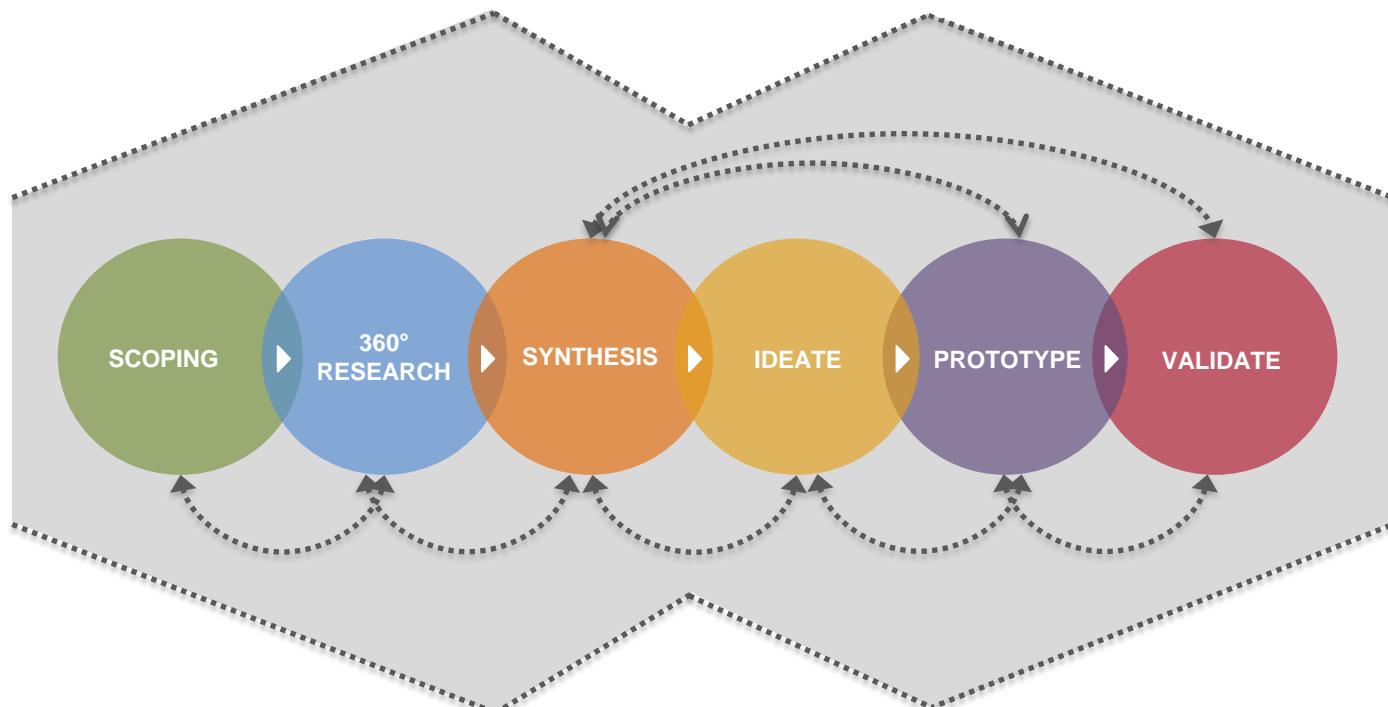
**THE NEEDED SPACE.**

# THE TEAM SPACE IS YOURS



# THE SUPPORTING PROCESS.

# THE DESIGN THINKING APPROACH





# CURIOSITY & WILLINGNESS TO LEARN.



A large pile of colorful LEGO bricks of various colors including red, blue, yellow, white, black, and green, scattered in a chaotic pile.

