

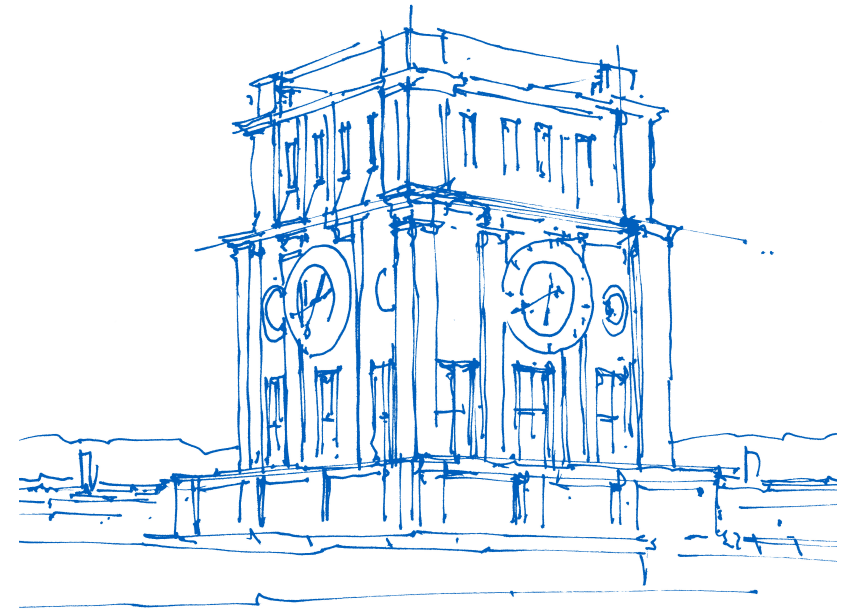
# Prototyping

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Technical University of Munich

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**Entrepreneurship Research Institute**

