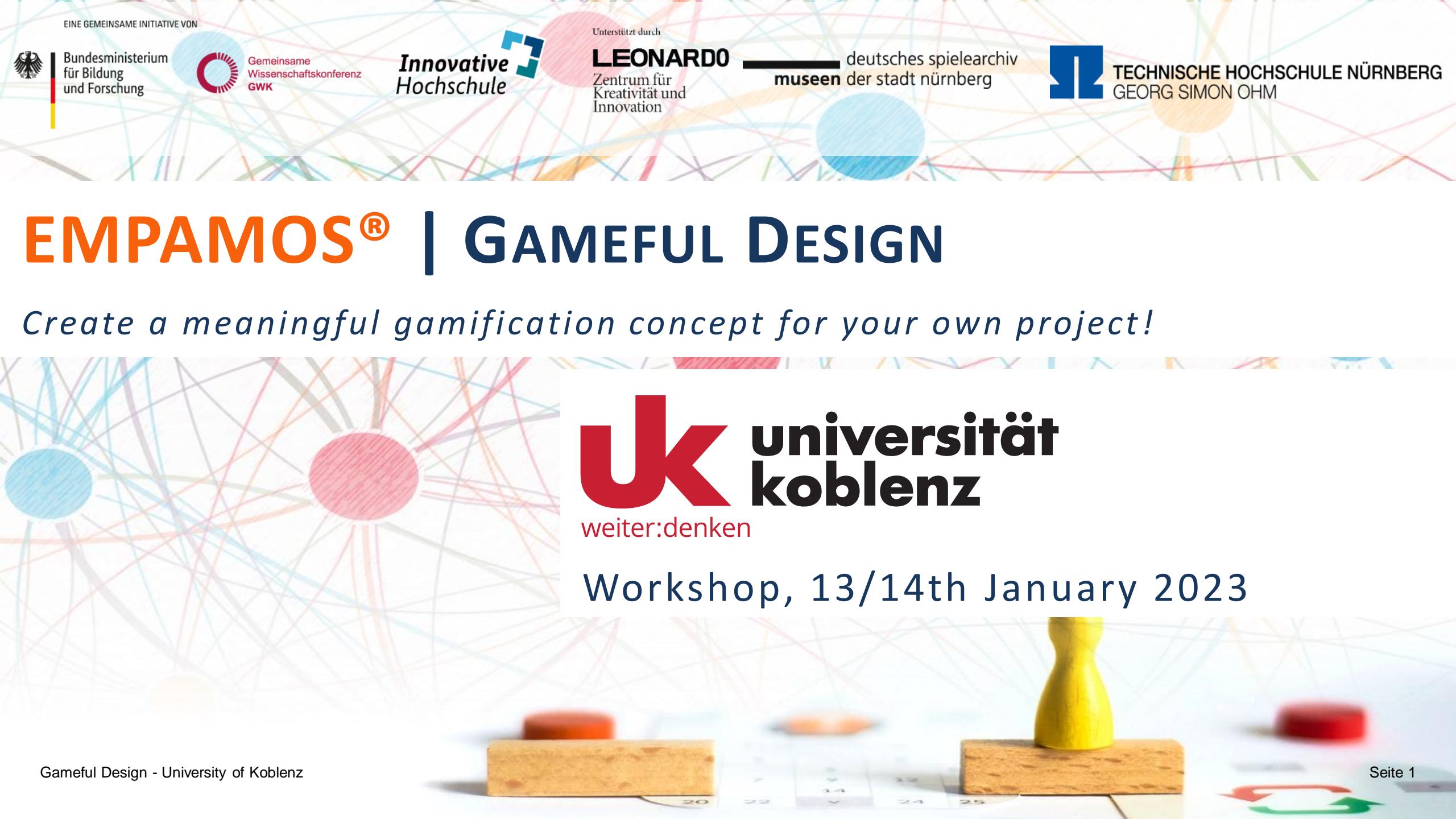




EMPAMOS® | GAMEFUL DESIGN

Create a meaningful gamification concept for your own project!



uk universität
koblenz
weiter:denken

Workshop, 13/14th January 2023



Dr. Max Höllen

uk universität
koblenz
weiter:denken

Creative & Cultural Entrepreneurship (PhD)

Cultural Management (M.A.)

INNOVATION MANAGEMENT
GRAPHIC RECORDING
GAMEFUL DESIGN

The Power of Arts and Culture

Rough Schedule

Day 1

- Overview: Gameful Design in Innovation Management
- Group building
- **BRIEFING:** Where do you want to use Gameful Design?
- **EXPLORATION:** Understanding the Problem → Analysing Game Design Misfits

Day 2

- **CREATION:** Integrate Game Design Elements into your project
- **NETWORKS:** Elaborate a Game Design Network
- **PITCH:** Present your idea (will be part of the assessment)

Warm-up

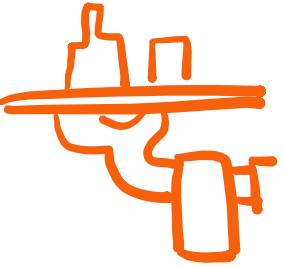
- Draw a card randomly from one of the two piles (Game Design Misfits OR Game Design Elements)
- Discuss with your neighbors: How do you understand what is written on the card? What comes into your mind when you read it?
- Everyone thinks for him/herself about a situation that is related to your study / work context, where you 1) experience the misfit or 2) recognize the element written on the card
- What is the effect of the misfit? What is the effect of the element?

Domains of Innovation Management

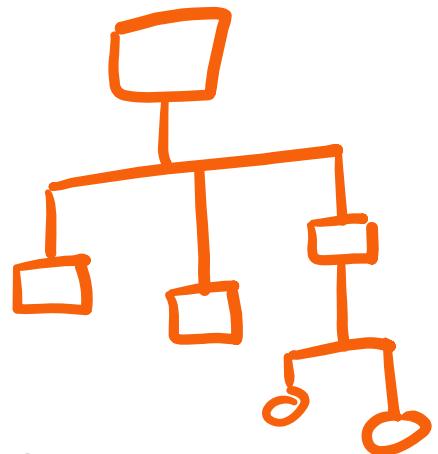
- **Product** Innovation
- **Service** Innovation
- **Process** Innovation
- **Organisational** Innovation
- **Marketing** Innovation
- **Business Model** Innovation



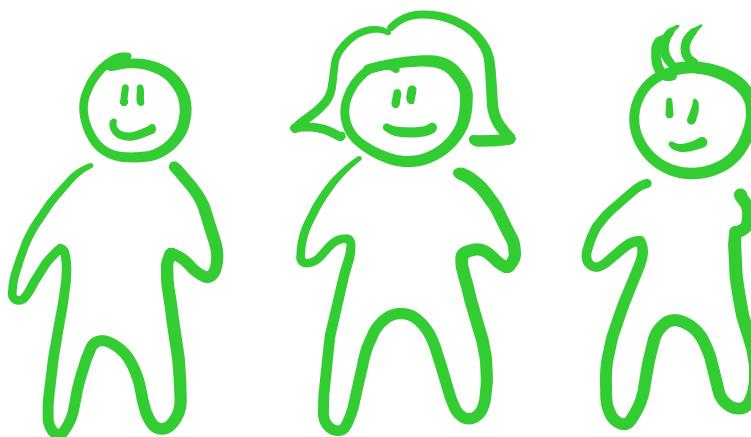
Products



Services

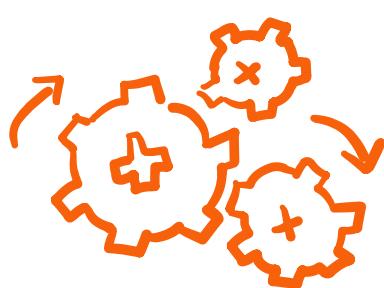


Organisations



... and social interaction

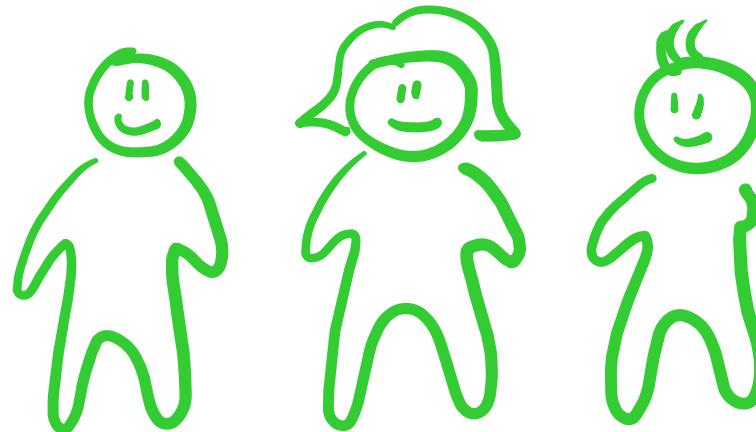
Apps and
Software



Processes

Motivation

Humans



... and social interaction



Quelle: Phil Toledano: <http://mrtoledano.com/photo/gamers/thumbnails/> (Zugriff am 20.6.2019)



Quelle: Phil Toledano: <http://mrtoledano.com/photo/gamers/thumbnails/> (Zugriff am 20.6.2019)



Photo by Jelle Ito, The Boat, <https://www.flickr.com/photos/joi/572906925>, Attribution 2.0 Generic (CC BY 2.0)

What is special about Games?



