

From PhD to Innovator Day 1

Präsenz



An initiative of:



**FALLING
WALLS
FOUNDATION**

With funding from the:



THIS PROGRAMME IS SUPPORTED BY:



WELCOME



Young Entrepreneurs in Science



- opens up new career perspectives for young researchers
- part of the Falling Walls Foundation
- enabled by Federal Ministry of Education and Research



Workshop programme



Day 1

Morning

Entrepreneurship

Intro to
Entrepreneurship
The Entrepreneurial
Mindset
Startup Success
and Failure
Your Innovation Skills

Afternoon

Meet the Role Models

Q&A with Role
Models
Getting to know
the university startup
centres
Intro into Design
Thinking

Day 2

Morning

Design Thinking

Understand &
Observe: User
Research
Define: Persona and
How Might We

Afternoon

Design Thinking

Ideation and
Brainstorming
Prototyping & Testing
Presentations

Learning goals

- Getting to know the concept of entre- and intrapreneurship
- Reflecting on your own potential entrepreneurial journey
- Exchange with and learn from young entrepreneurs

ENTREPRENEURSHIP



What is entrepreneurship?

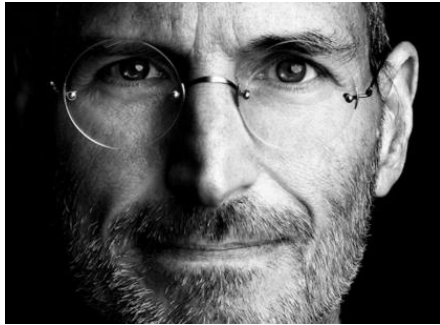


Skill in starting new businesses, especially when this involves seeing new opportunities.

Cambridge Dictionary

Types of entrepreneurship

Example 1
**Start-up founder, Serial
Entrepreneur**



Steve Jobs

Apple, NeXT, Pixar

Example 2
**Founder and Serial
Entrepreneur**



Oprah Winfrey

Harpo Productions,
OWN, O Magazine

Example 3
Social Entrepreneurs



Dr. Anja Bittner

„Was hab ich?“

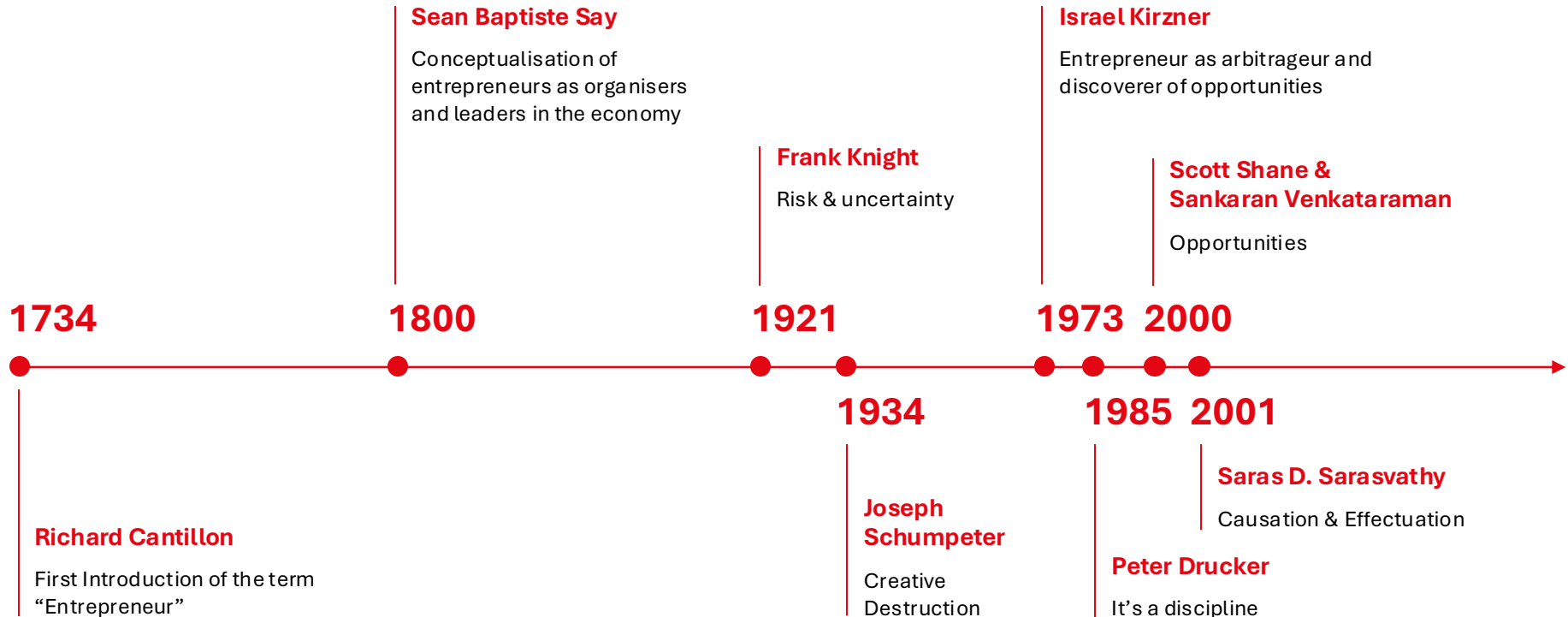
Example 4
**SME's, Hidden Champions
Mittelstand, Family Businesses**



**August, Franz, Theo
& Bernhard Claas**

CLAAS

History of entrepreneurship theory



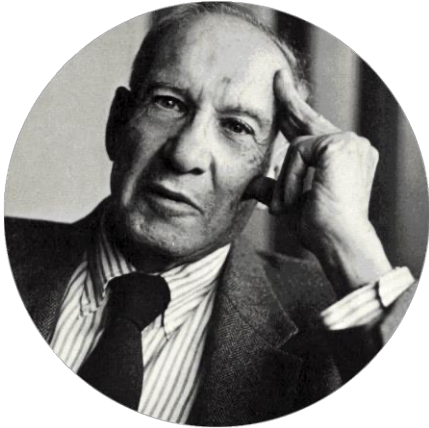
Creative destruction



“The function of entrepreneurs is to reform or revolutionize the pattern of production by exploiting an invention or, more generally, an untried technological possibility for producing a new commodity or producing an old one in a new way, by opening up a new source of supply of materials or a new outlet for products, by reorganizing an industry and so on.”

Joseph Schumpeter

It's a discipline!



“It’s not magic, it’s not mysterious; and it has nothing to do with genes. It’s a discipline and, like any other, it can be learned.”

Peter Drucker

Drucker, P. 1985. *Innovation and Entrepreneurship*. New York: Harper & Row and Kuratko, D. F., 2005. The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice* 29, 5, p. 580

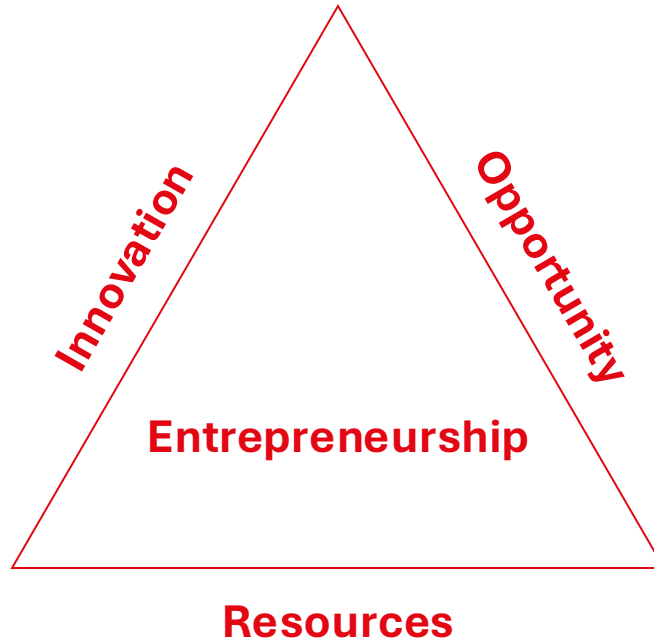
It's about opportunities!