**BE A CHILD.**



**FAILURES ARE ALLOWED** and a great opportunity to learn.

I LIKE,

WISH 8.5

I WISH WE HAD TAKEN MORE PHOTOS OF THE PEOPLE WE TALKED TO

I WISH WE HAD FOUND DISCOVERED MORE ANNOYING DETAILS

I WISH WE HAD FOUND OUT MORE NON-OBVIOUS

I WISH I HAD ASKED THE COACHES MORE

I LIKE THAT WE ARE STRUCTURED,  
.. MAYBE NOT SO ORGANIZED

I WISH WE MET UP DURING RESEARCH

I LIKE THAT WE JUST WALKED INTO A SCHOOL

I WISH EVERYONE WAS HERE

I LIKE THE DIFFERENT INTERVIEWS

I LIKE THE ACTIVITY ON INCOM

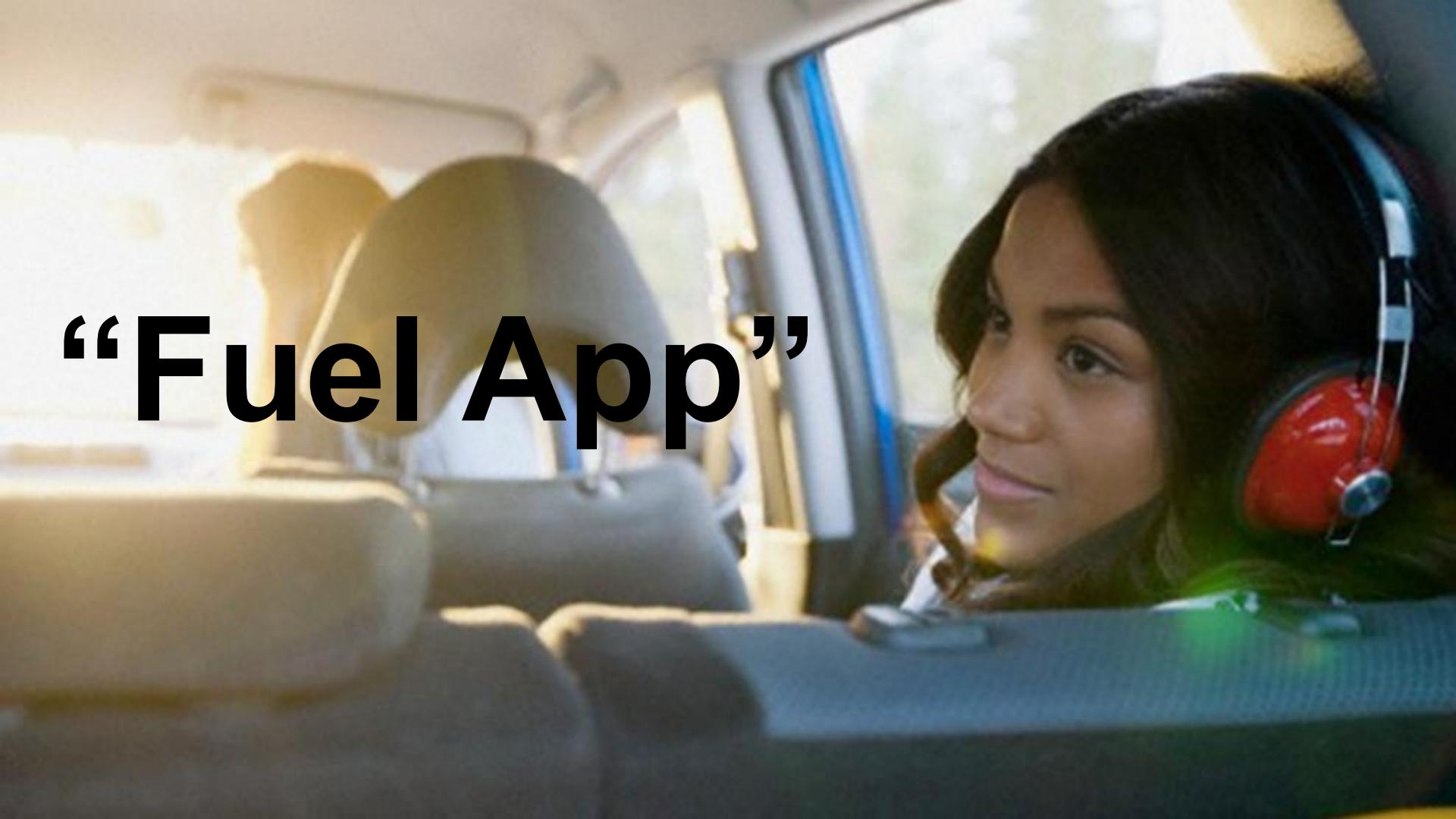
I WISH

I WISH WE DIDN'T

MORE TIME TO PLAN

ON INCOM

# CONSTRUCTIVE FEEDBACK CULTURE.

A photograph of a woman with dark hair, wearing a flight suit and red headphones, looking out of the window of an airplane. The interior of the cockpit is visible in the background.

**“Fuel App”**



## DEEP DIVE INTO THE APPROACH



# What are you trying to achieve?

- focus of the solution
- quick research to validate
- shift the project focus if necessary
- plan the project, based on the phases of the Design Thinking approach





## Research, discover, explore and capture

- Find key insights
  - Find experts
  - Gain empathy for the users
- 
- Understand stakeholders
  - Gather market information
  - Research analogous situations
  - Research adjacent situations
  - Do field research to understand users





# Understand stakeholders

- Understand their expectations and motivations
- map out their relationships to each other and to the project goals.

Size =  
Power in Issue



Links/Close

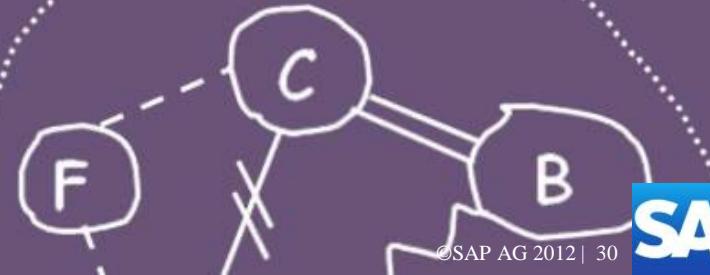


additional  
information

Alliance



Issue, problem or opportunity -  
Boundary of Network ..



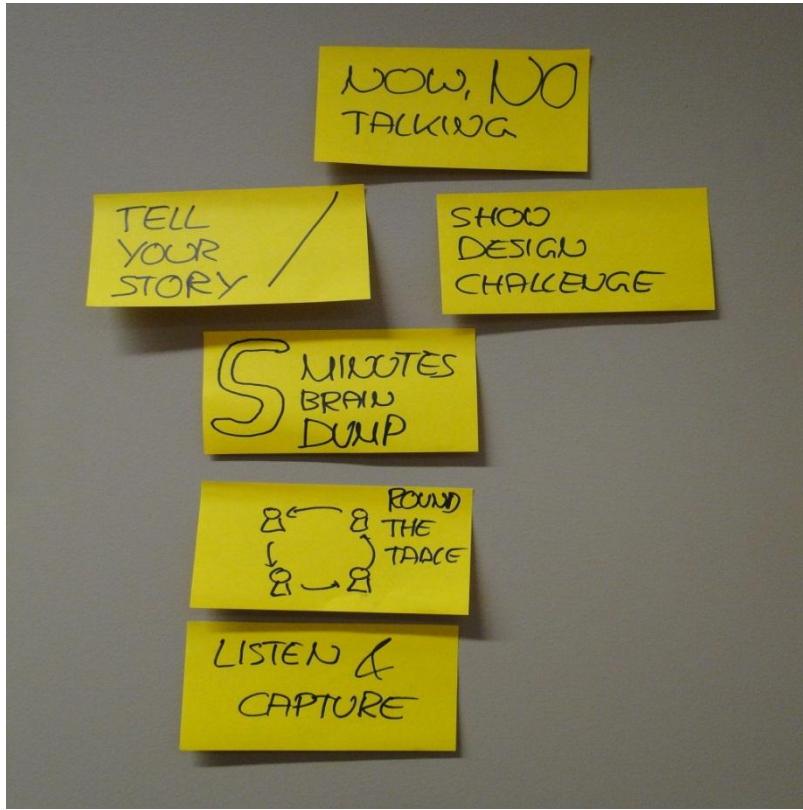


## Gather market information

- Is the market big enough?
- What will be your unique selling proposition?
- Your competitive advantage?
- Consider analysts and thought leaders



# Brain Dump



## How this works:

- Now, no Talking ☺
- 5 Minutes silent Brain Dump on Topic (Questions, Thoughts, Ideas, ...)
- Round the Table Report-Out
- Go Post-It by Post-It
- Structure your Data
- Listen & Capture