*Good Games are played
voluntarily*

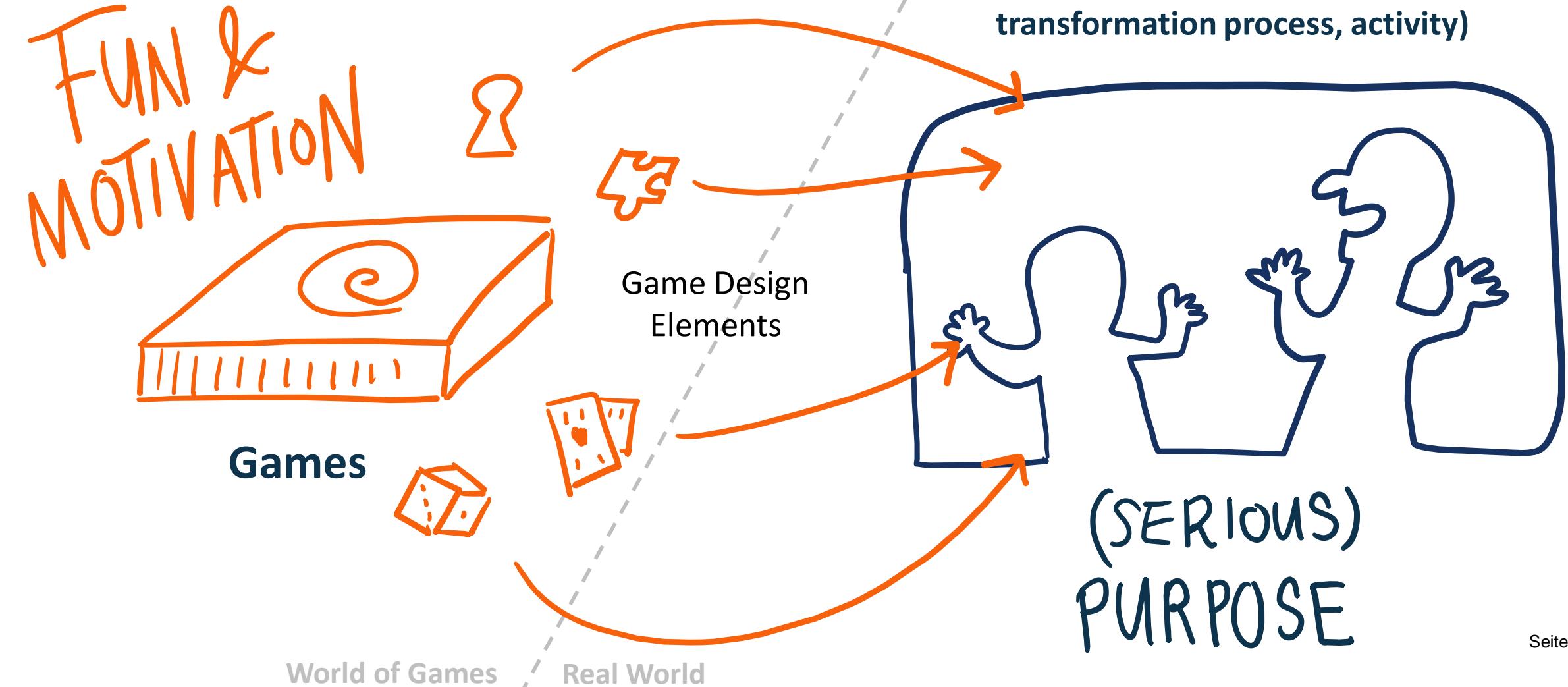
*Games make
fun!*



*Games can be played with people from different
ages, classes, backgrounds etc.*

„Gamification“, or better:
*Gameful Design / Gameful
Motivation*

The principle behind gamification



RESEARCHERS
GONNA
RESEARCH!

Who are we?



Teaching and
Learning Innovation



Methods
and
Production

Business Informatics

Prof. Dr. Voit



TECHNISCHE HOCHSCHULE NÜRNBERG
GEORG SIMON OHM

Social Work

Prof. Dr.
Lehmann

Prof. Dr.
Hofmann

Business Administration
and Diversity
Management

Transfer



me



EMPAMOS®

Empirical Analysis of Motivational Game Design Elements

Innovation Management and
Project Coordination



Games replicate the real world in miniature – in such a way that it gives us humans fun and joy.



These gameful designs can be transferred into the real world again.

Games designs show us, how players / humans are motivated.



- MOTIVATION -

The knowledge from game designs helps us to build gameful designs that foster motivation.