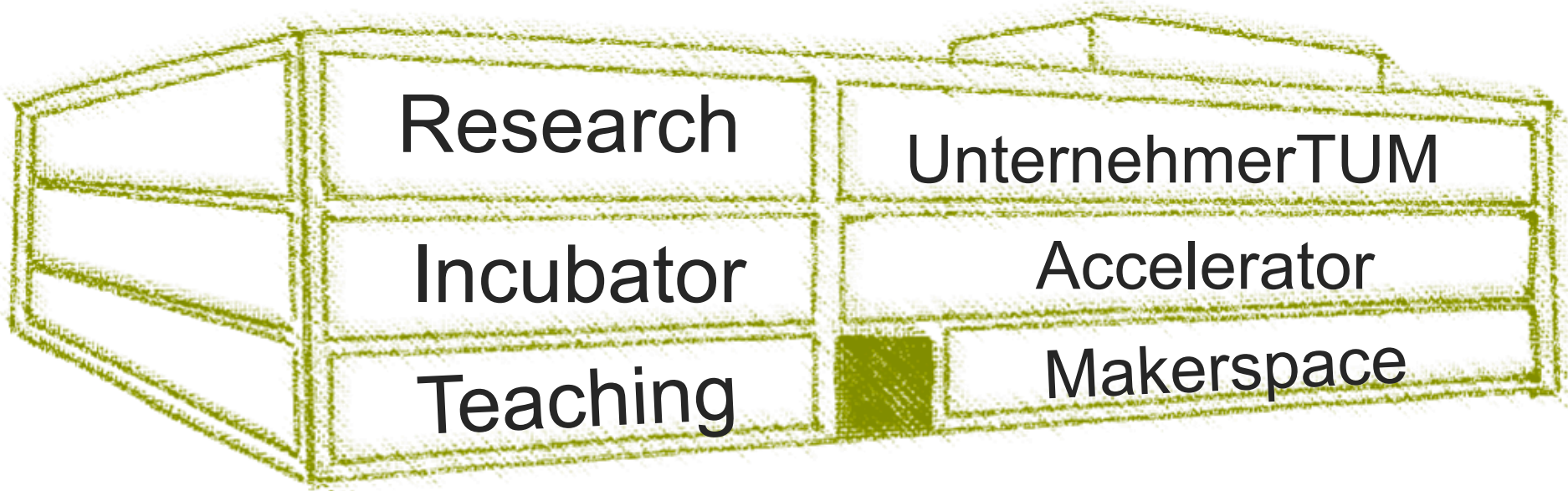


*Uhrenturm der TUM*

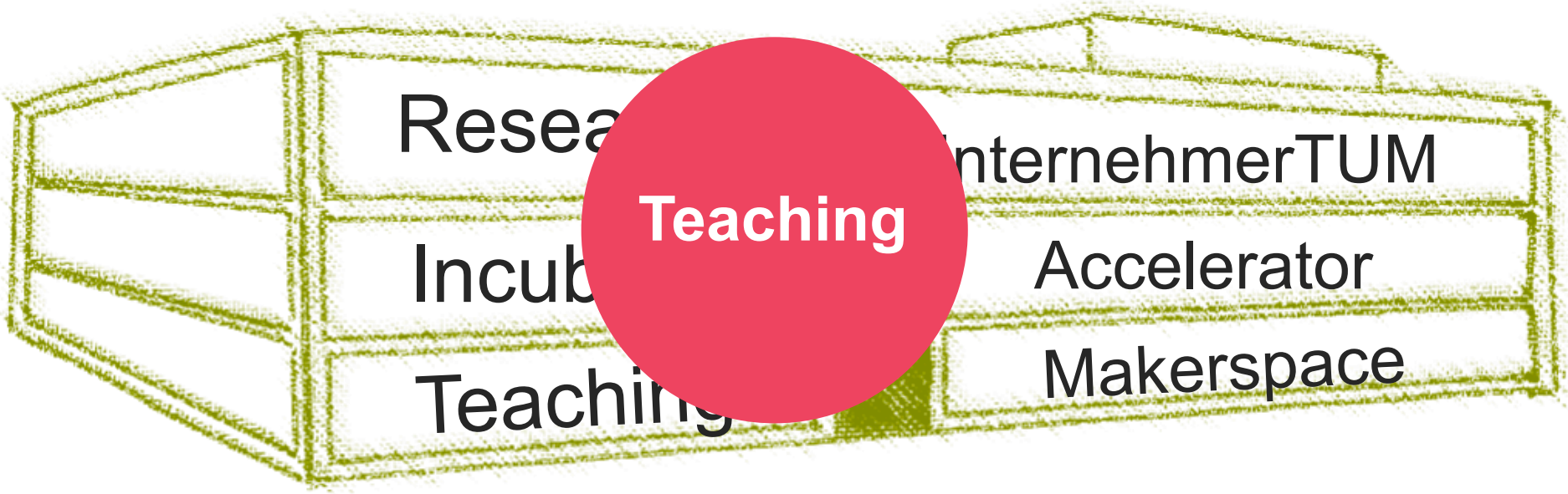
# TUM Entrepreneurship Center



# Concept of Center



# Concept of Center



# Issues

## 1. Implicit views on their product or themselves:

- that they are not creative
- that they have to do everything on their own
- that they have to come up with the product first
- that they know better what the markets need