# Do field research to understand users

- with the people for whom you are designing

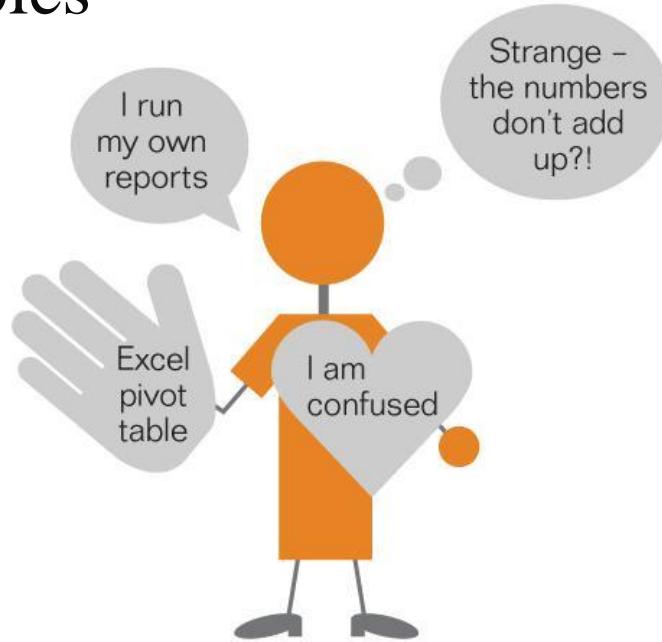
Here are some methods and tools to choose:

- Interviews and in context observations: to get answers to specific questions
- Ethnographic studies: great to collect data on peoples' culture and contexts
- Make tools: great for collective creativity





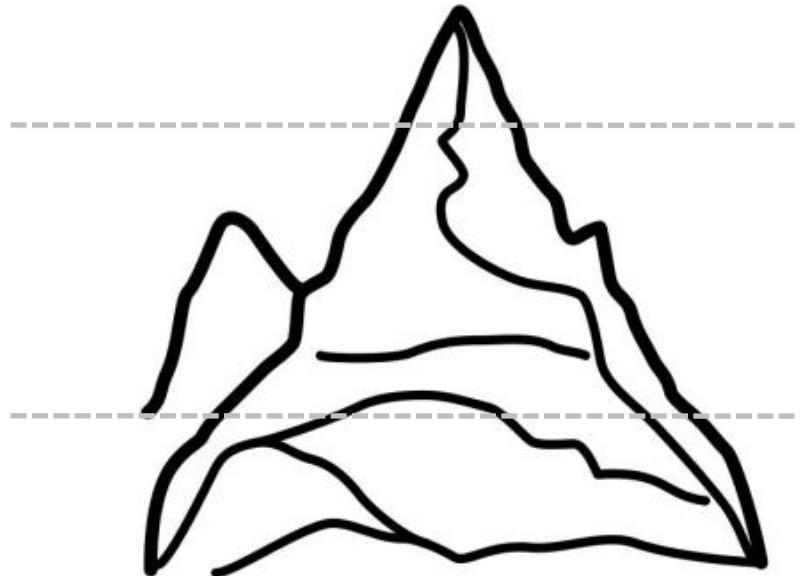
## Basic principles



**say ≠ do ≠ think ≠ feel**



# Finding insights



Position

Insights (“needs”)

Basic Needs (e.g. Maslov)



# How you ask matters

- Leading questions are ineffective.
- Open-ended questions ‘what’, ‘why’, ‘how’, ‘when’, ‘where’, ‘who’ provide insights.

## Example Questions:

- What do you use to purchase your tickets?
- How do you know which bus or train to take?
- Can you describe step by step how you reach your goal?





If you **return early**, do not try to connect  
the dots and **do not**  
**jump to conclusions**, yet.



# Scoping & 360° Research

1. Understand your challenge
2. Get smart fast (Brain Dump)
3. What do you want to know?
4. Interview

**GOAL:** gather as much valuable information as possible – **no evaluation yet!**

BRAINDUMP: 10 minutes

SCOPING & PREPARE RESEARCH: 15 minutes

RESEARCH ACTIVITIES: 55 minutes



# MAGGI's PRODUKTE

**SYNTHESIS** find the essence of your research data.



**WÜRZE • SUPPEN • FLEISCHBRÜH**



## Understand and gain insights

Part one

Storytelling

Capturing key points

Identifying user roles

Clustering and prioritization

Part two

Looking at the needs and motivations

Creating personas/a POV



## SYNTHESIS



# Storytelling

- Make a list of users you saw
- Describe what you heard and observed
- Try not to (mis)interpret or judge and indicate if you make an assumption
- As the audience, try to note down all important details on post-its
- Be visual ☺
- Put one statement per post-it and articulate the statements clearly so that they are understandable without other context.
- Use one color per user to have a reference.





# Capturing key points on post-its per user

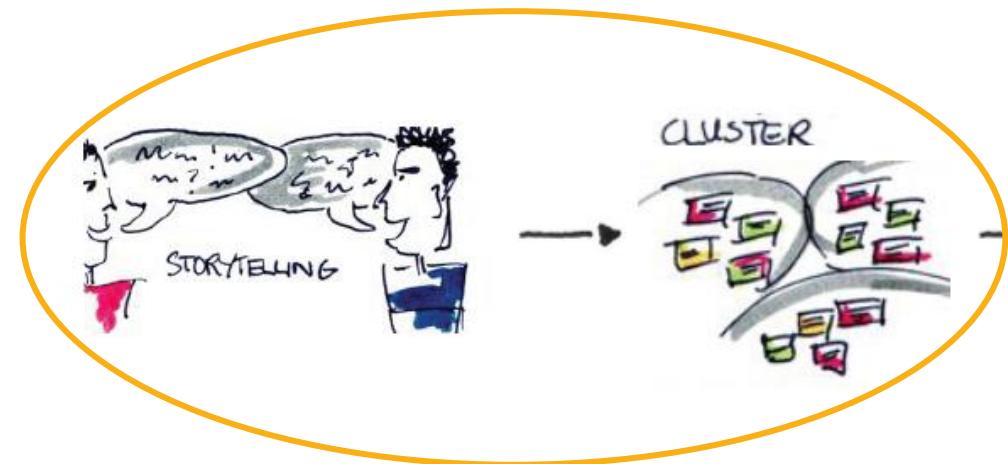
Categories	Example post-its
Characteristics	Loves to make her customers happy
Goals	Wants to spend as much time with her customers as possible
Activities /tasks	Is responsible for ordering and replenishing the stock levels
Pain points	Has no transparency into what her customers really want
Observations on the environment	Is always running around in the noisy store
Artifacts and tools they use	Uses her mobile phone to connect to the people in the warehouse

Emma, department supervisor fresh fish   Lisa, department supervisor fresh produce

# COLOR-CODES help to link insights to users.



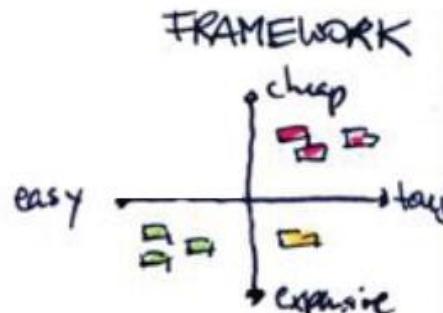
# THE ART OF STRUCTURING YOUR INSIGHTS.