Gameful Design
EMPAMOS®

Nuremberg: a gameful city

House of Games/
German Games Archive

Toy Museum



Nuremberg, Germany

~40.000 board
games archived

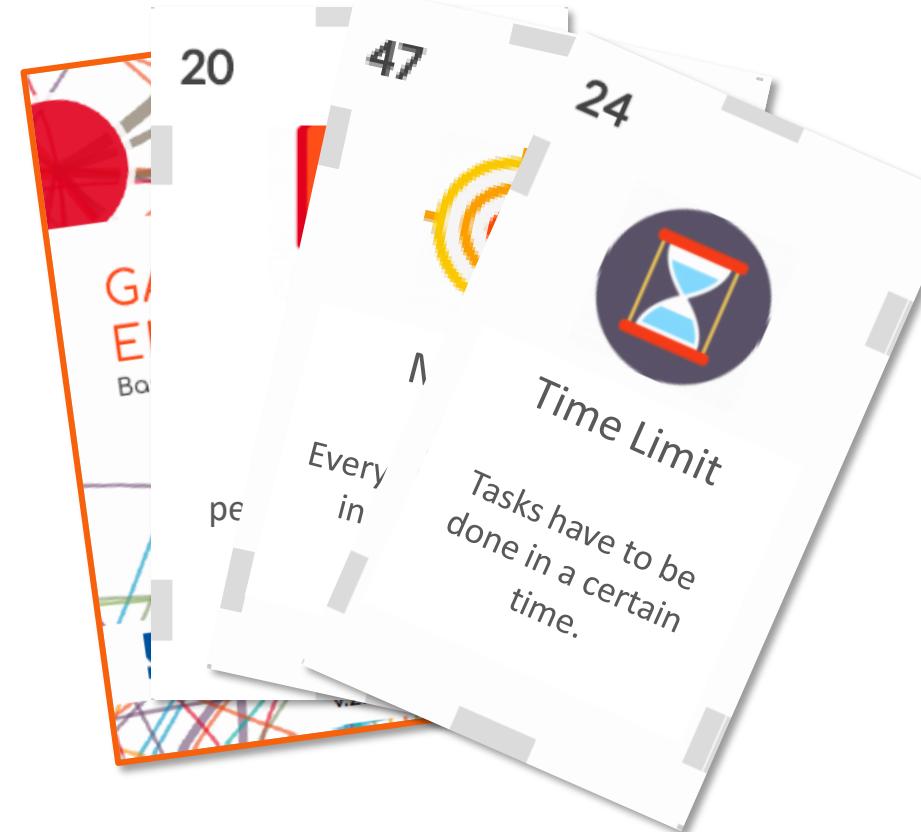


~8.300 board games
analyzed



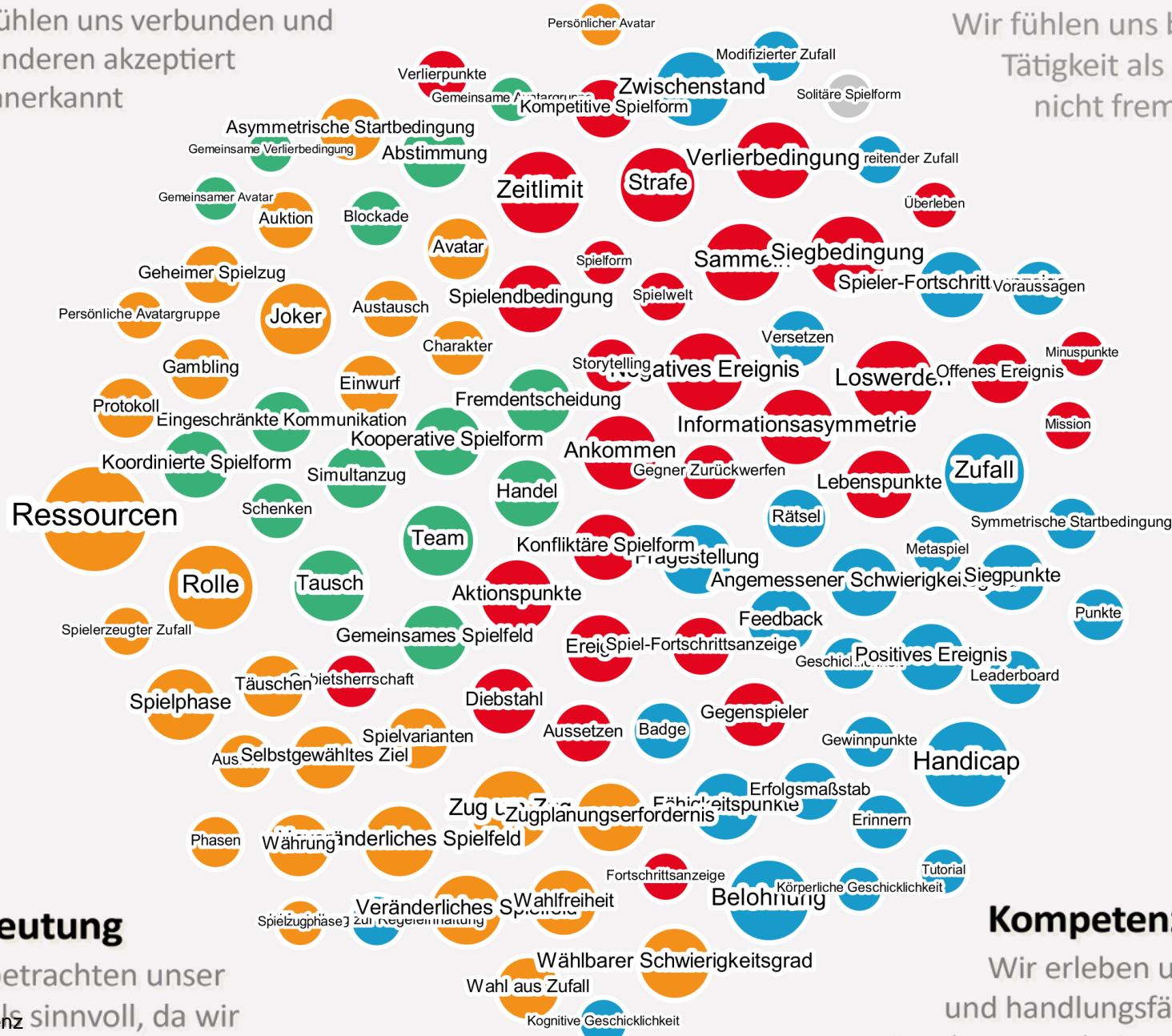
~100 Game Design Elements

25 „Misfits“



Soziale Eingebundenheit:

Wir fühlen uns verbunden und von anderen akzeptiert und anerkannt



Autonomieerleben

Wir fühlen uns bei unserer Tätigkeit als selbst- und nicht fremdbestimmt

Bedeutung

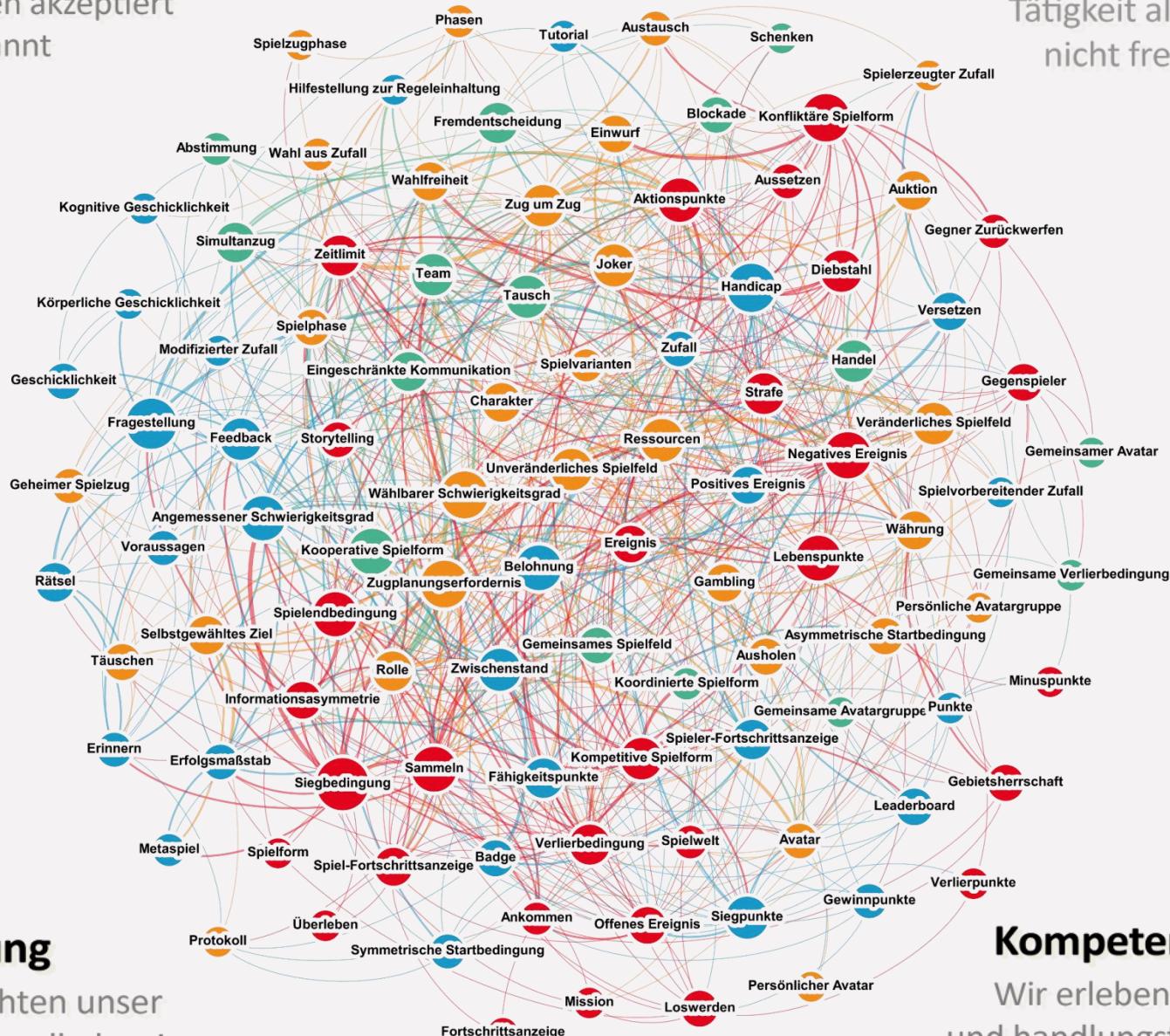
Wir betrachten unser Tun als sinnvoll, da wir ein wichtiges Ziel verfolgen

Kompetenzerleben

Wir erleben uns als lern- und handlungsfähig, die gewünschten Ergebnisse zu erzielen

Soziale Eingebundenheit:

Wir fühlen uns verbunden und von anderen akzeptiert und anerkannt



Autonomieerleben

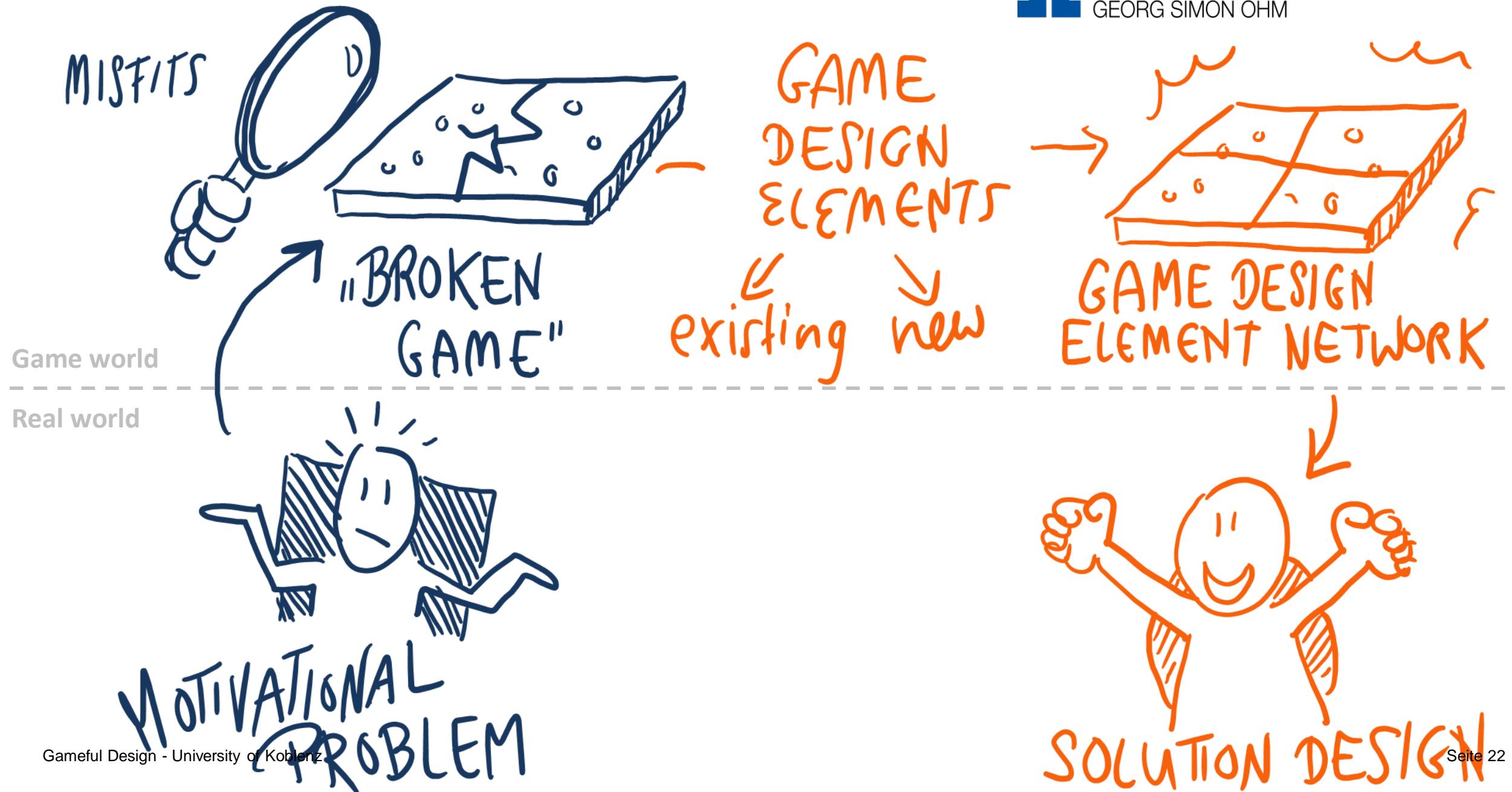
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Bedeutung

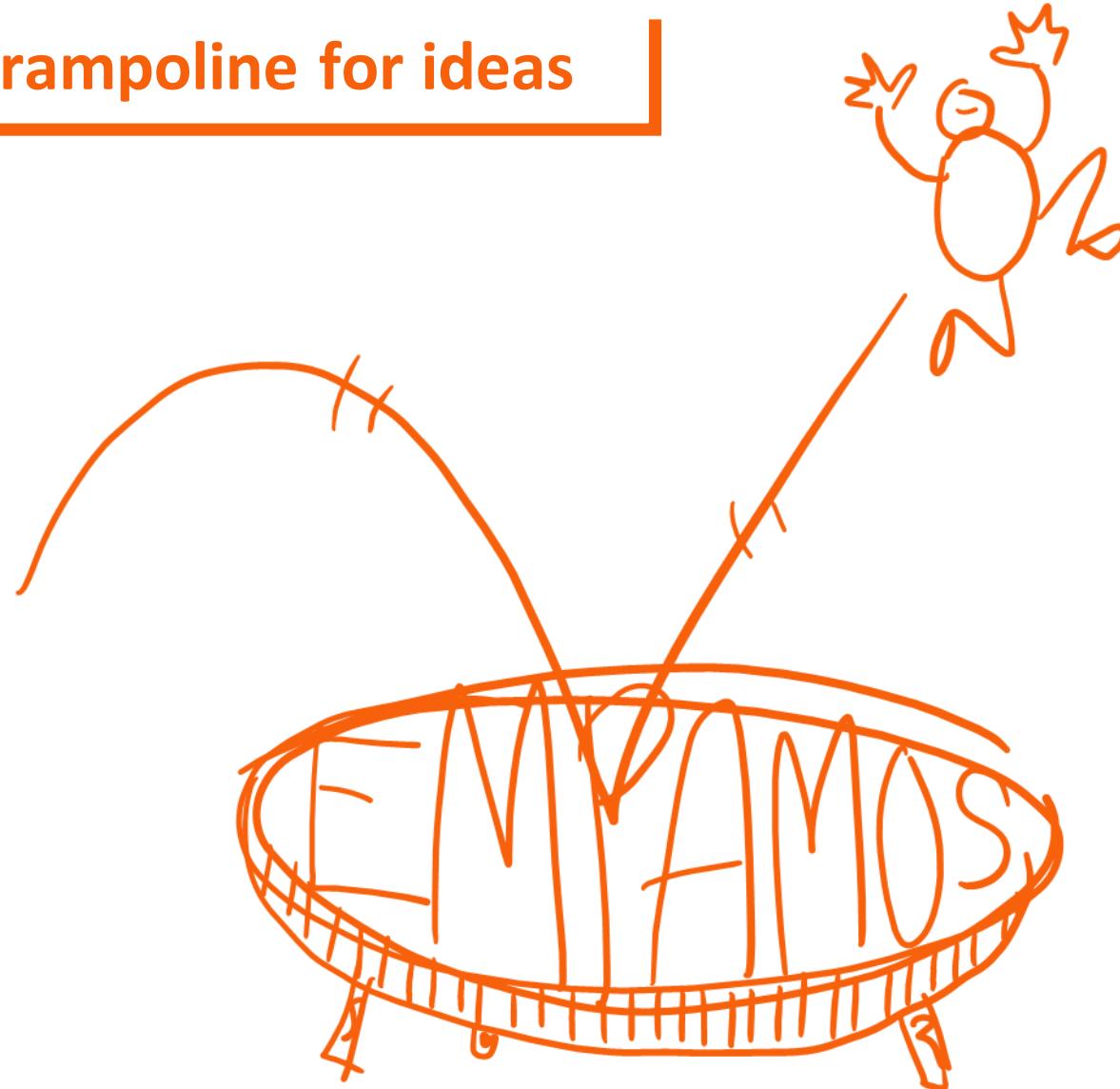
Wir betrachten unser
Tun als sinnvoll, da wir
ein wichtiges Ziel verfolgen

Kompetenzerleben

Wir erleben uns als lern- und handlungsfähig, die gesuchten Ergebnisse zu erzielen