**=> do not develop product that customers want, or miss out important feedback**

## 2. Finding the right team for starting a new venture

**=> do know how to form a team and how to cope with conflict or uncertainty**

## 3. The social environment expects students to make money right after graduation.

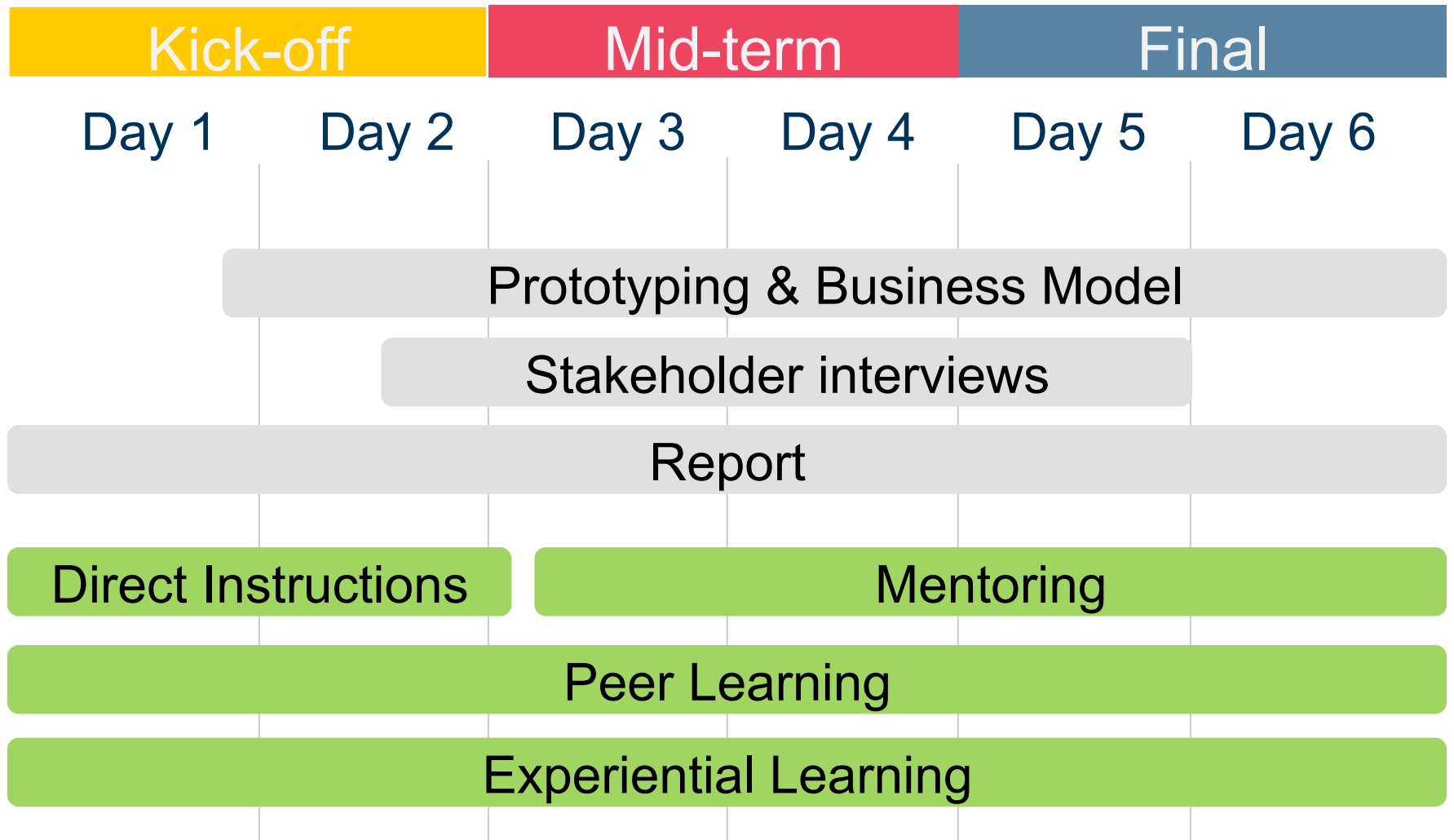
**=> Potential entrepreneurs are forced to pursue a classic career**

# How we see ourselves

1. Every bit of knowledge is available.... In higher quality than we ever could do  
**=> Focus on the people side of entrepreneurship**
  - **Team formation**
  - **Team processes**
  - **Networking**
  - **Mentoring**
2. Yes, a little bit of knowledge or guidance:  
**=> Focus on a general knowledge map**

## **Prototyping Seminar – An first touchpoint for students**

# Course structure



# Kick-off

## Day 1

- Preface
- Creativity
- Entrepreneurship
- Teams
- Final Exercise I

## Day 2

- Tools
- Design thinking
- Business model
- Lean startup
- Pitch
- Final Exercise II

**Goal: Get a kick start into hands on experiencing team work and prototyping**



## Pre-Seminar Task



## Networking

### Creativity

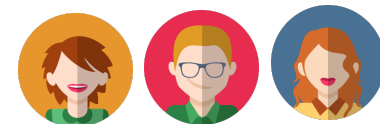
e.g. Saywer, 2012; Runco, 2014;