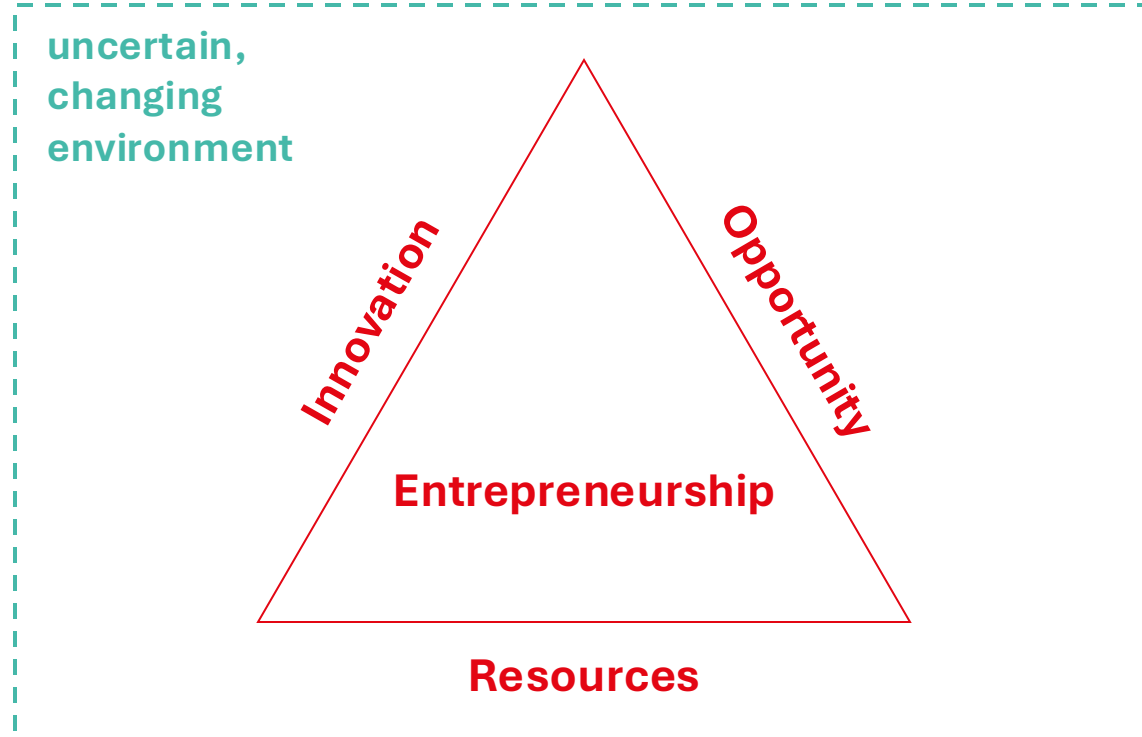
“... we define the field of entrepreneurship as the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited.”

Sankaran Venkataraman

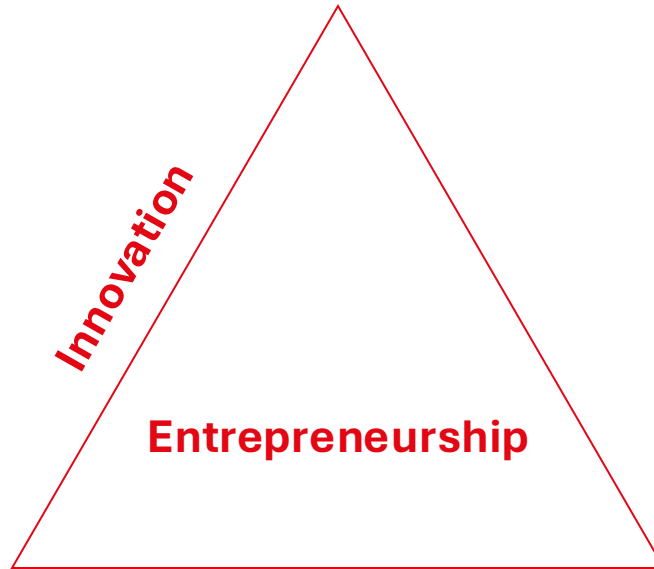
Components of entrepreneurship



Components of entrepreneurship



Components of entrepreneurship



Innovation

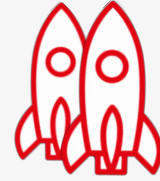
Many views on entrepreneurship incorporate the idea that entrepreneuring is about the “**creation of something new**”



Invention



Innovation



Imitation

Innovation

Any thought, behavior or thing that is new because it is qualitatively different from existing forms

BARNETT, H. G. Innovation, 1953. The Basis of Cultural Change. New York: McGraw-Hill Book Company, p. 7

An idea, practice or object that is perceived as new

ROGERS, E. M. (1983). Diffusion of innovations. Third edition. New York. Free Press, p. 11