EMAMOS® as a Trampoline for ideas



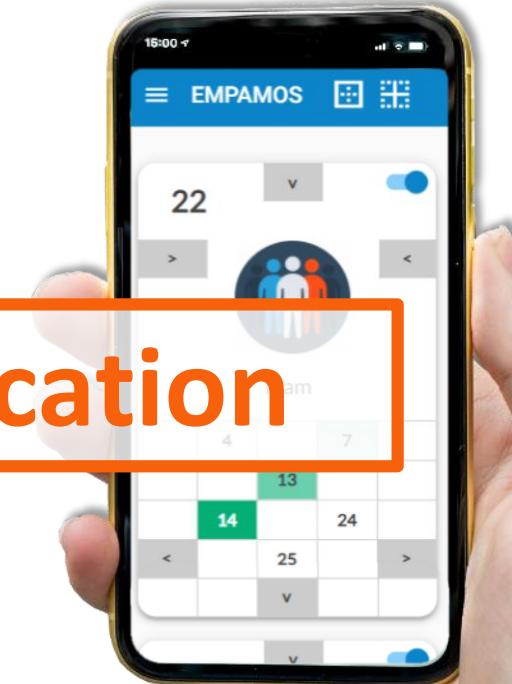
Tools



Modular training



Toolbox



Examples for past and current projects



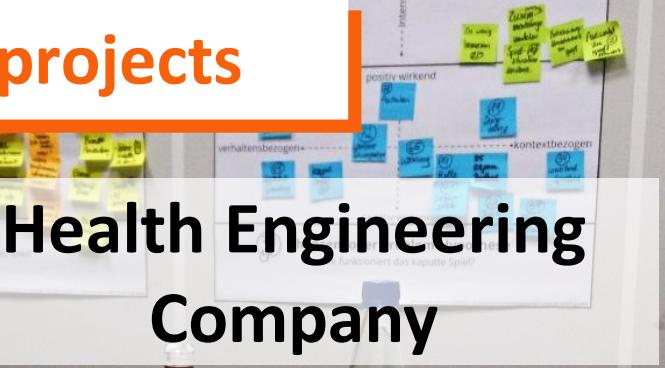
Reconstruction of the permanent exhibition to bring young people closer to fates and feelings of citizens living in the Third Reich with the help of personal objects.

- Riddles
- Interaction with objects
- Choice between different options
- Secret items



Enhancement of a VR-based training to learn the execution of complicated machines in the health sector.

- Cooperative platform: do the training together with different roles
- Create different paths to explore the machines based on individual choices



Health Engineering Company



IT Management Company

Enhance collaboration with customers, when it comes to agile workflows: How can customers understand the agile mindset and methods better to build up trust?

- Journey
- Tutorials
- Different difficulty levels



Room of Memories, City Museum Tübingen



Berufe entdecken

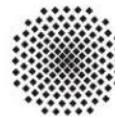
“Job Adventure” by Bundesagentur für Arbeit



Partners and participants



VEND
Sehen. Verstehen. Entwickeln.



Universität Stuttgart
Institut für Arbeitswissenschaft und
Technologiemanagement IAT

Business



 **Fraunhofer**
IAO


N-ERGIE
methodpark



hessischer
museumsverband

Culture



 **infraFürth**  **SCHAEFFLER**



INTRA
Lab
Labor für soziales
Unternehmertum

 **BW Bildung und Wissen**
Verlag und Software GmbH

 **NEANDERTHAL MUSEUM**

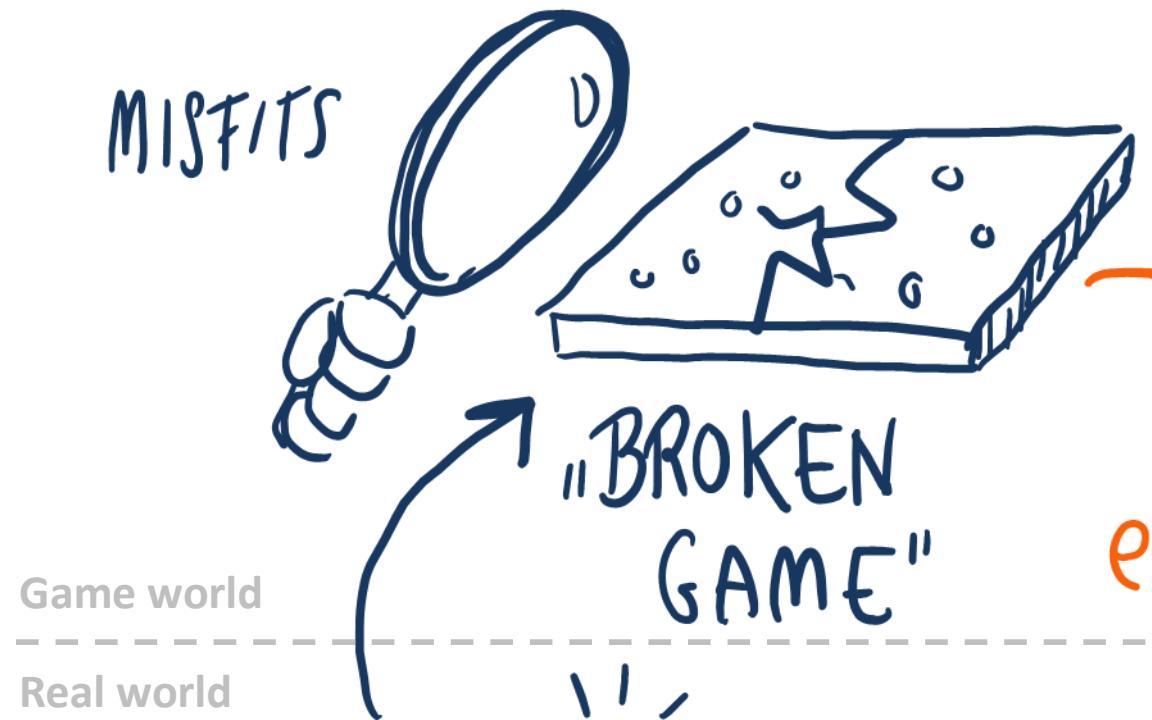


Social Work



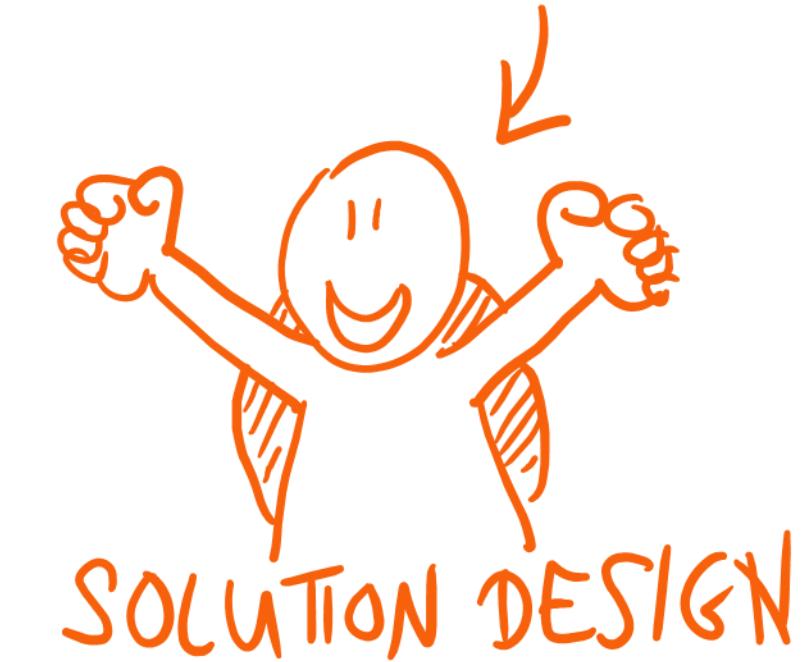
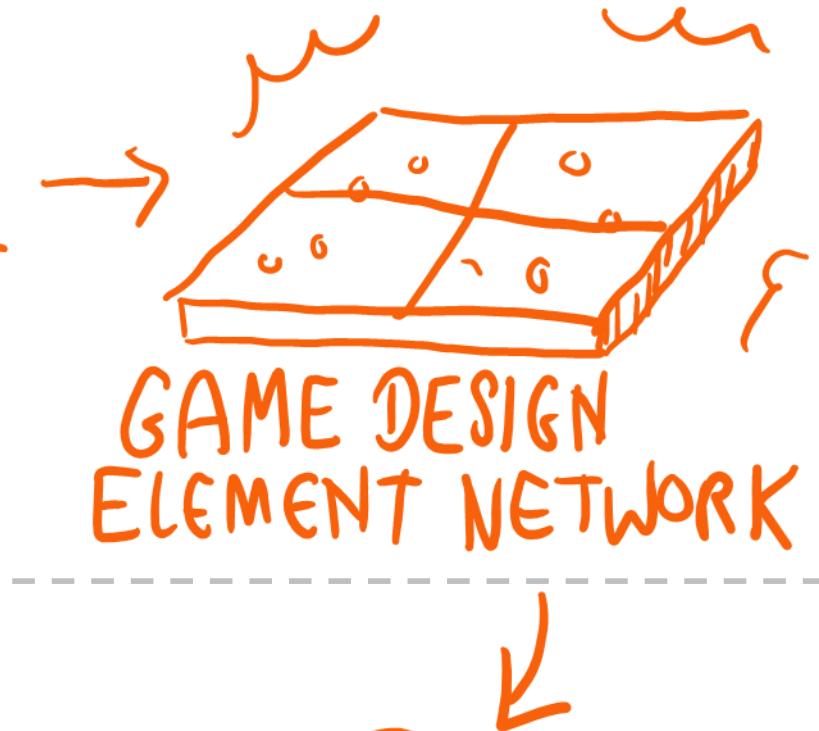
**What kind of gamification projects
do you know? Which of them do
you like and which not?**