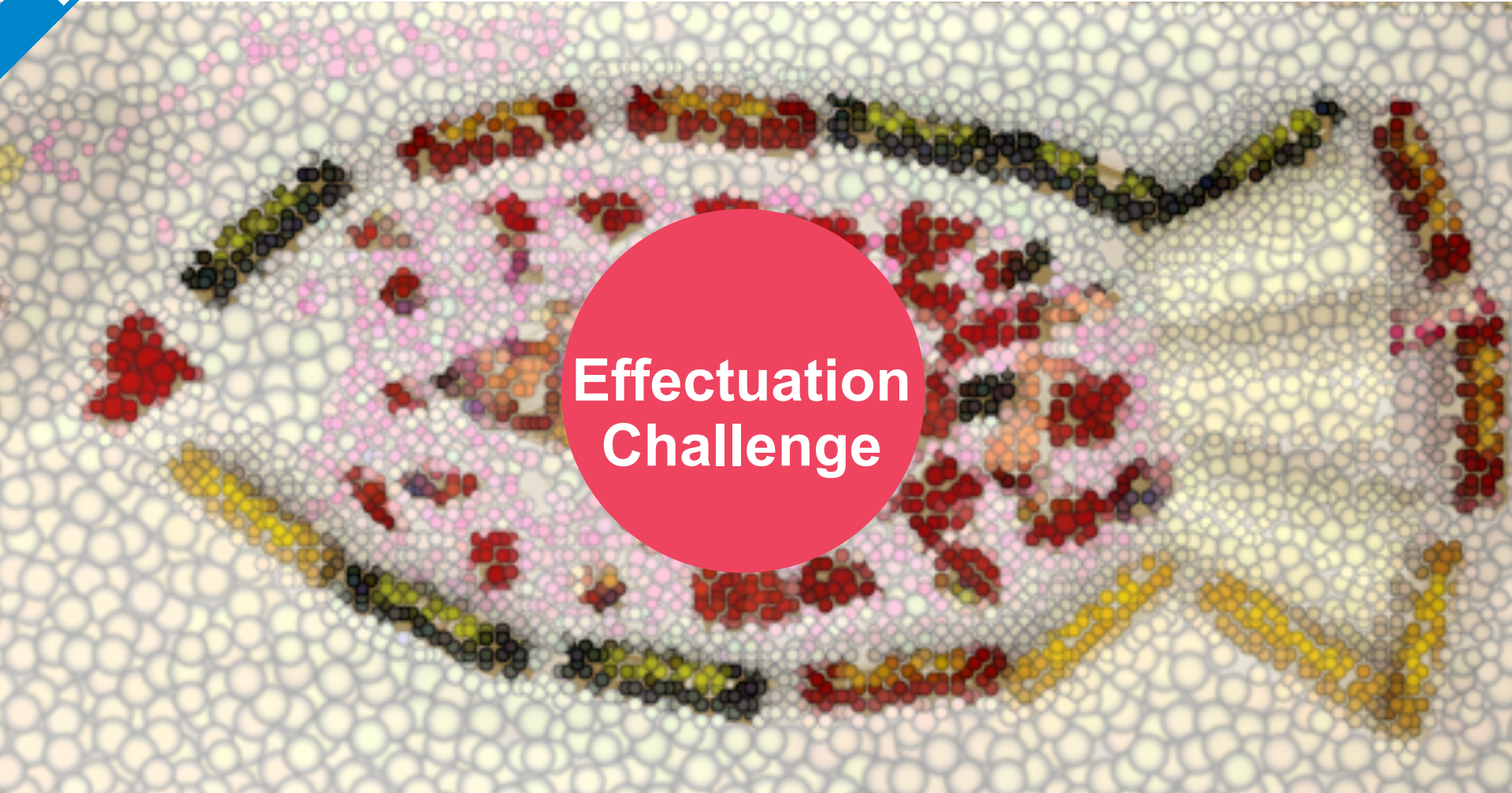
### Entrepreneurship

Focus on Effectuation  
Sarasvathy, 2001



## Teambuilding & Ideation





**Effectuation  
Challenge**

# Team Effectuation vs. Team Causation

Step 1

Pair up two teams of 5 at every table (3 min.)

Step 2

Define animal for Team Causation  
(2 min.)

Step 3

Select half of the resources from the  
table (5 min.)

Step 4

Work with remaining resources and  
build any animal you like

Step 4

You have 20 min. to build your animal

All resources have to be completely used / integrated in the animal

Step 5

Other teams vote for the winner at one table



## Pre-Seminar Task



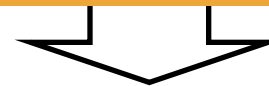
## Networking

### Creativity

e.g. Saywer, 2012; Runco, 2014;

### Entrepreneurship

Focus on Effectuation  
Sarasvathy, 2001



## Teambuilding & Ideation



Connect the three aspects and use your creativity to generate business ideas by combining them. **Opportunities for you!**

My knowledge	My social networks	Changes in environment	Idea?