CREATE A PERSONA



USER +  
NEED + INSIGHT  
= POV



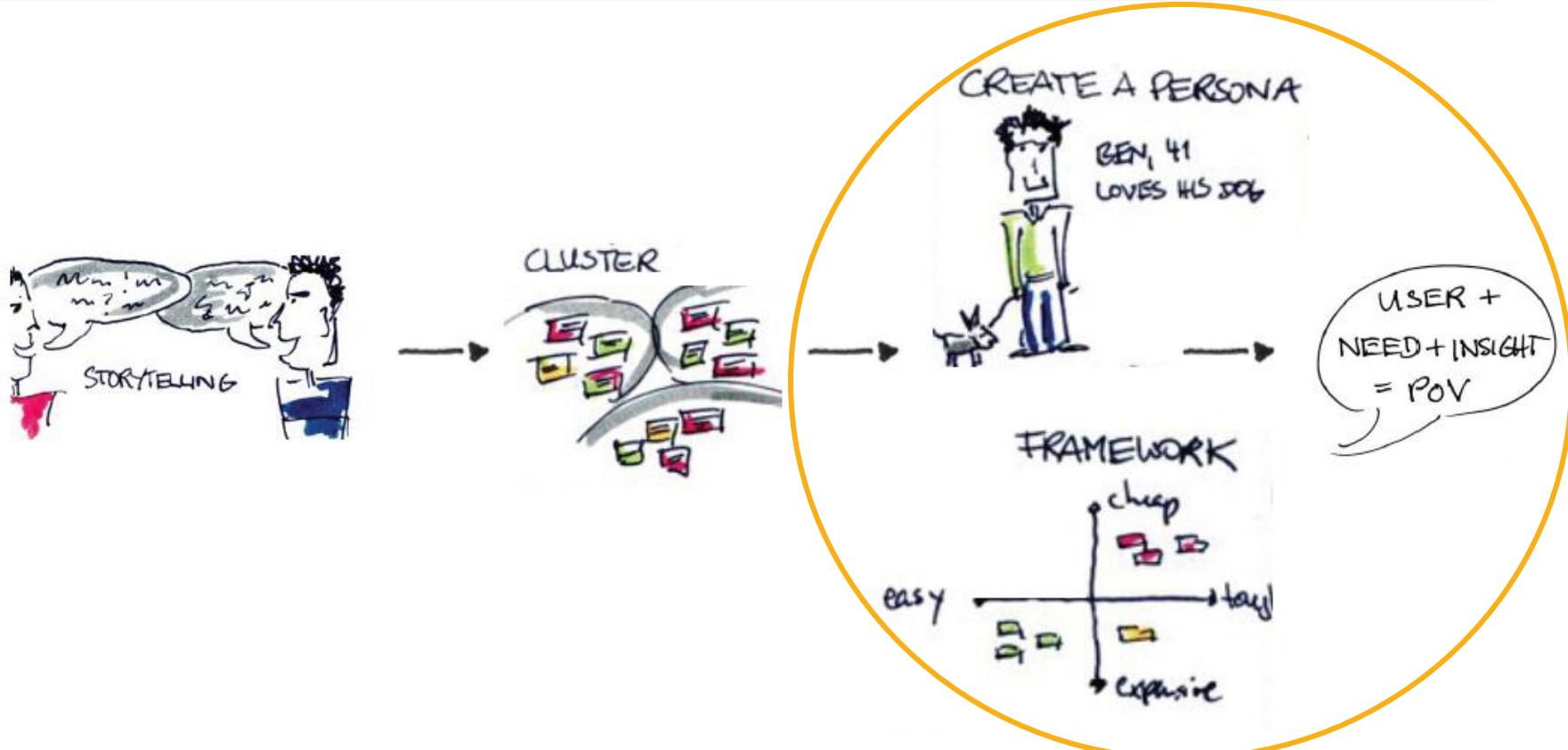
# Storytelling

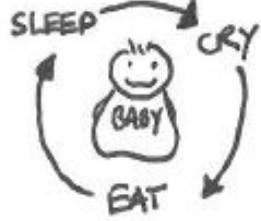
1. Share what you heard and saw, tell your stories.
2. Note the data points on post-it notes. Select one color per user.
3. After each story, post your notes by user and category on the wall
4. Cluster and prioritize your data points