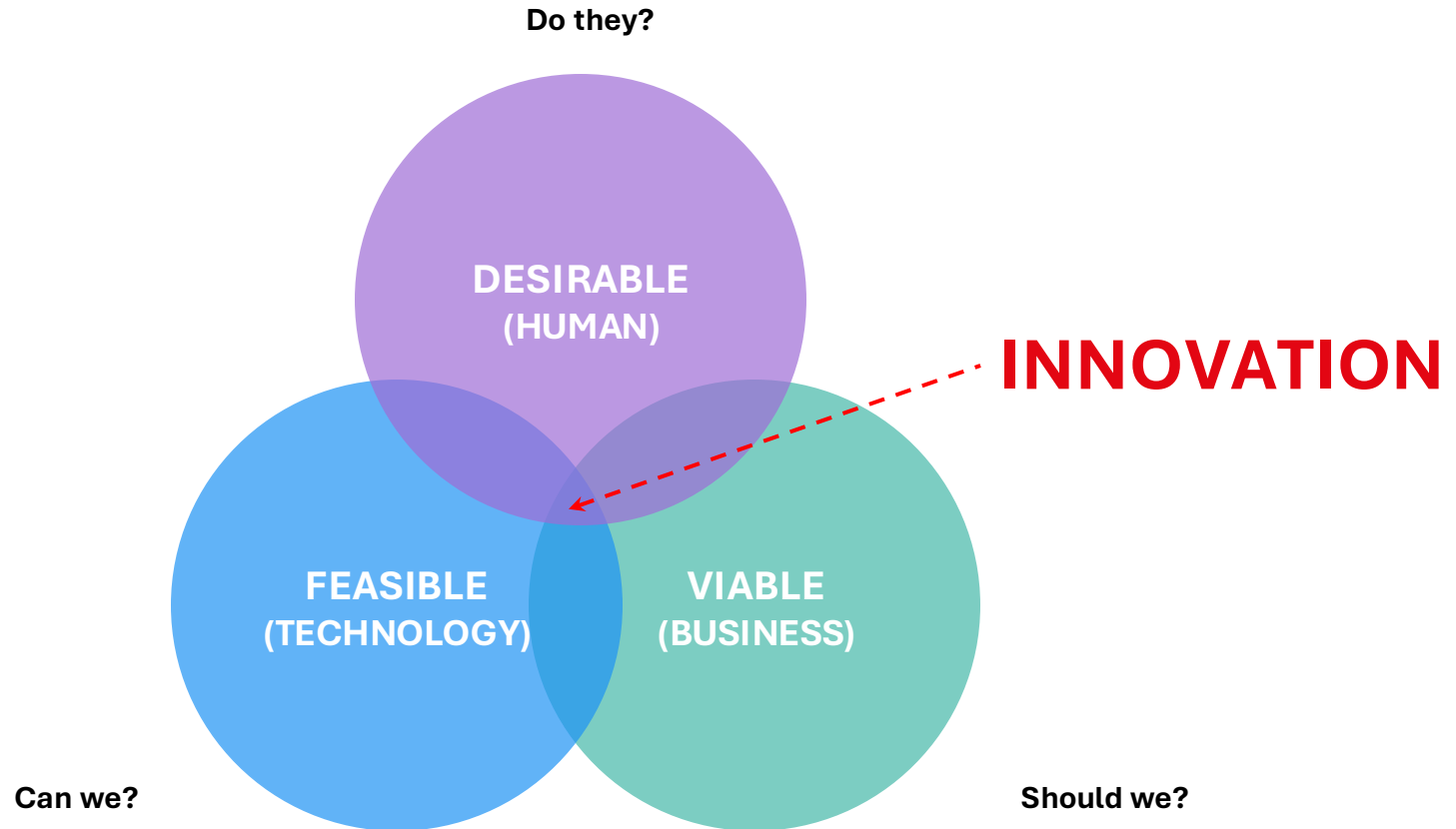
Invention + exploitation

E.B. ROBERTS. (1988). "Managing invention and innovation," Research-technology management, Jan-Feb, p. 13

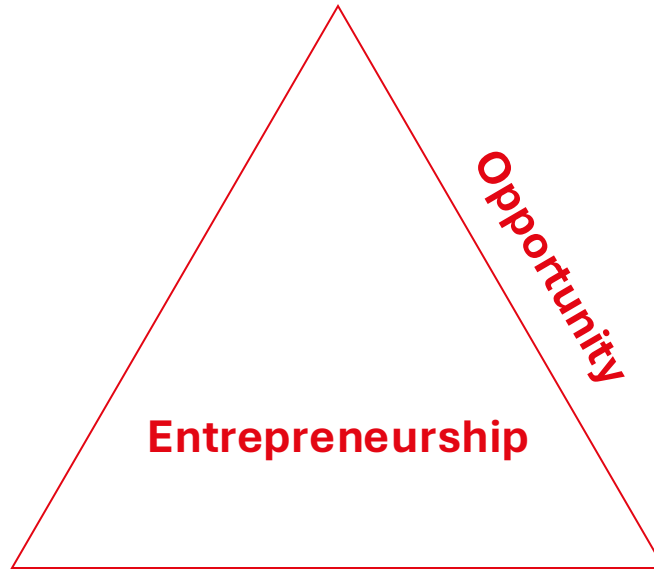
The synthesis of a market need with the means to achieve and produce a product to meet that need

MOORE, W.L., TUSHMAN, M.L. (1982). Managing Innovation over the Product Life Cycle, in: TUSHMAN, M.L., MOORE, W.L. (Hrsg.): Readings in the Management of Innovation. Boston, p. 132.

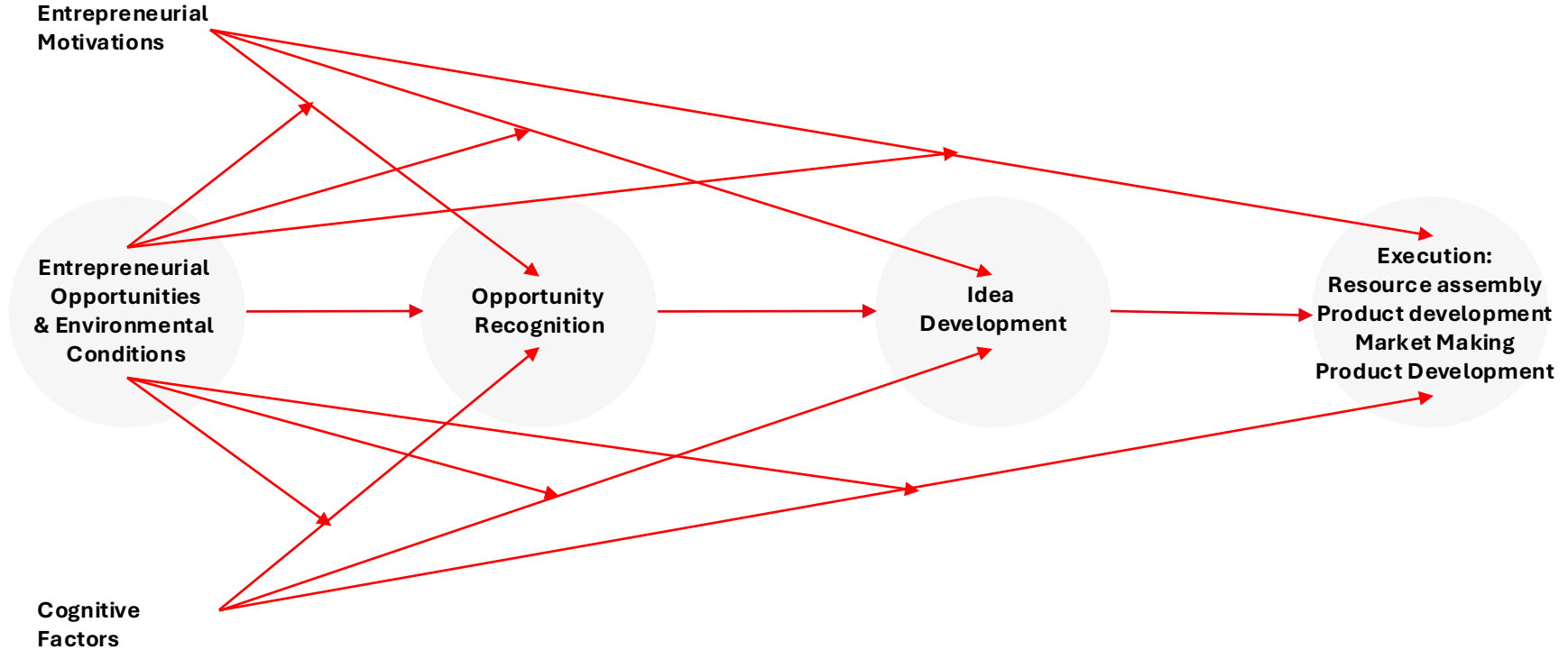
Innovation



Components of entrepreneurship



Opportunity



Opportunity

People can become entrepreneurially active for **completely different reasons**.