Ideas



Team



**Alice**



**Bob**



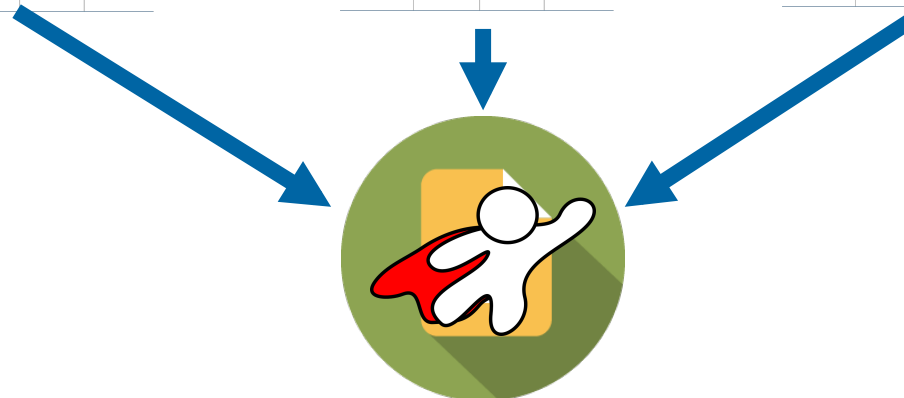
**Jules**

Opportunity Sheet

My knowledge	My social networks	Changes in environment	Idea?

My knowledge	My social networks	Changes in environment	Idea?

My knowledge	My social networks	Changes in environment	Idea?



**Day 1 results**



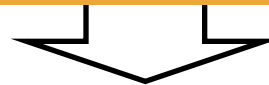
## Ideation & Incubation

### Tools

Focus on design thinking  
& Prototyping product

### Business Modell

Canvas  
Osterwalder & Pigneur, 2001



**Pitch & Feedback**





Hands on

# Midterm

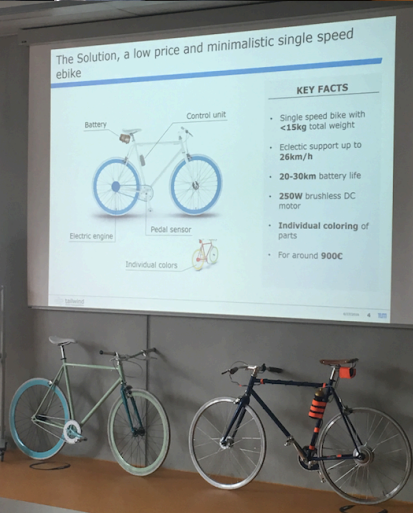
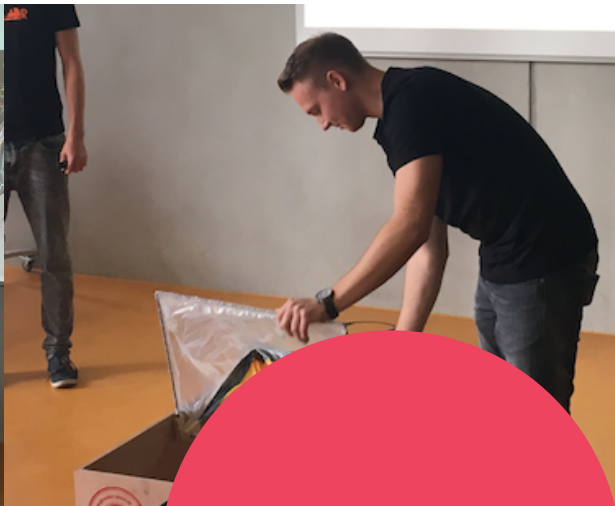
## Day 3

- Guest speaker
- Preparation for midterm presentation

## Day 4

- Midterm presentations of preliminary prototypes and business model canvas “SHARK TANK”