**GOAL:** create a common understanding within the team, cluster your insight

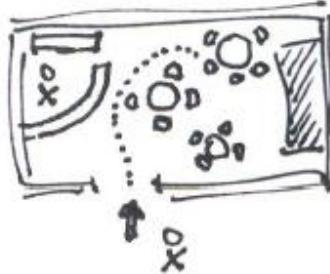
SYNTHESIS ACTIVITIES: 30 minutes

# THE ART OF STRUCTURING YOUR INSIGHTS.

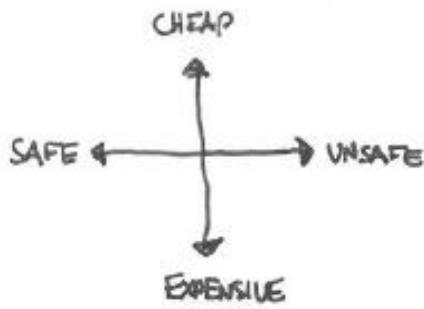




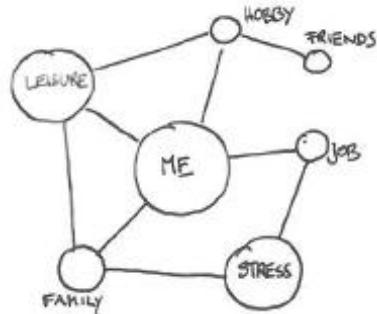
Process Map circular



Floorplan



2-by-2 Axis Map



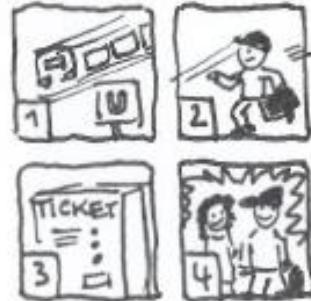
Concept Map



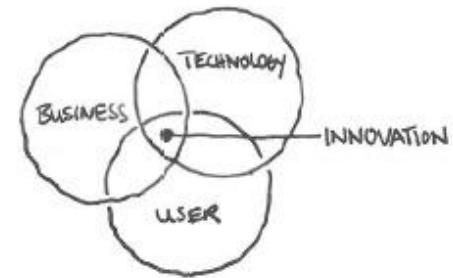
Causal Map



Geographic Map



Scenario



Venn Diagram

# PLAY WITH FRAMEWORKS.



# Creating personas

- Personas are fictional characters created to represent user types.
- They are useful in considering the goals, desires, and limitations of the users to help to guide design decisions.
- Personas put a personal human face on otherwise abstract data about customers

Your persona description might include:

- name and picture
- demographics like age, education
- needs and tasks
- goals and aspirations





## Coming up with a POV

**POV = User + Need + Insight**

The Point of View is one sentence that creates an image in your mind. Based on an understanding of a user group and an insight into a specific need, it narrows the focus and makes the problem specific.

Template:

[Attributed user] needs (to) [Position]  
because [Insight]

Example:

The Department Supervisor needs time with customers, since knowing who they are enables her to optimize her ordering plan.



Based on your research, please create...

1. A persona that represents the people you want to design for.
2. A point of view that represents the main need and insight of your persona

**GOAL:** create a persona & a point of view

SYNTHESIS ACTIVITIES: 35 minutes

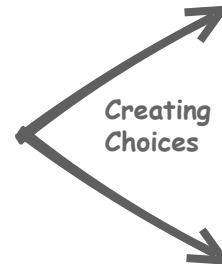


**IDEATION** find ideas & go for quantity.

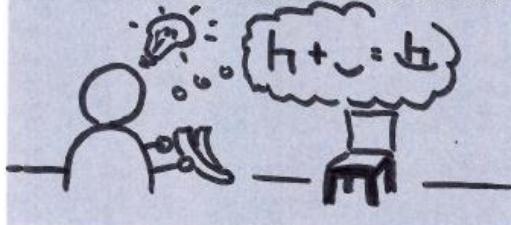


## Ideation is about brainstorming ideas

- The goal is to generate as many ideas as possible
- At this point your team starts to imagine possibilities
- Do not check for feasibility and viability at the beginning of ideation, this is done later during prioritization



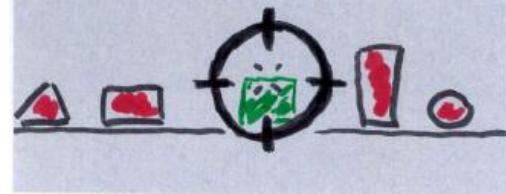
Build on the Ideas of Others



Defer Judgment



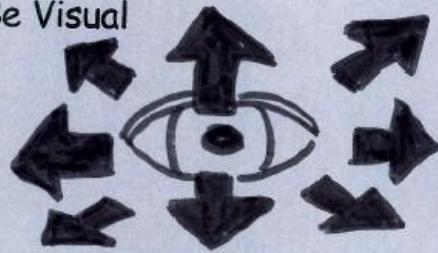
Stay Focused on Topic



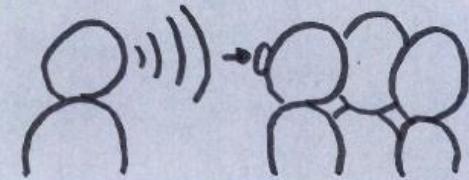
Fail early and Often



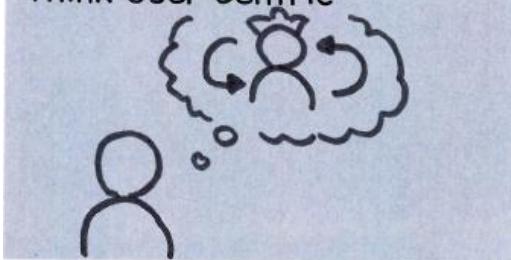
Be Visual



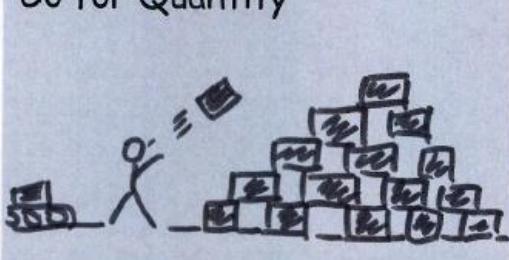
One Conversation at a Time



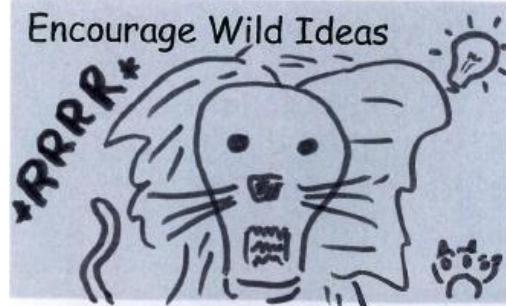
Think User Centric



Go for Quantity



Encourage Wild Ideas



# BRAINSTORMING RULES.



DEFINE CONSTRAINTS.