Briefing



GAME
DESIGN
ELEMENTS

existing new



MOTIVATIONAL
PROBLEM

Organizational and
Personnel Development

Transformation and
Innovation Management

Team Development

Redesigning Work
Processes (i. e. in context
of "New Work")



MOTIVATIONAL
PROBLEM

New ways to interact with
products and services (e.g.
apps, exhibition design)

Making business models
and user journeys more
interactive

New ways to
motivate
yourself for
"boring" tasks
(e.g. learning
for exams)

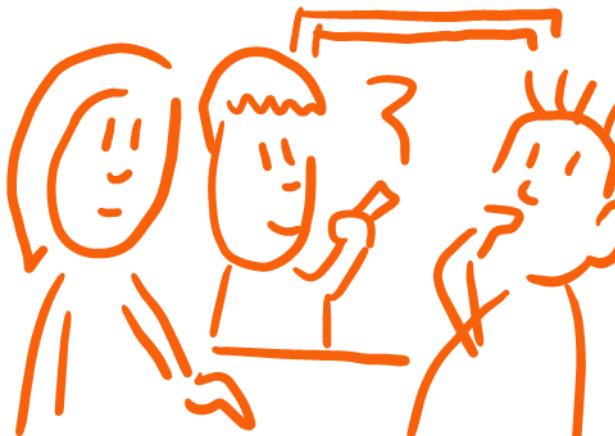
Game world

Real world

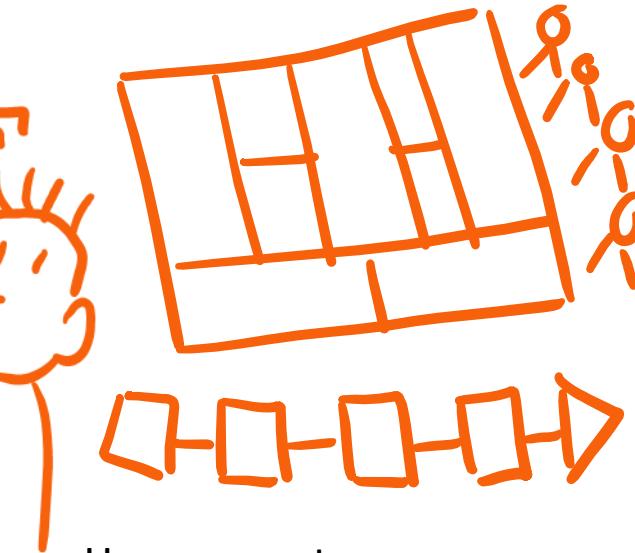
Example questions from entrepreneurship



How can we foster self-motivation of entrepreneurs for **daunting tasks**, such as acquisition and bureaucracy?



How can we develop **entrepreneurial teams** that are supportive and motivated?



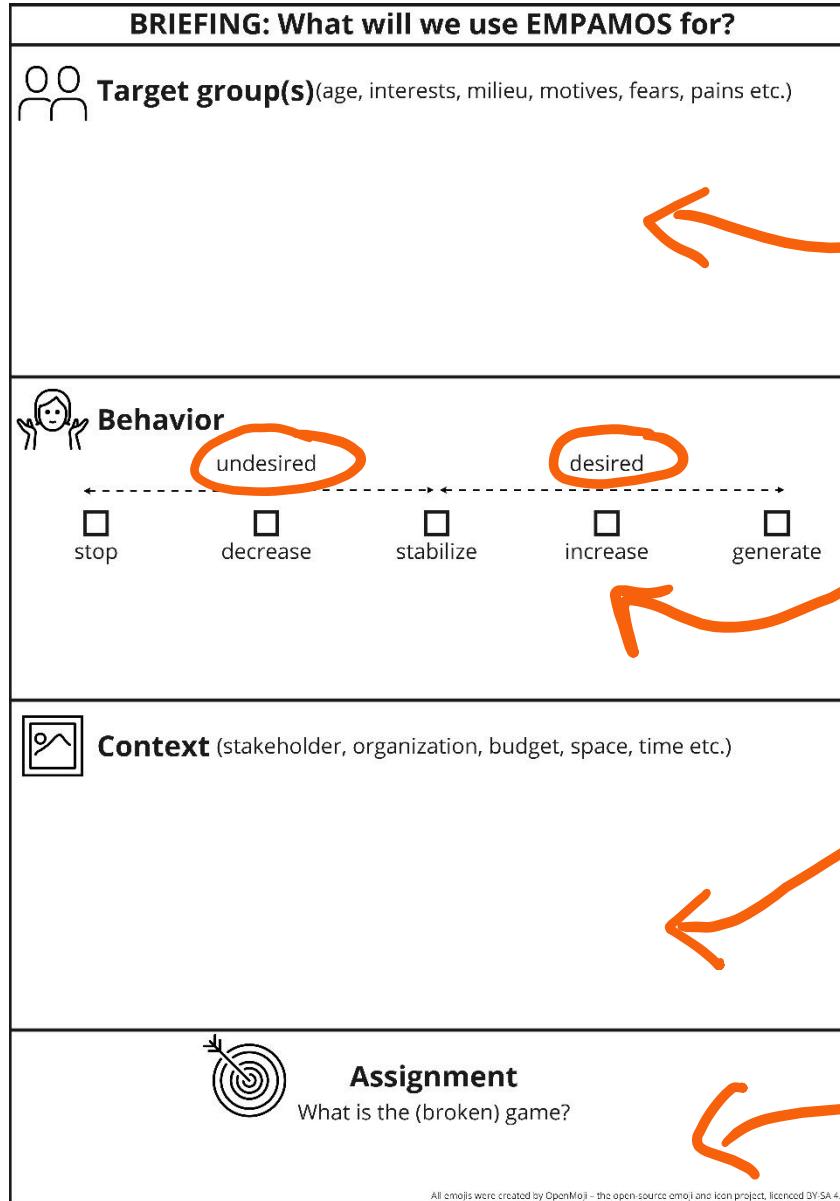
How can entrepreneurs use game design elements in their **products, services and business models**?



Problem definition

- Write down a **problem that you want to tackle** or an **experience that you want to enhance with gameful design** on a card
 - The problem can be connected to your **start-up idea** that you want to pursue
 - The problem can be connected to your **bachelor thesis** or idea for a **master thesis**
- Discuss the problem in your group: Does everybody agree to work on this case?

Briefing



Please fill out your BRIEFING canvas (45 minutes). Afterwards summarize your project to the others.

ALWAYS LOOK

- AT YOUR -

BRIEFING!

Game design
misfits

EXPLORATION

MISFITS



"BROKEN
GAME"