**Goal: Get a critical feedback and learn to so feedback as chance to improve the concept**



# Final

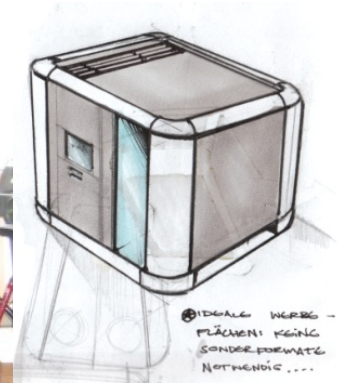
## Day 5

- Guest speaker
- Student pitches  
“SHARK TANK”

## Day 6

- Guest speaker
- Student pitches  
“SHARK TANK”

Goal: Get final feedback from peers, entrepreneurs, and trainers. Discussion together with coaches from the incubator about possible further possibilities to start a business

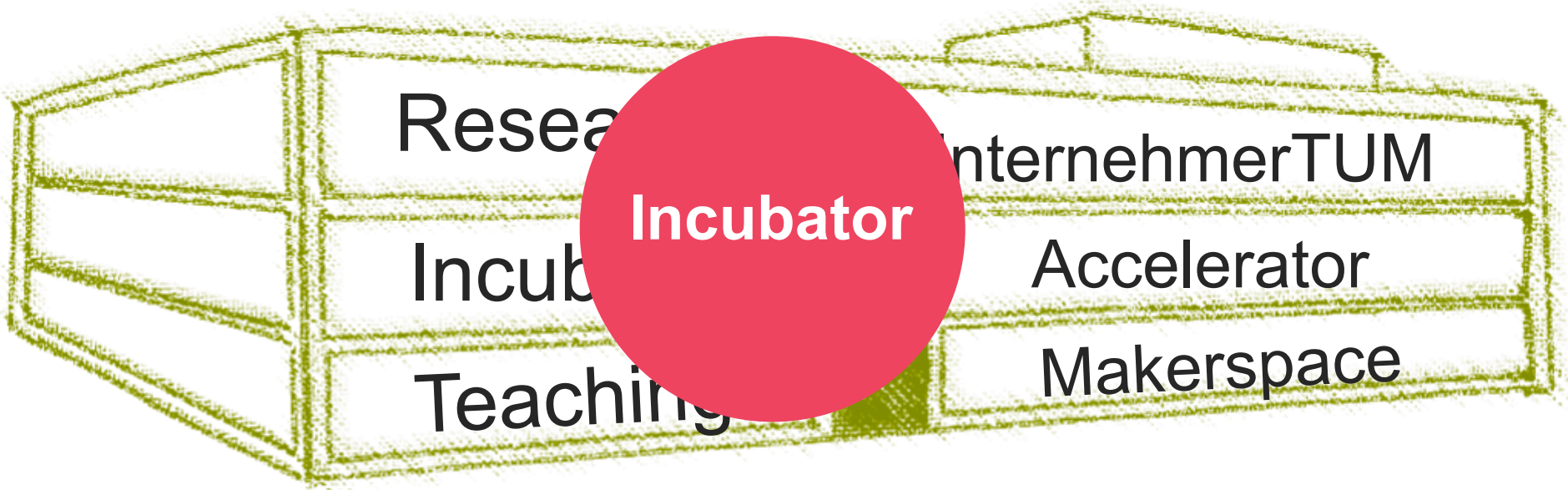


# Final Pitch

# WHAT ELSE



# Concept of Center

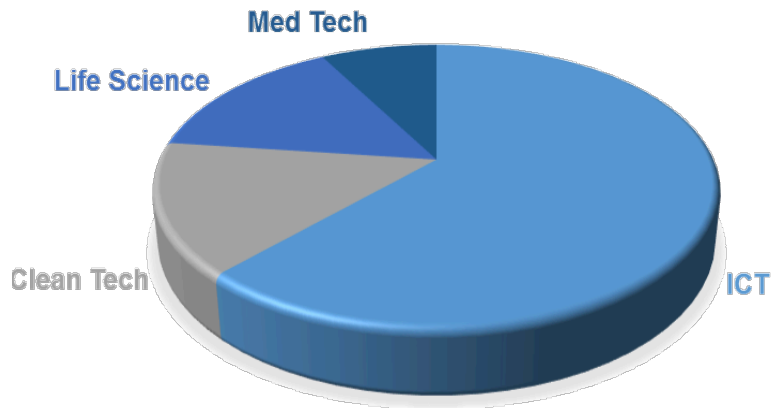


# Next step

## Infrastructure

- Open to all TUM members
- Over 100 co-working spaces and offices for more than 20 startups
- On average 6 months tenancy