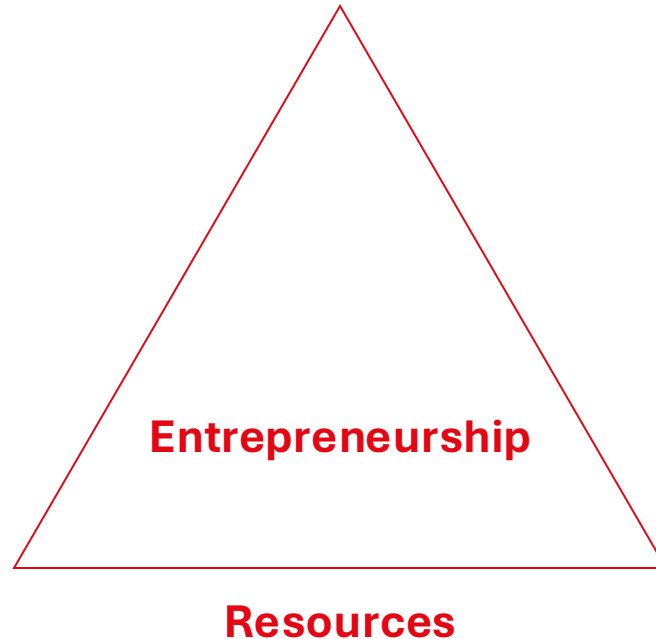


Opportunity-based activity



Necessity-based activity

Components of entrepreneurship



Resources



Founder/Team

Organisation

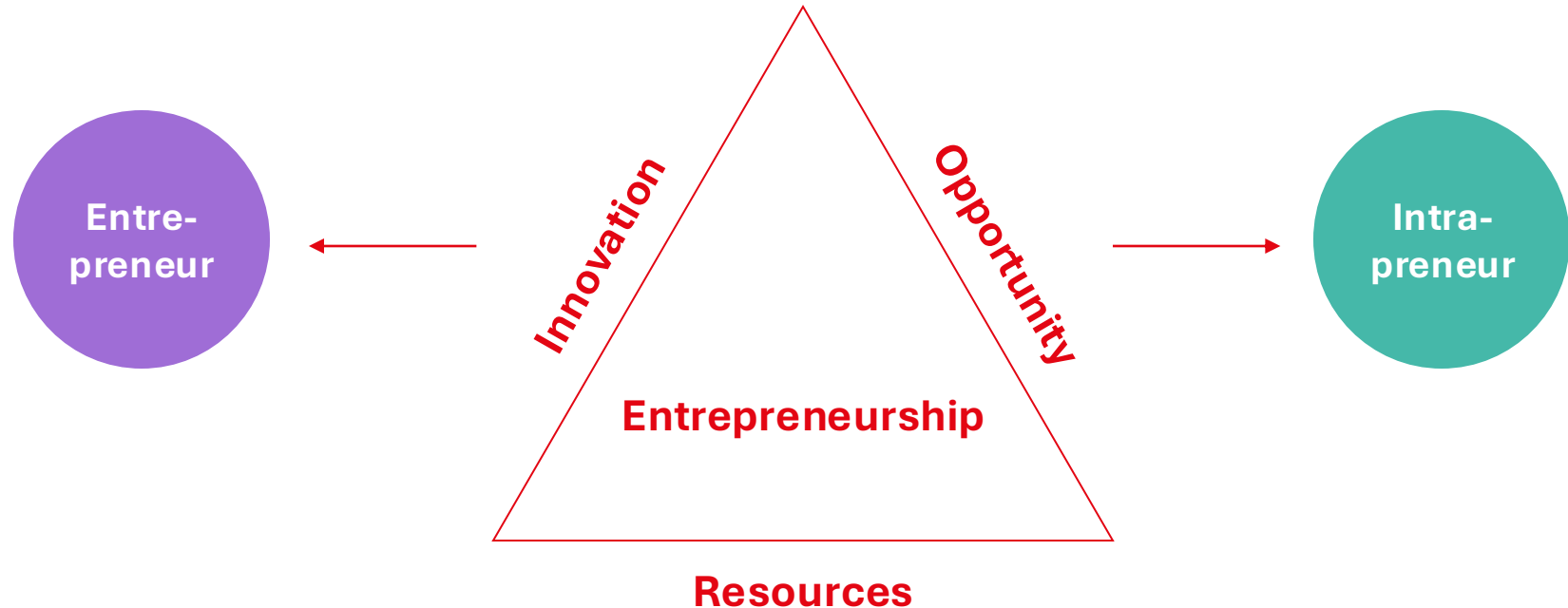


Network

Financials



Components of entrepreneurship



What is intrapreneurship?



**The willingness or ability of people within a large company
to take direct responsibility for turning ideas
into profitable new products, services, businesses, etc.**

Cambridge Dictionary

It's about the mindset



Entrepreneurship & Intrapreneurship:
Different environments, same mindset

ENTREPRENEURIAL PROCESS



Desire

START

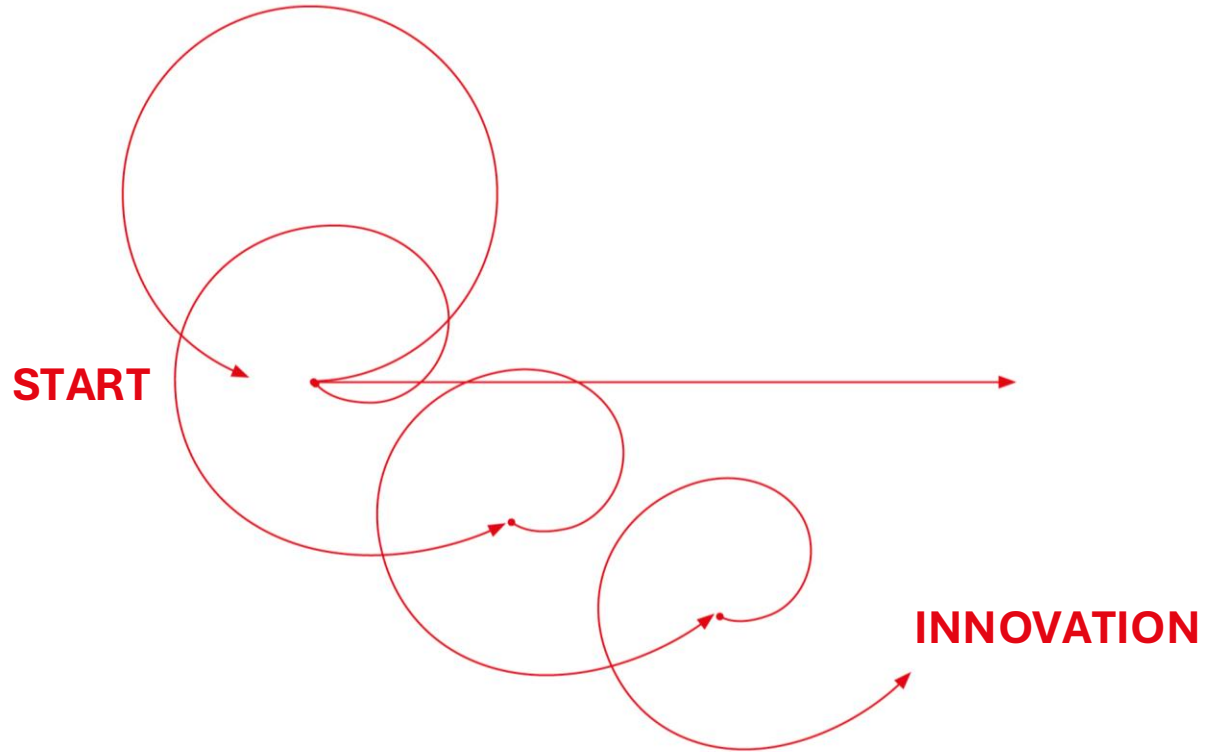


INNOVATION

Reality



Iteration





Failure as part of the process...

In reality, failure is the normal case!

- the vast majority of startups fail
- Study results vary between **60% and 90%**

Reasons for failure



42%

No market need



29%

Ran out of cash



23%

Not the right team

The journey of Milena Glimbovski



Fail early and often... in a supportive context



**Guarantees
psychological safety**



**Rewards risks and
trying new things**



**Doesn't punish
mistakes**



**Creates a culture
without blame**

YOUR INNOVATION SKILLS

MARKETING

Entrepreneurial skillset

PRODUCT-RELATED SKILLS

- Your expert knowledge!
- All the skills you need in order to build and produce your product
- ...



Entrepreneurial skillset

BUSINESS-RELATED SKILLS

- **Business modelling**
- **Managing cash flow**
- **Sales experience**
- **Growth skills**
- **Organising things (getting stuff done)**
- ...



Entrepreneurial skillset

COMMUNICATION-RELATED SKILLS

- **Selling the vision**
- **Networking**
- **Critical thinking**
- **Team building**
- ...