# **BACK TO THE PAST** How would they do it?

or

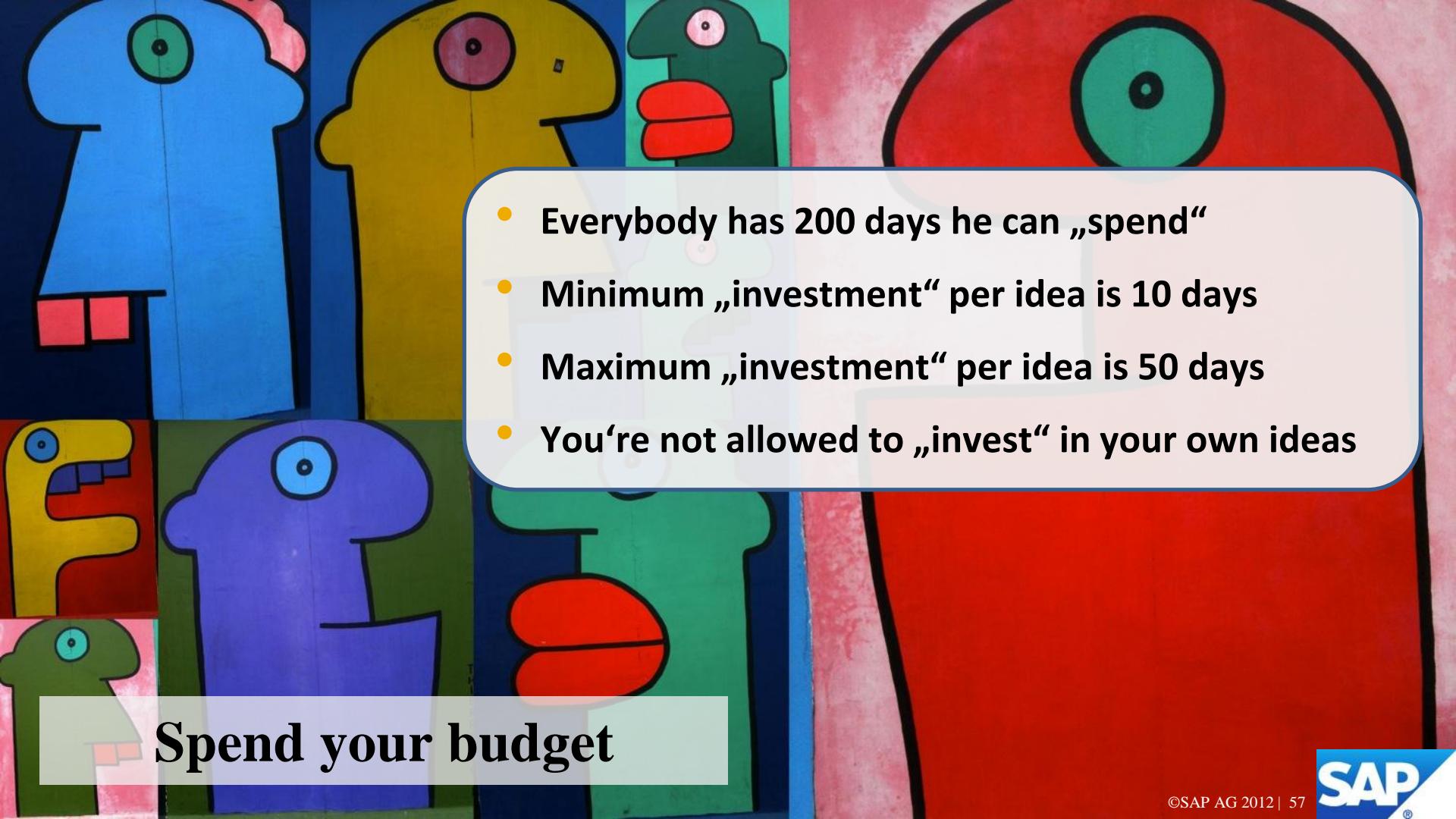
# **BACK TO THE FUTURE** How would they do it?



minimum 50 ideas

## GO FOR QUANTITY

“the best way to get a good idea is to get a lot of ideas”  
*linus pauling*

- 
- Everybody has 200 days he can „spend“
  - Minimum „investment“ per idea is 10 days
  - Maximum „investment“ per idea is 50 days
  - You're not allowed to „invest“ in your own ideas

Spend your budget

# Ideation

1. Brainstorm ideas.
2. Cluster your ideas.
3. Prioritize your ideas for the upcoming prototyping phase.

**GOAL:** generate as many ideas as possible, cluster & vote

IDEATION ACTIVITIES: 55 minutes

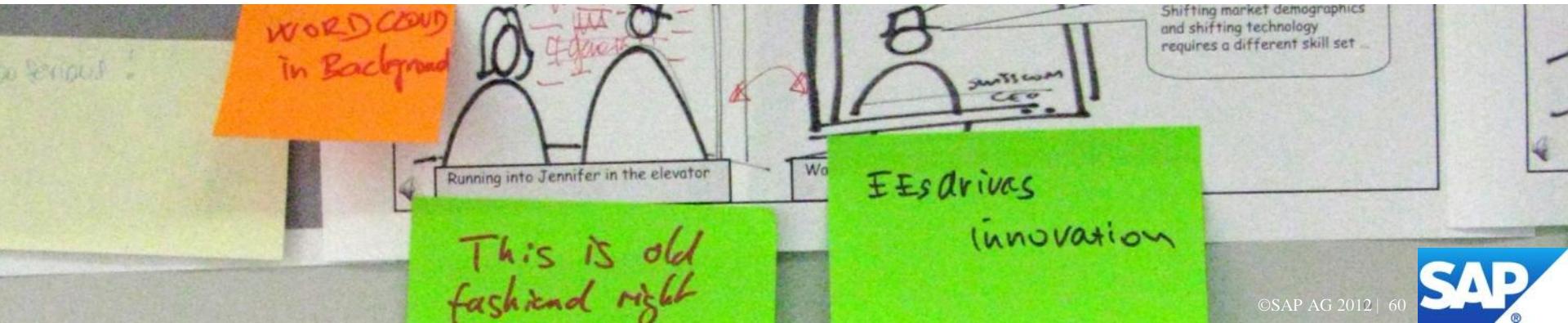


Validate and validate your ideas.



# Get feedback from end users

- Take your idea, re-visit end users and take them through a scenario that shows how to reach the goal with the new solution.
- Listen carefully to what they say.
- Create a storyline to show how a user employs the solution to reach the goal
- Capture and later synthesize all feedback
- Ideate how the feedback can be worked into the next iteration of your solution

