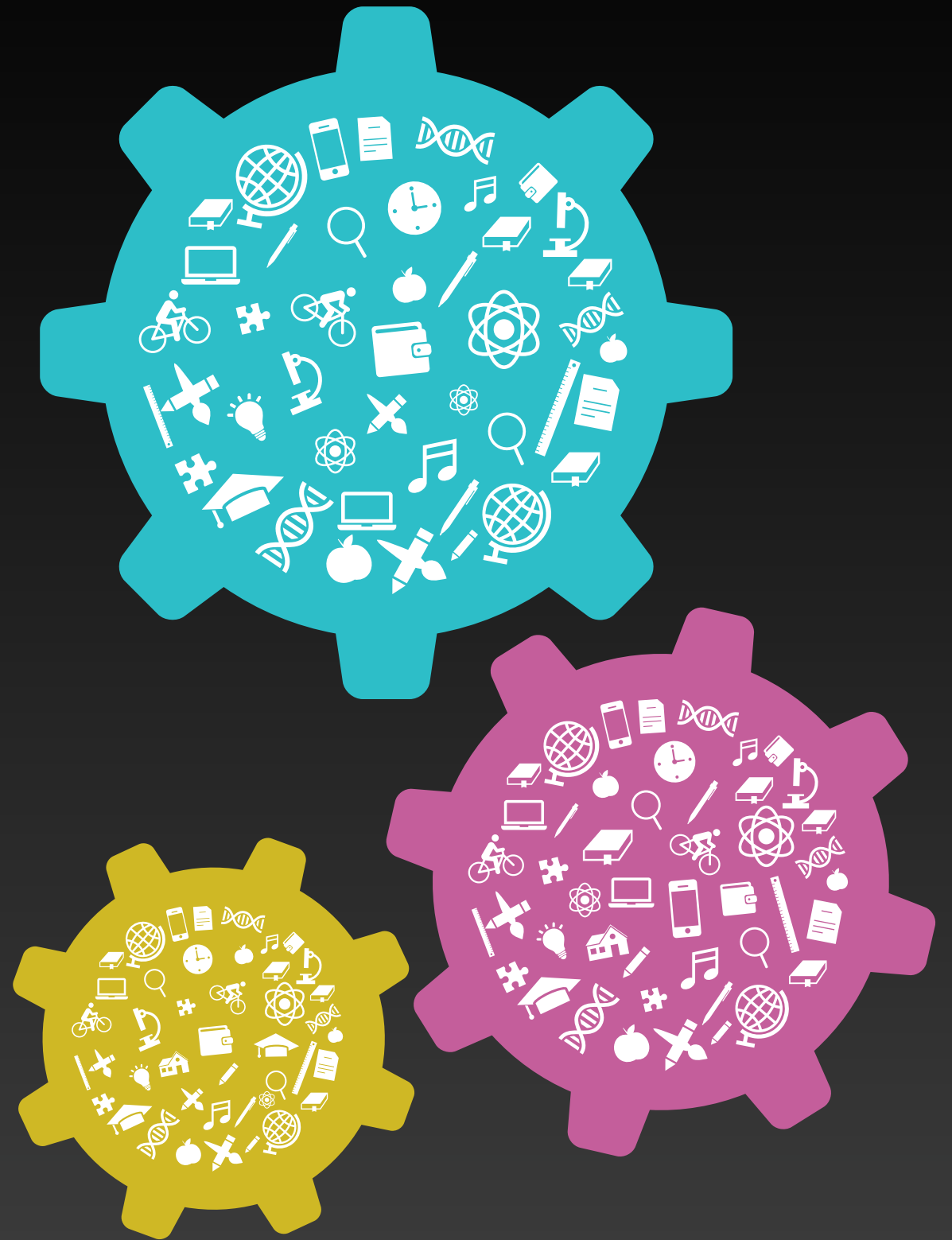# A CRITICAL

INTRODUCTION INTO

DESIGN THINKING

Prof. Dr. Ingo Hamm

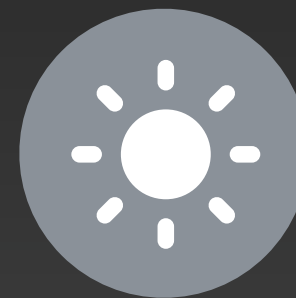**Darmstadt University of Applied Sciences**

A radically new approach for innovation is...

„Think like a designer!"

Making existing products more attractive

Creating ideas that better meet customer needs

Source: Tim Brown (2008), „Design Thinking", HBR

h_da

„Think like a designer!"

Source: „H tour", hinterher.com / Bundespreis EcoDesign 2015

The essence of Design Thinking

Design Thinking

„...is a **human-centered** approach to innovation ...

to **integrate** the **needs of people**

the **possibilities** of **technology,**

and the **requirements** for **business success.**"

Tim Brown, IDEO

h_da

Case Example „Shimano" for Design Thinking

Source: Bikeworks Albuquerque (2007)

Case Example „Shimano" for Design Thinking

The Design Thinking workshop concept

UNDERSTAND

What is the problem?

OBSERVE

What are the customers' needs?

IDEATE

What could be a solution?

PROTOTYPE

How could the solution look like?

IMPLEMENT

Would the solution work?

think

feel

dream

make

reflect

Typical actions during a workshop

h_da

What can YOU take away?

DESIGN THINKING PROCESS...

„Situation, complication, solution" - no solution with a compelling problem

Forget brainstorming - creativity needs good preparation and honest feedback

Leave the academic world - embrace craftsmanship

Some valuable tools with and beyond Design Thinking

UNDERSTAND

- **Customer Journey Map**

  _ Understanding customer experience along all touchpoints

  _ Visualization of customers' behaviors, thoughts and feelings

Some valuable tools with and beyond Design Thinking

Example: Customer Journey Map

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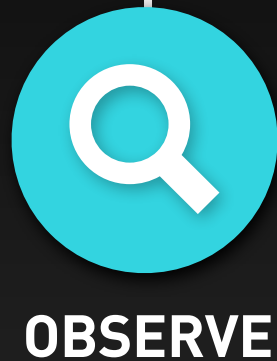# Some valuable tools with and beyond Design Thinking

OBSERVE

- **Qualitative customer insights**
  - _ In depth interviews with psychological approach (projective tasks...)
  - _ Participant observer
  - _ Shadowing
  - _ „Delphi approach": iterative expert interviews

Some valuable tools with and beyond Design Thinking

OBSERVE

- **User Stories**
  - _ „As a <type of user>, I want <some goal> so that <some reason>"

- **Story Telling**
  - _ Telling and illustrating customer insights
  - _ Comic strips, Video Clips, Role Play, articles...

- **„Personae"**
  - _ Illustrating a typical customer

Key success factors of Design Thinking

Collaborative, open,
optimistic and diverse

Different perspectives

Rather a workbench
than a meeting room

Get out (of business)

TEAM

SETTING

PROCESS

TOOLS

Time, please!

„Be so fast that you don't
fall in love with ideas"

Thinking with hands

Be concrete, not
necessarily perfect

h_da