Learn constantly



**“Be open to constructive criticism:
listen carefully and don’t get defensive about it. There is
nothing more important than feedback
on your lifelong learning journey.”**

Slim Chiha

Co-Founder of PROSION

& Young Entrepreneurs in Science Alumnus

Build networks



“For somebody who wants to become an entrepreneur, it is crucial to be proactive in order to build up a network outside your lab.”

Nadine Diersch

Researcher-Entrepreneur at DZNE Magdeburg
& Young Entrepreneurs in Science Alumna

Work on what you love



**“I get to do something I truly love,
and I get paid to do that. There’s
nothing that’s more compelling to me.”**

Asmelash Teka Hagdu

Co-Founder of Lesan
& Young Entrepreneurs in Science Alumnus

As an entrepreneur ...

- You can make decisions on your own
- You can choose the team you are working with
- You can create a positive working culture for your team and your partners
- You learn constantly
- You can work on something you love

My entrepreneurial skillset



My entrepreneurial skillset

SOLOWORK: FROM PHD TO INNOVATOR

MY ENTREPRENEURIAL SKILLSET



Imagine if you were to start your own business tomorrow.
Please, fill in the skills you already possess, the skills
you would need, and what you have to do to develop any
missing skills for each category.

20 min

SKILLS I ALREADY HAVE...

Product

Business

Communication

SKILLS I NEED...

Product

Business

Communication

I CAN DEVELOP THOSE MISSING SKILLS BY...

Product

Business

Communication

How it works ...



Solo work



**Imagine that you were to
start your own business
tomorrow ...**



20 minutes

What skills do you already
have?

What skills do you still need?

How could you develop those
missing skills?

How it works ...



Small teams



**Pair up in teams of two
or three and discuss
with your group:**



20 minutes

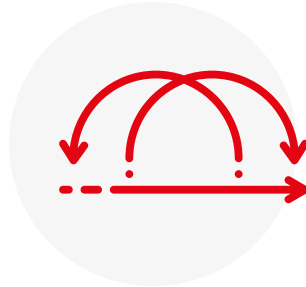
Strengths and skills you want
to work on

How could you combine your
strengths to found a
company?

Key elements of an entrepreneurial mindset



Human-centred



Iterative approach



Early prototyping



Teamwork

Workshop programme



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Design Thinking

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Design Thinking

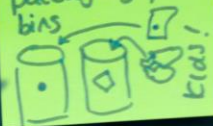
Ideation and
Brainstorming
Prototyping & Testing
Presentations

DESIGN THINKING

How might we show
... of
... food
... time consuming

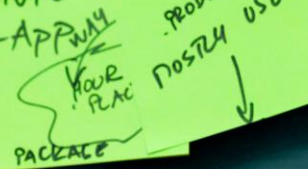
How might we
make trash organization
in the house
easier & more fun?

color-coding
system on
packaging
bins



Bio-degradable
take
out
packaging

INFO APP
-APPWAY
-PRODUCT
-POSTAL USE
-PACKAGE



How might we
make trash organization
recycling
look nicely & be
hygienic?

bio-waste

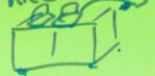


Bins
with
Motivation
quote

WASTE
LIFT



bin system
that is
movable, has
a nice design

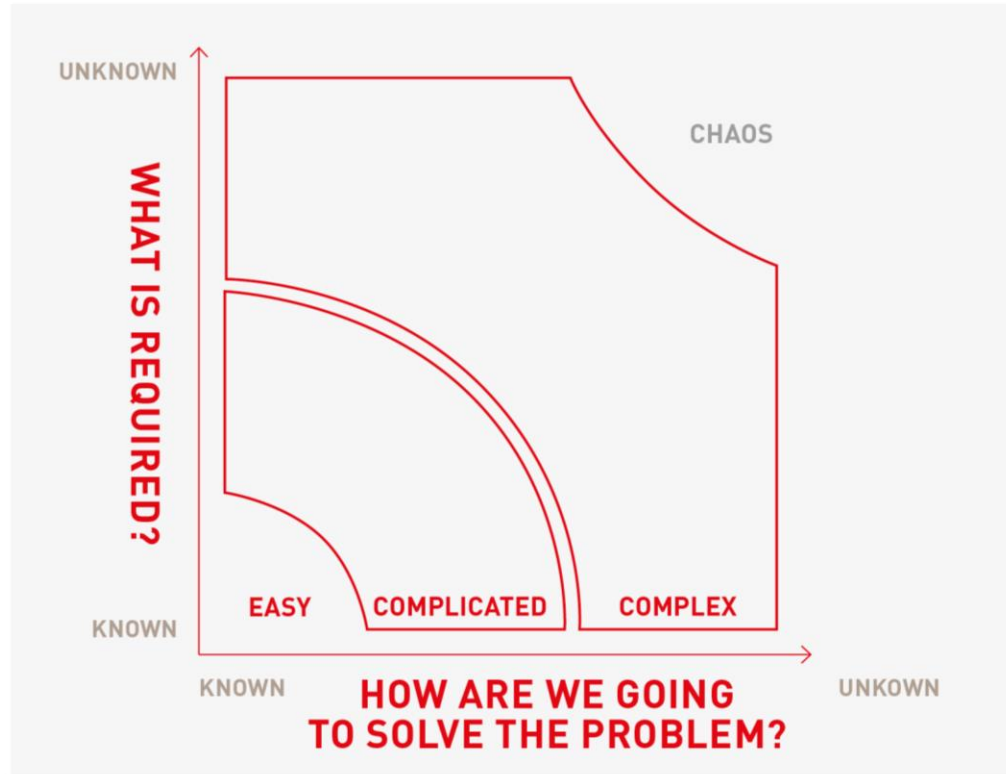


Learning Goals

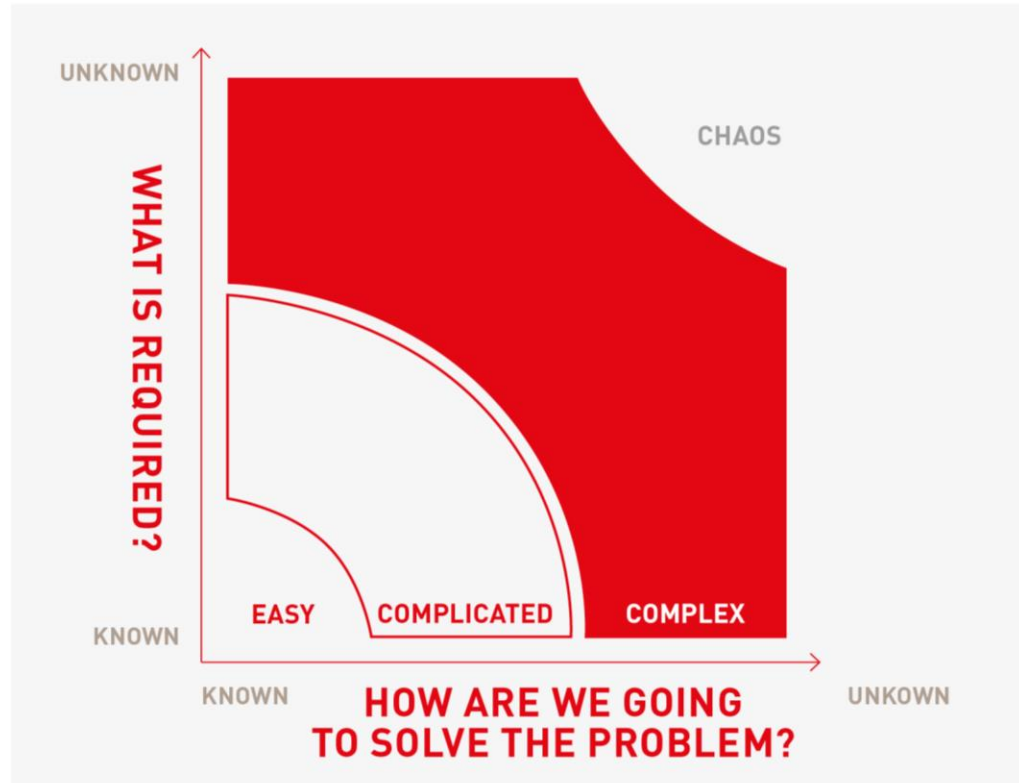


- Introduction to the Design Thinking approach
- Interdisciplinary and agile teamwork
- Changing perspectives & build empathy