Represented research fields of the future



## Service

- TUM startup coaches offer individual support on topics such as finance, team building, sales, marketing, operations
- Helpful advice including HR and IP
- Networking events and contact to internal and external experts





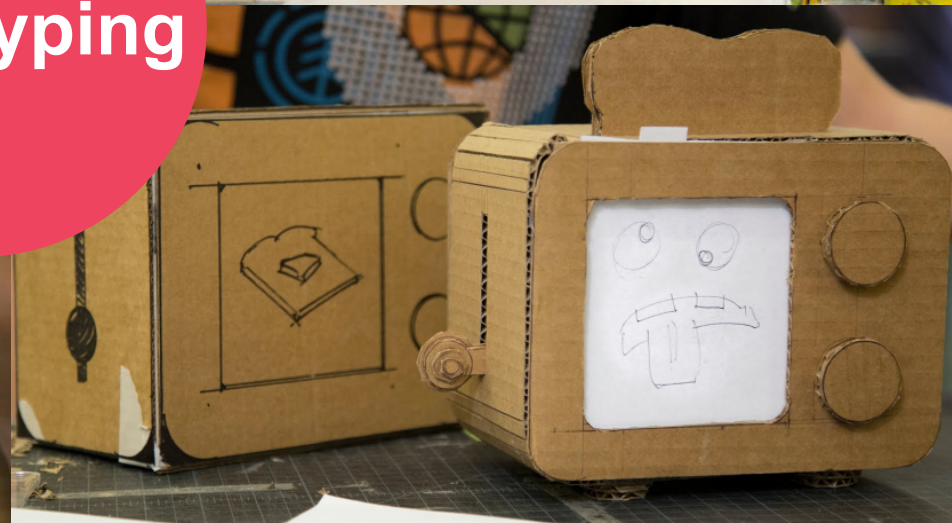
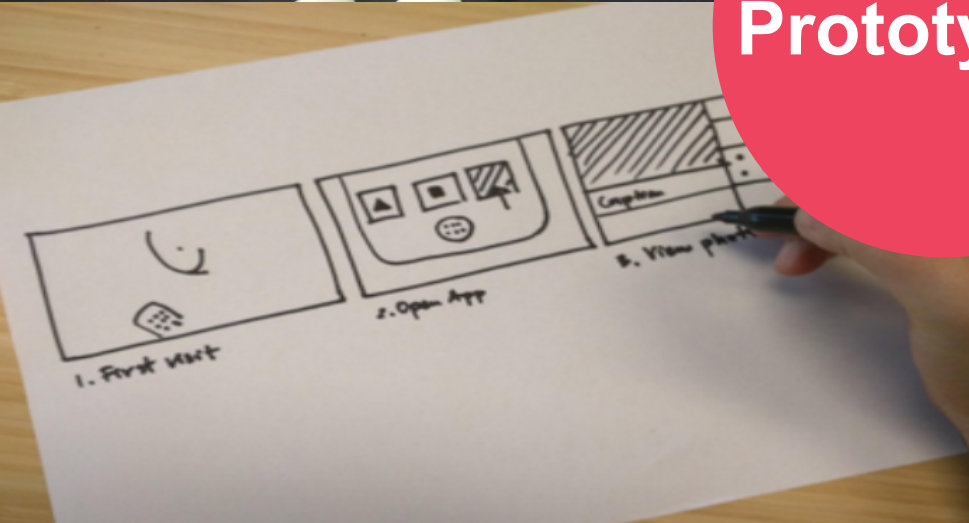
# Transfer