Game world

Real world

BRIEFING

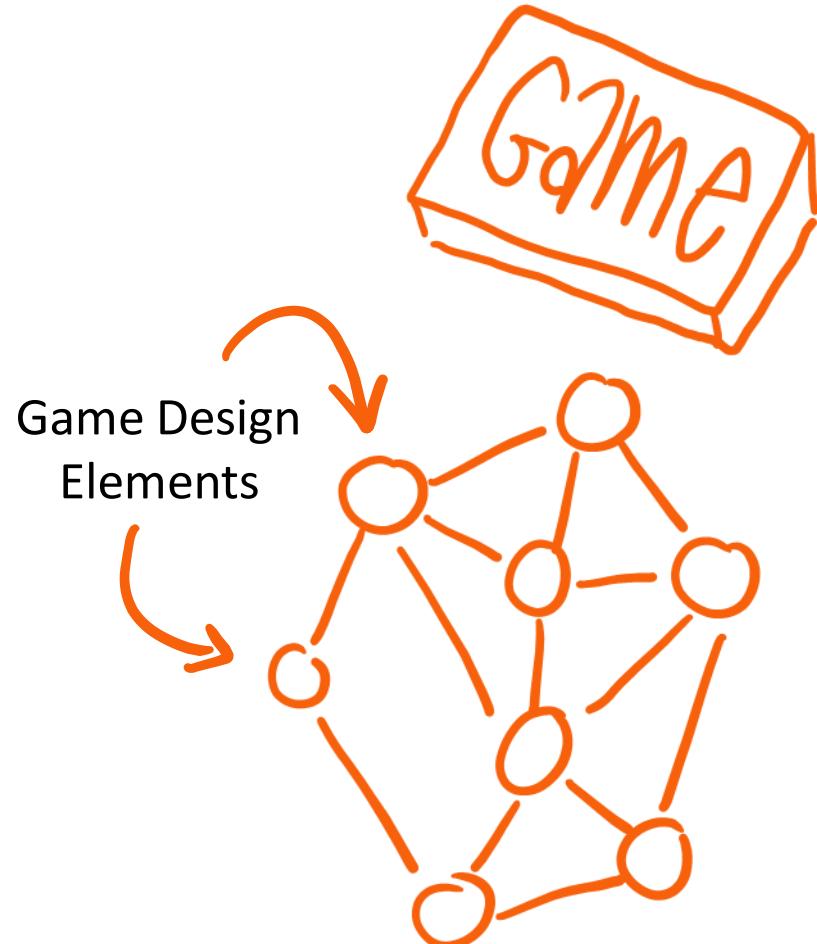
MOTIVATIONAL
PROBLEM



**Which (board) game do you hate
and why? Discuss within your group
(15 minutes).**

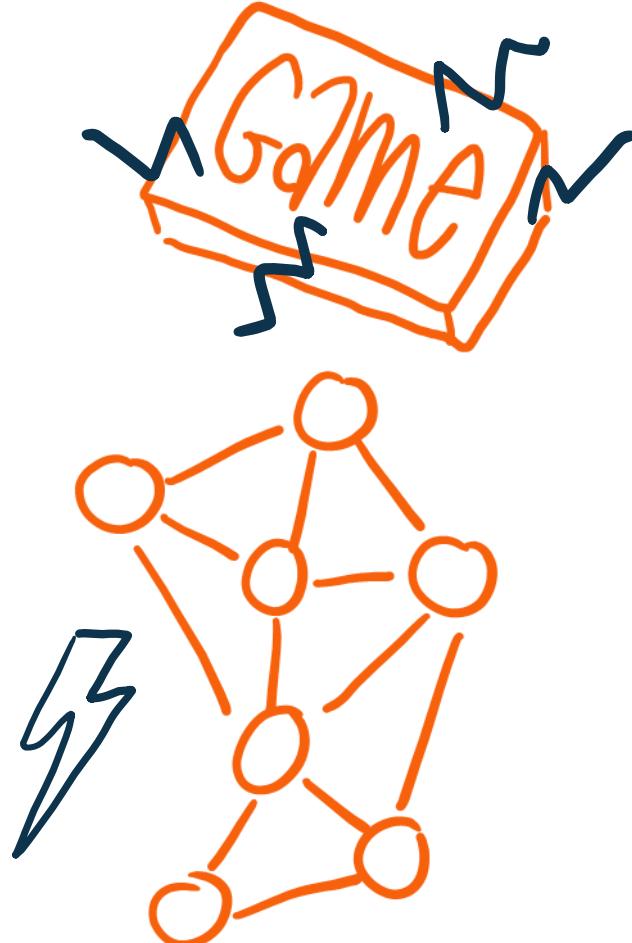
Many situations in our work and product world are "broken games" that do not motivate.

What is a misfit?



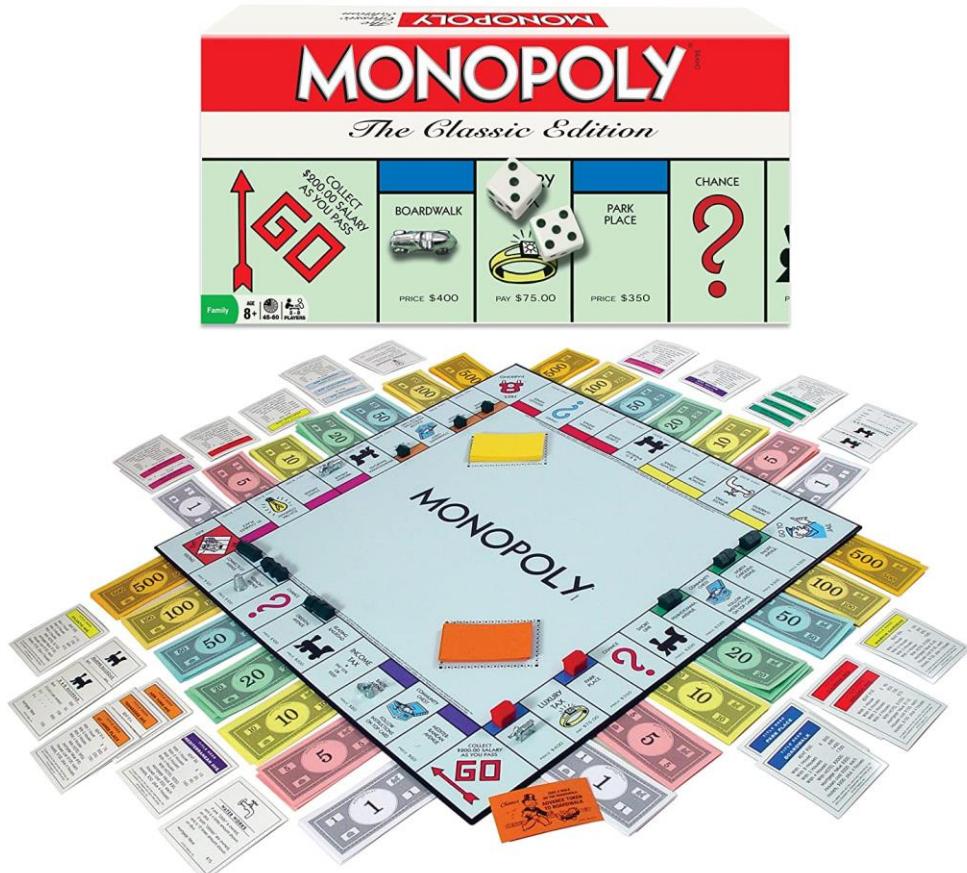
Games are well conceived and tested motivational designs consisting of many game design elements that are connected with each other in such a way that they motivate interaction and make fun.

What is a misfit?

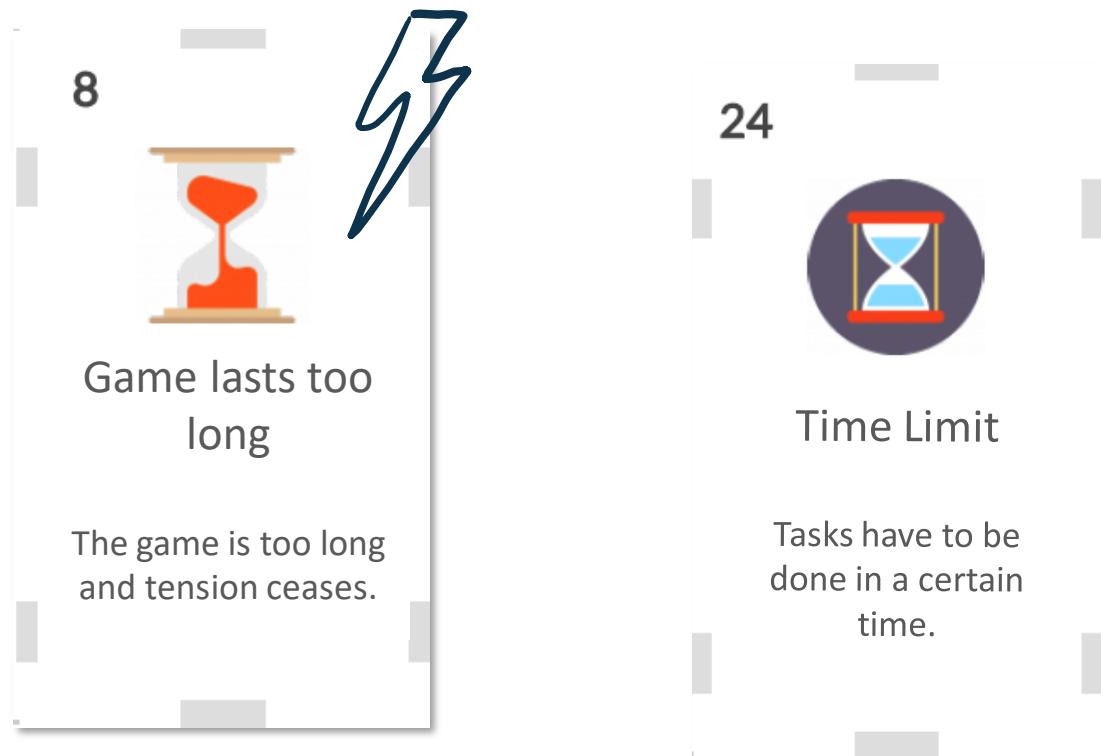


If you take out one element out of the design, the motivational structure collapses and a game loses its motivational power and fun.