Work in Iterations



Work in Iterations



Work in Iterations



Design-Thinking



Lean Startup

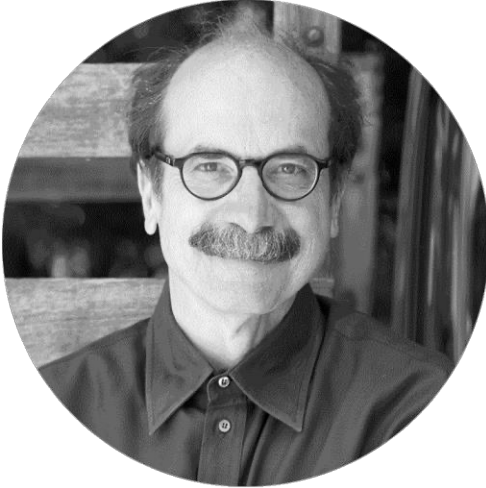


SCRUM

What is Design Thinking?

- Design Thinking ≠ Design
- Is a holistic innovation approach
- Is a work mode & mindset
- Puts the human and their needs in center
- Is based on three components: process, team, space
- Works as a catalyst for innovation culture

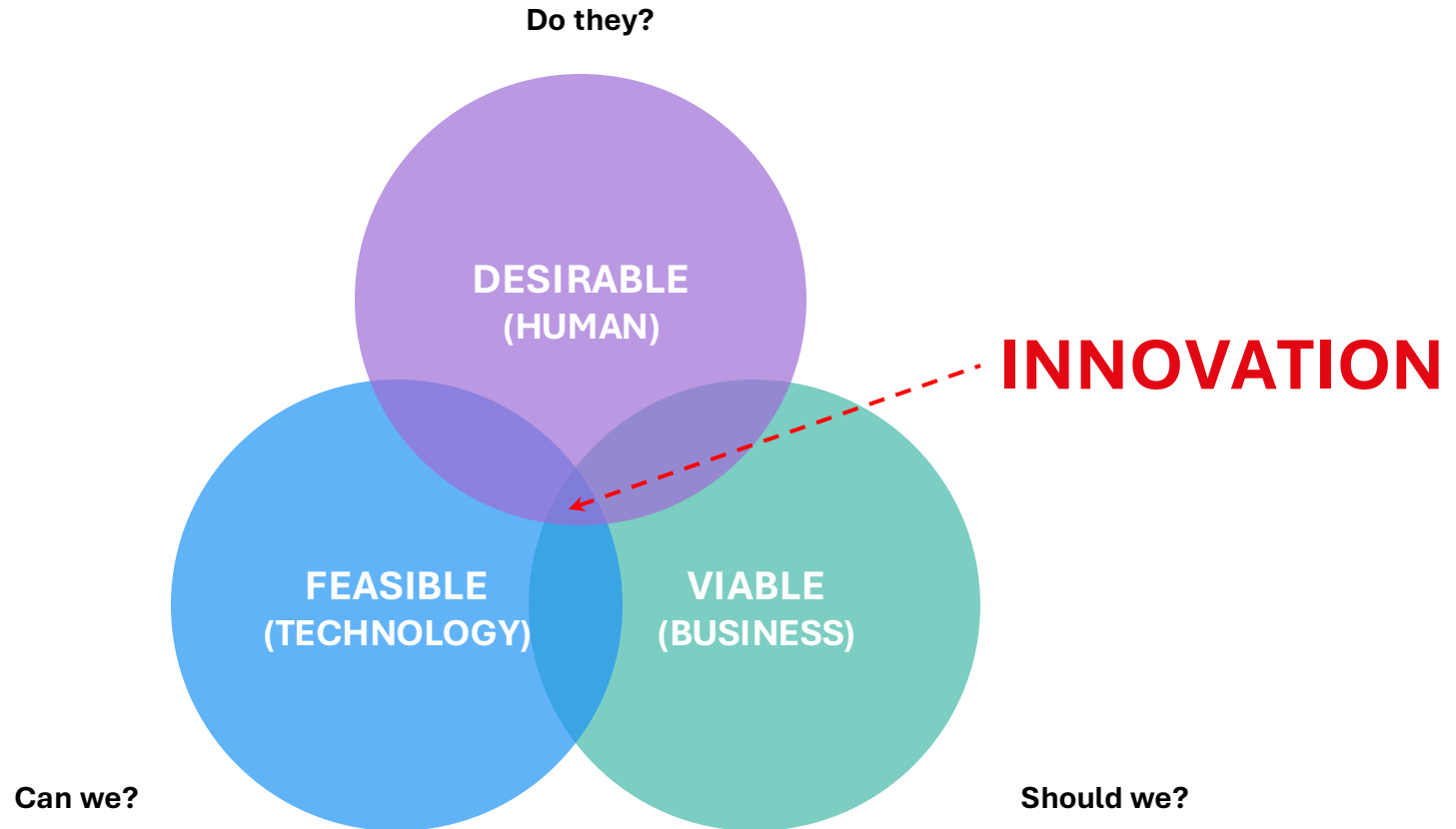
Design Thinking pioneer



DAVID KELLY

- Pioneer and name giver of the innovation approach Design Thinking
- Engineer, 2nd degree in product design
- Founder of the design studio IDEO
- Lecturer at Stanford University