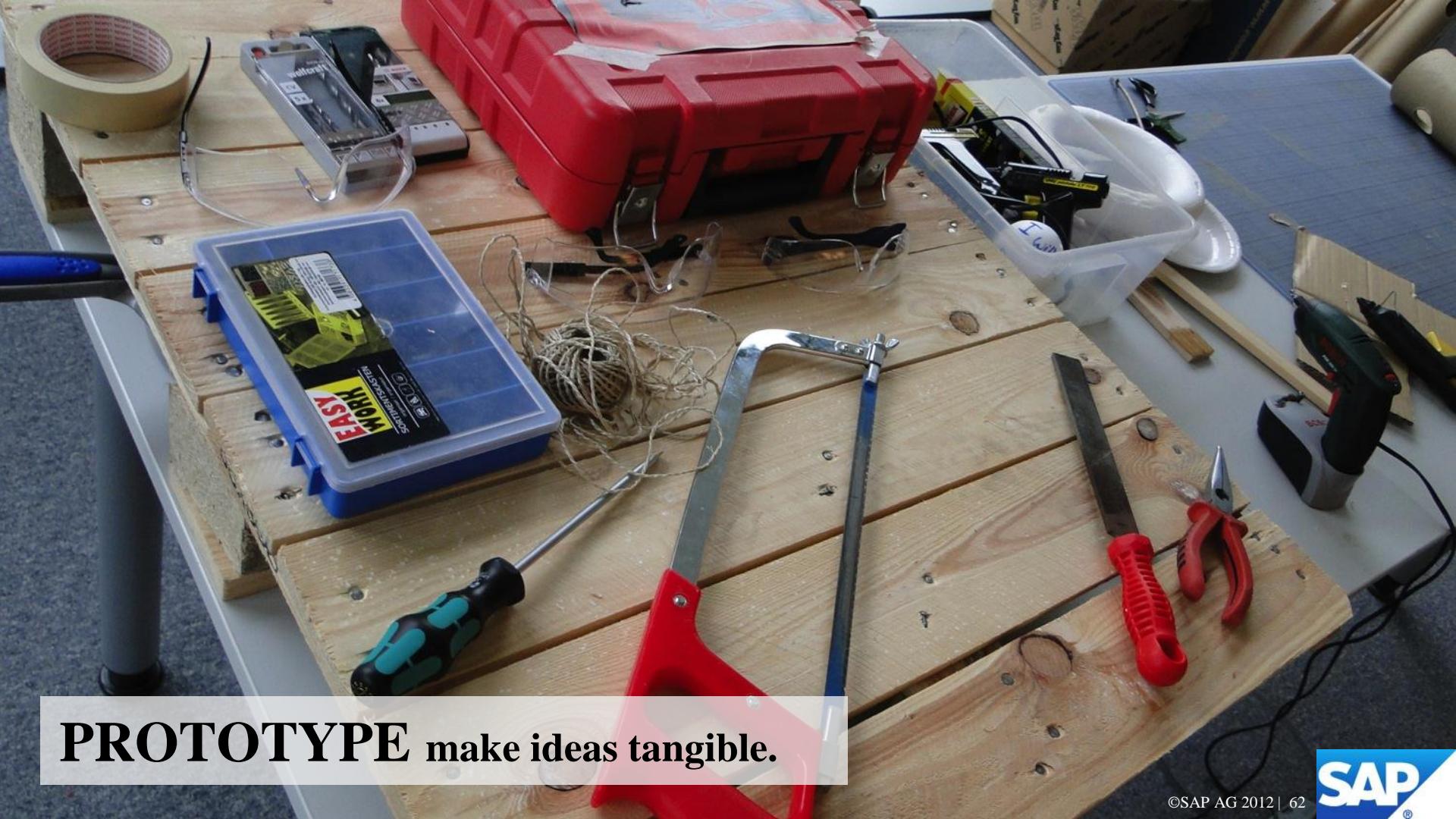


# Validation

1. Validate your idea.
2. Get feedback from the other team.

**GOAL:** Get feedback for your idea & iterate.

**VALIDATION ACTIVITIES:** 20 minutes

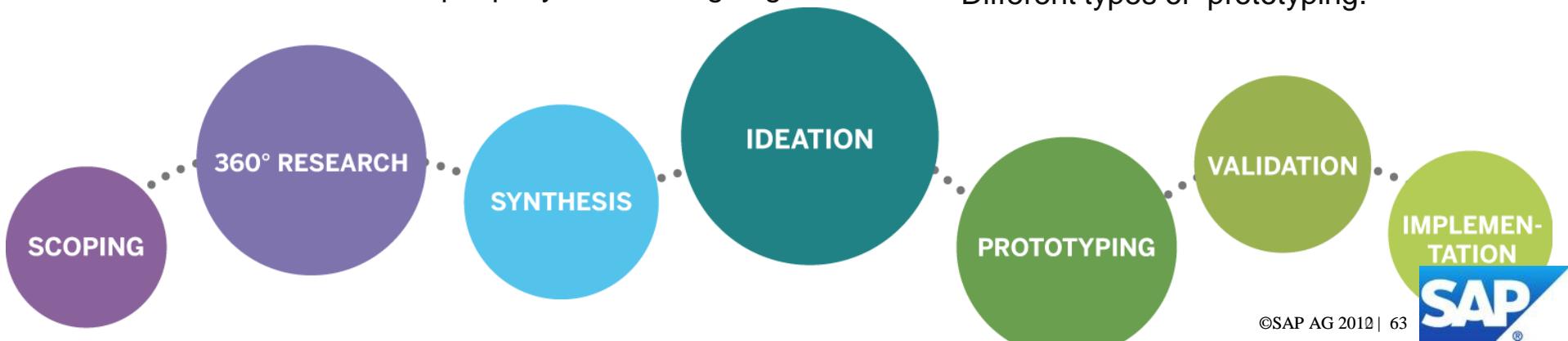


**PROTOTYPE** make ideas tangible.



## Fail early, fail often

- A first or preliminary model of something.
- Prototypes may show what something looks or feels like, or how it operates.
- Prototypes make things tangible.
- It is made to test other peoples' reaction, and to help you learn and gain insights into what your ideas mean to the people you are designing for.
- The better it looks, the more narrow the feedback.
- If prototypes aren't they aren't pushing far enough
- Failure is simply part of understanding and improving.
- Different types of prototyping.