# Transfer



Prototyping



Prototype teams



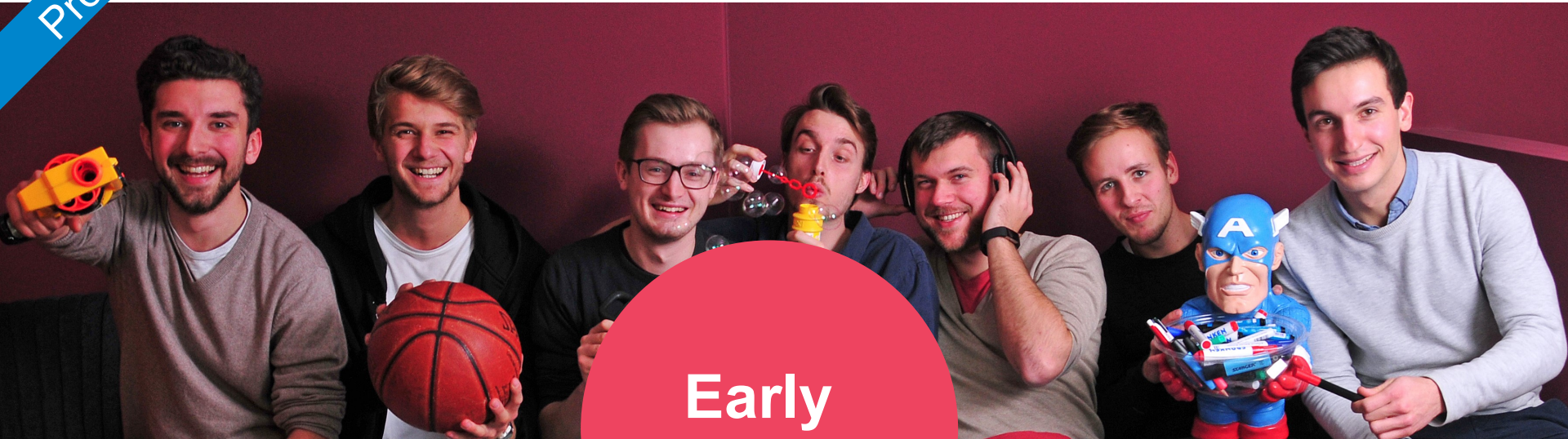
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Team building



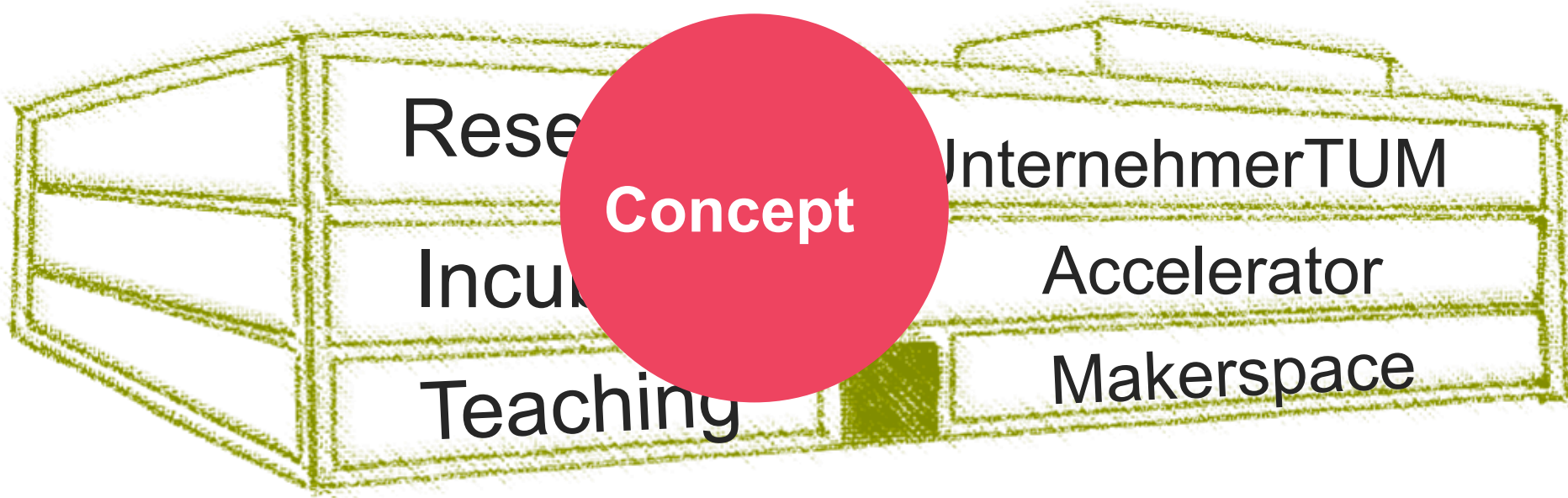
# Transfer



Early Startup



# Transfer





**Thank you very much  
for your attention!**

# Literature

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