Innovation



**Design Thinking
needs space ...**



Design Thinking guidelines

1. Timeboxing



Design Thinking guidelines

2. Build on the ideas of others



Design Thinking guidelines

3. Defer judgement



Design Thinking guidelines

4. Listen actively



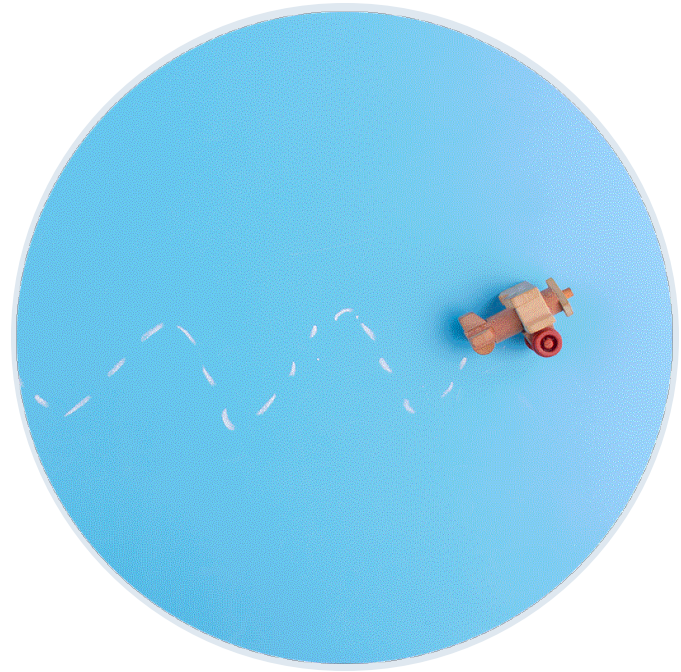
Design Thinking guidelines

5. Stay on topic



Design Thinking guidelines

6. Fail early and often



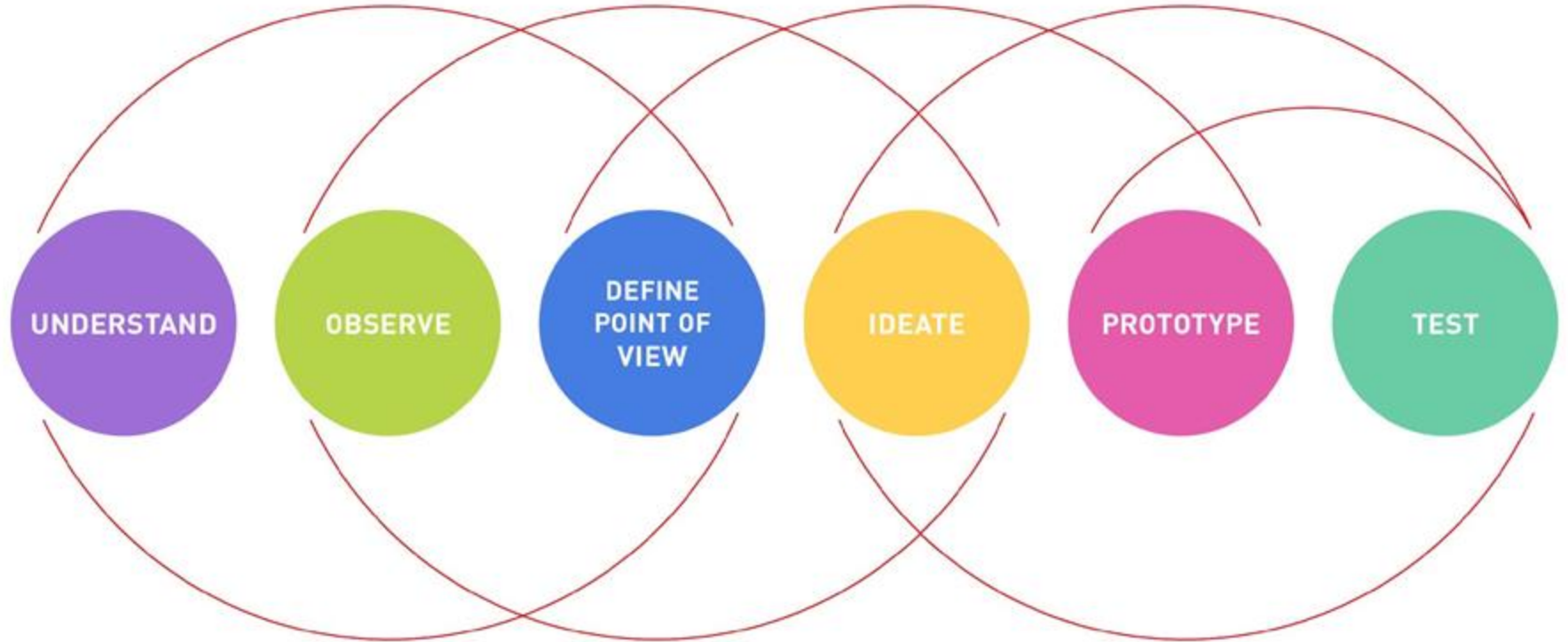
**Design Thinking
needs a team ...**



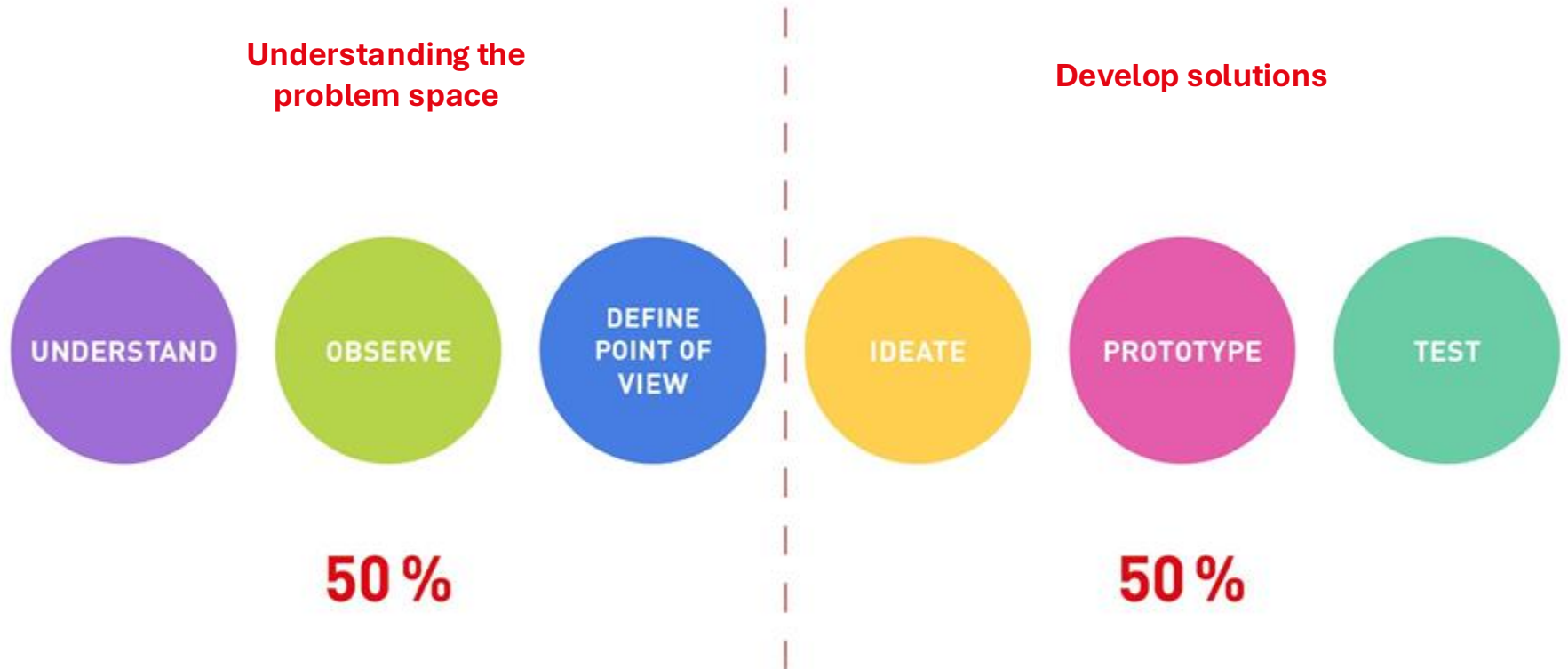
Design Thinking is a process ...