# Role Play – You are the Actors

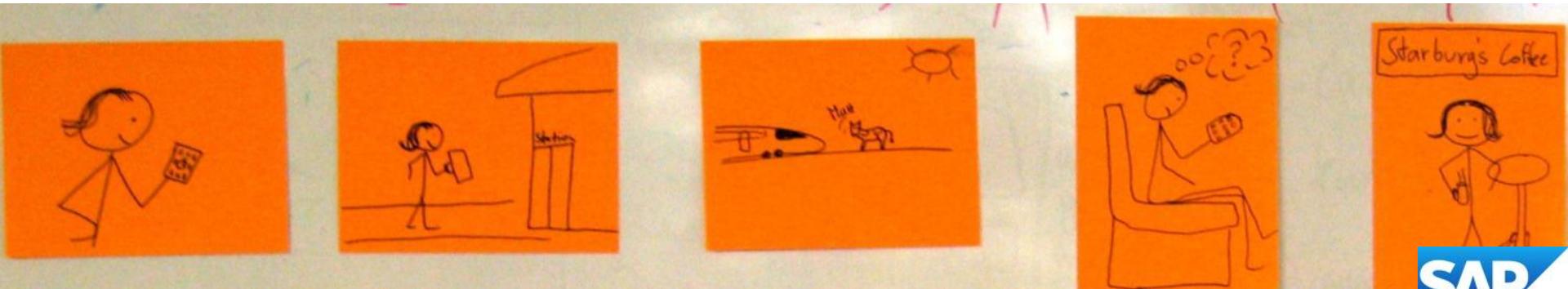
- Show the Solution through the User's eyes
- Don't try to be too perfect. "Feeling the idea is key, not perfect make up"
- Use a role play to show the impact of your idea e.g. in the "day in the life of" your persona





## Storyboards

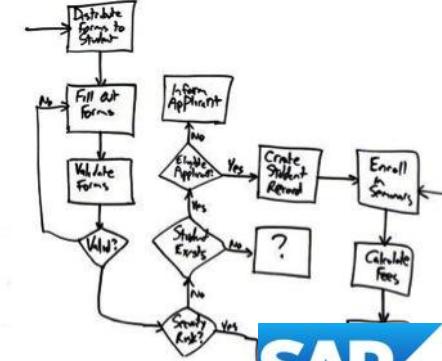
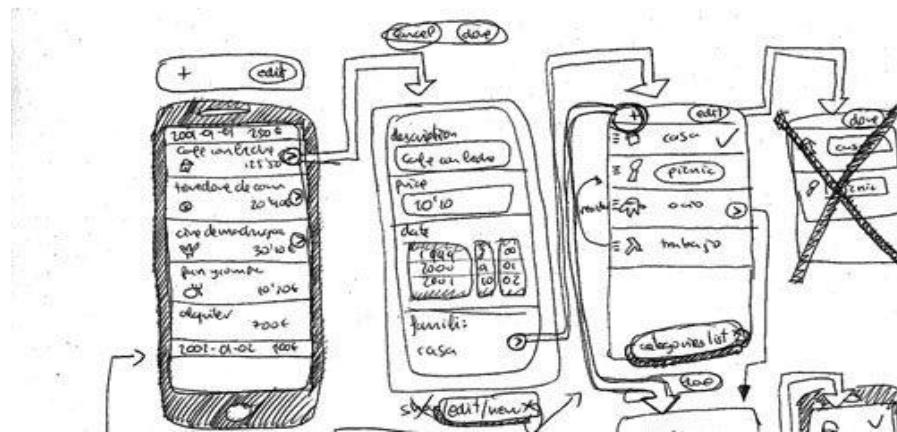
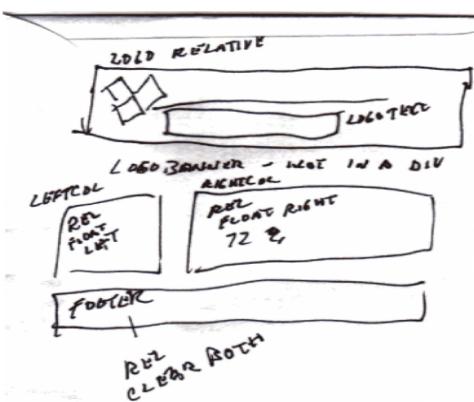
- Visualize your solution
- make it tangible by sketching it out
- Storyboards help viewers to share the holistic experience a user of a product or service might go through.





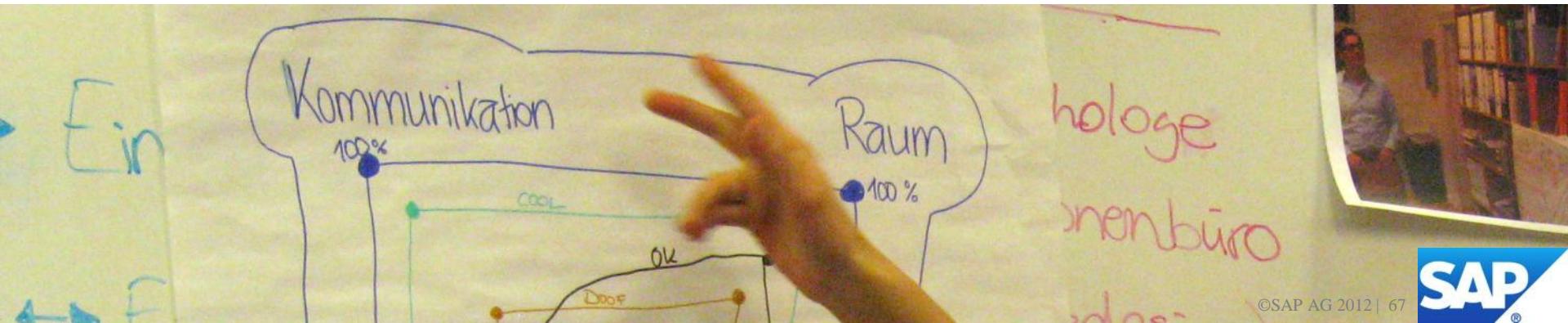
# Low fidelity Mockups

- Demonstrate Functionality, (Look)&Feel of your Solution
- Compose low fidelity mockups by using traditional material.
- Don't try to be too perfect. "Key functionality and screen flow is key, rather than finalized screenshots."



## Pitching your solution

- Your final presentation briefly describes the context of your solution. What were you asked to do? Who were you designing for? Which insights did you discover?
- Then focus on the essence of your solution and how it solves your users' needs.
- You have three minutes to present!



# Prototype

1. Prototype your solution based on the ideas you prioritized.
2. You have 3 minutes to present your prototype.
3. Remember, the evaluation criteria are creativity and simplicity of your solution, how well it fits your users' needs, as well as your presentation.
4. Think about how you want to pitch your solution / who will take what role

**GOAL:** visualize your idea, make it tangible & present in 3 minutes

PROTOTYPE ACTIVITIES: 40 minutes

PREPARE PITCH: 10 minutes

Carsten Becker  
Global University Alliances  
[carsten.becker@sap.com](mailto:carsten.becker@sap.com)



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