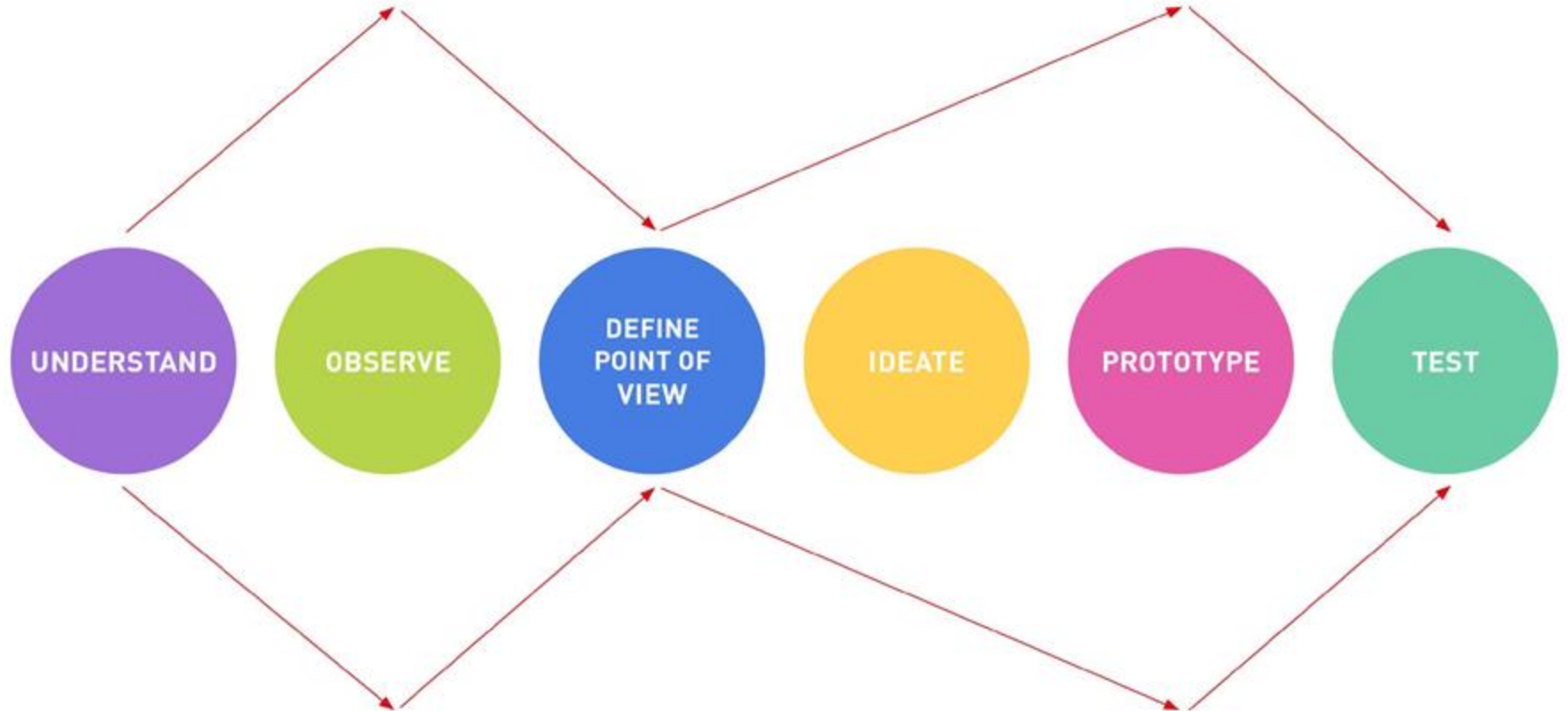
Design Thinking process



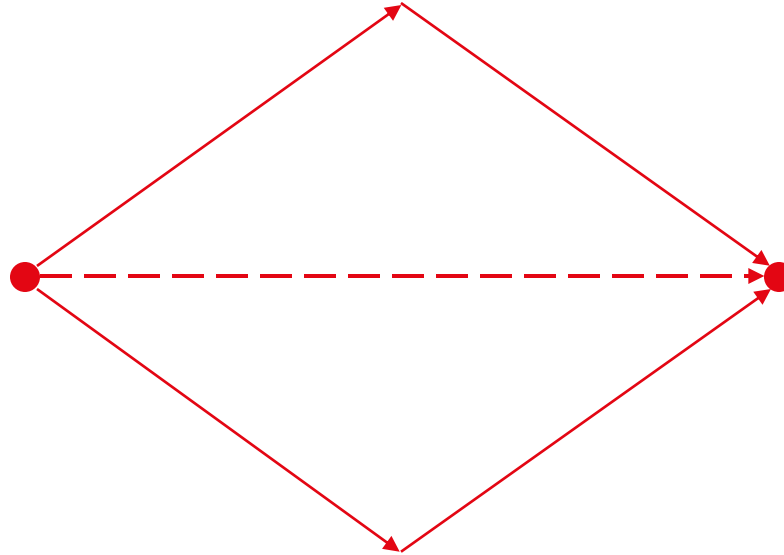
Design Thinking process



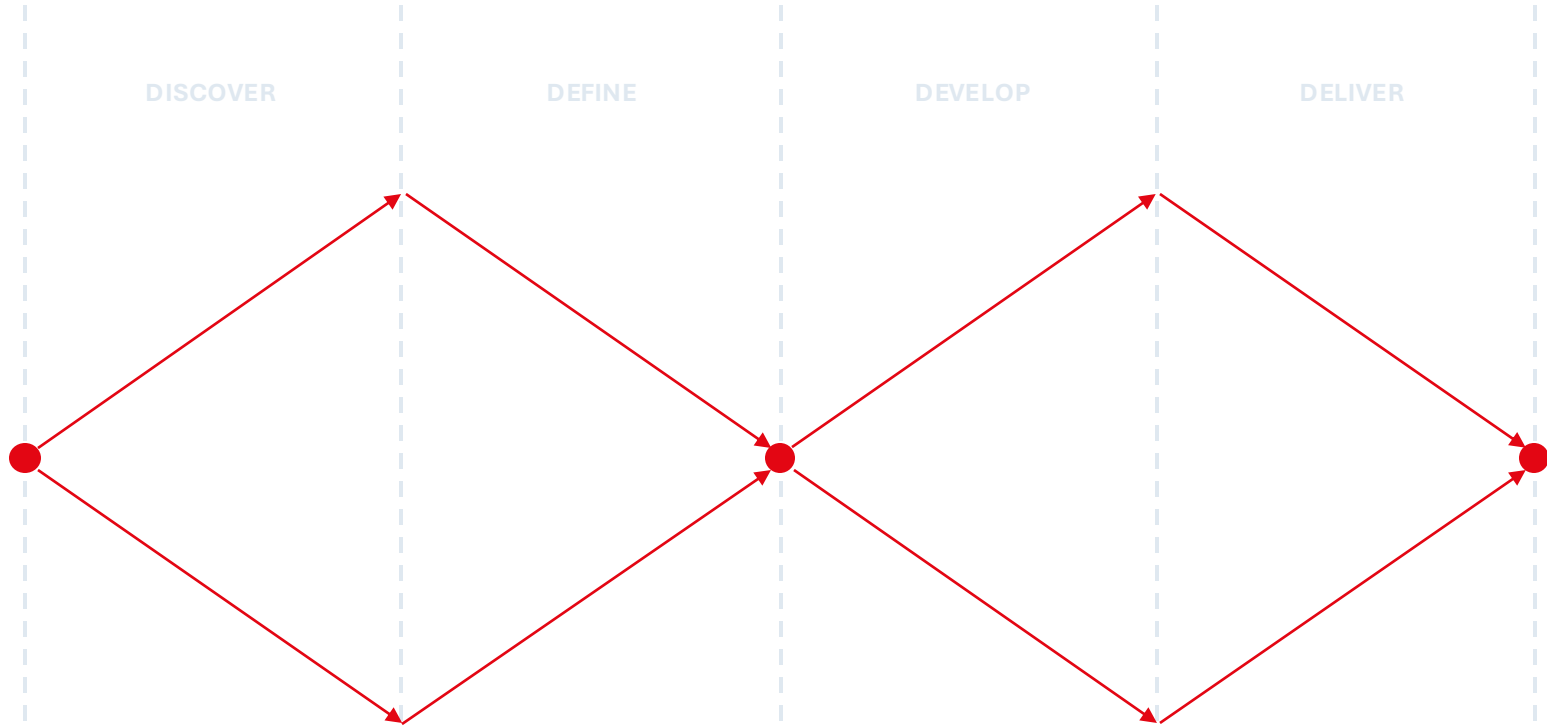
Design Thinking process



Divergent/convergent



Double diamond model



IN PRACTICE



IN PRACTICE