Example: monopoly

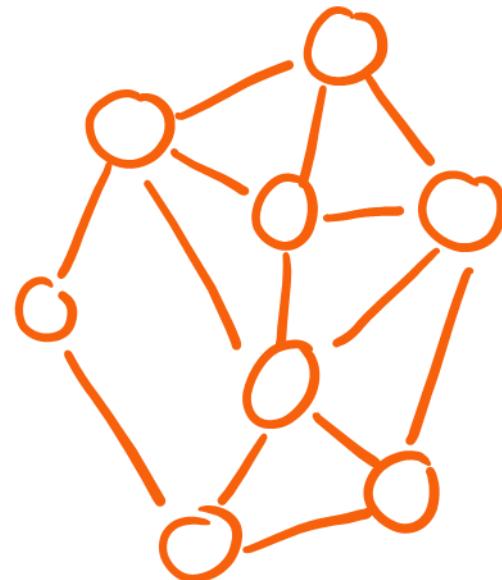


- One of the most successful games of the world
- Contains a lot of game design elements, such as “events”, “exchange”, “avatars”, “resources”, “arrival”, “penalty” etc.

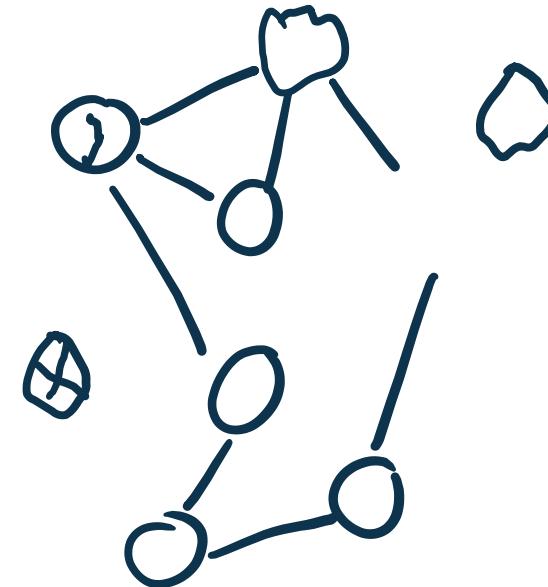


Misfits in the real world

If professional designed
games look like this ...



... real world settings look like
this!



Many situations in our work and product world are "broken games" that do not motivate.

But: If we understand the “broken game”, we might find out, how to fix it!

Method: Misfit Exaggeration

- Starts at your BRIEFING
- Works with the Game Design Misfits → are shuffled and divided among all „players“ in your team
- Use red sticky notes to translate the generic description of the Game Design Misfit into your context
- Result: Overview over you „broken game“ and understanding, why the motivational design of your real-world problem does not work

Conduct the method “misfit exaggeration”. Afterwards summarize the “broken game”.

**Reflection: What did you learn today?
What will you take home?**

- Reflect and write down some thoughts

What happens tomorrow?

Day 1

- Overview: Gameful Design in Innovation Management
- Group building
- **BRIEFING:** Where do you want to use Gameful Design?
- **EXPLORATION:** Understanding the Problem → Analysing Game Design Misfits

Day 2

- **CREATION:** Integrate Game Design Elements into your project
- **NETWORKS:** Elaborate a Game Design Network
- **PITCH:** Present your idea (will be part of the assessment)



See you tomorrow!

Max Höllen

max.hoellen@th-nuernberg.de

What happens tomorrow?

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- Overview: Gameful Design in Innovation Management
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- **BRIEFING:** Where do you want to use Gameful Design?
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- **NETWORKS:** Elaborate a Game Design Network
- **MOTIVATION:** Analyse the motivational structure
- **PITCH:** Present your idea (will be part of the assessment)

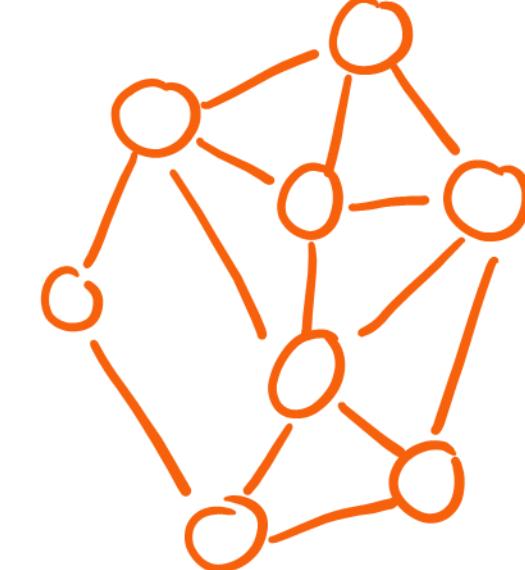
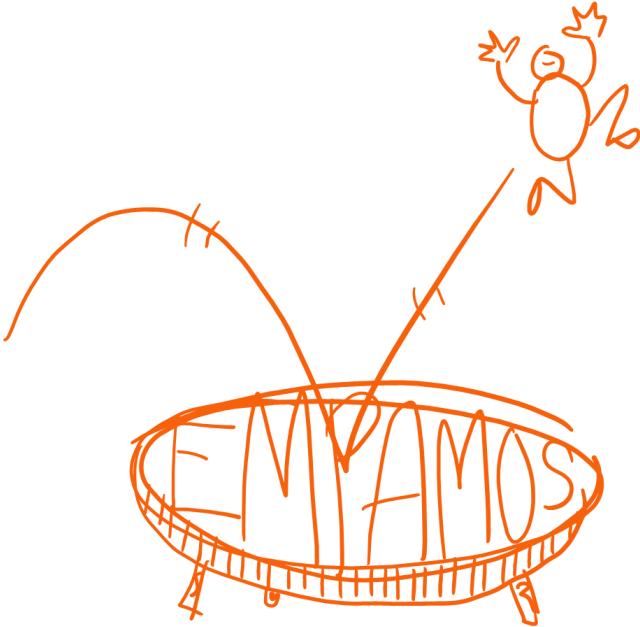
**Which questions do you have from
our session yesterday?**

Humans



... and social interaction have to
be addressed by innovation!

We use
EMPAMOS
as a
trampoline
for ideas.



Games are
well
designed
systems
consisting of
carefully
chosen
elements.

ALWAYS LOOK
- AT YOUR -
BRIEFING!

Game design elements



Pain of current gamification I

Chocolate-covered broccoli approaches

- Game design elements are stucked on, but not integrated into the context

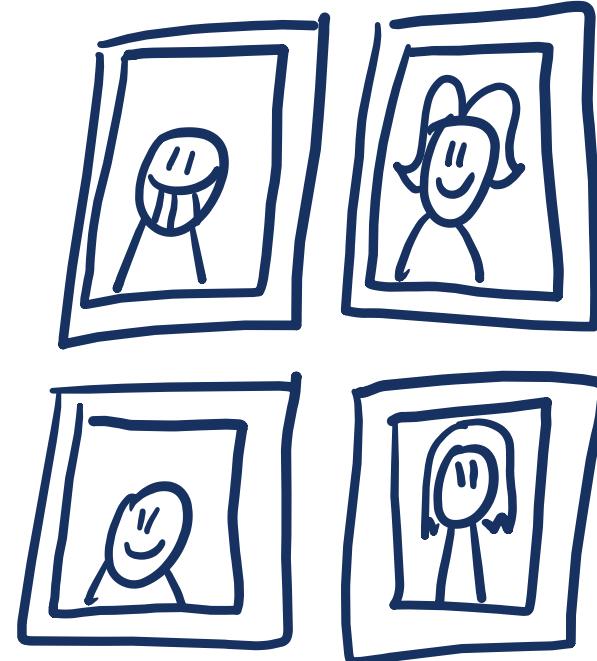


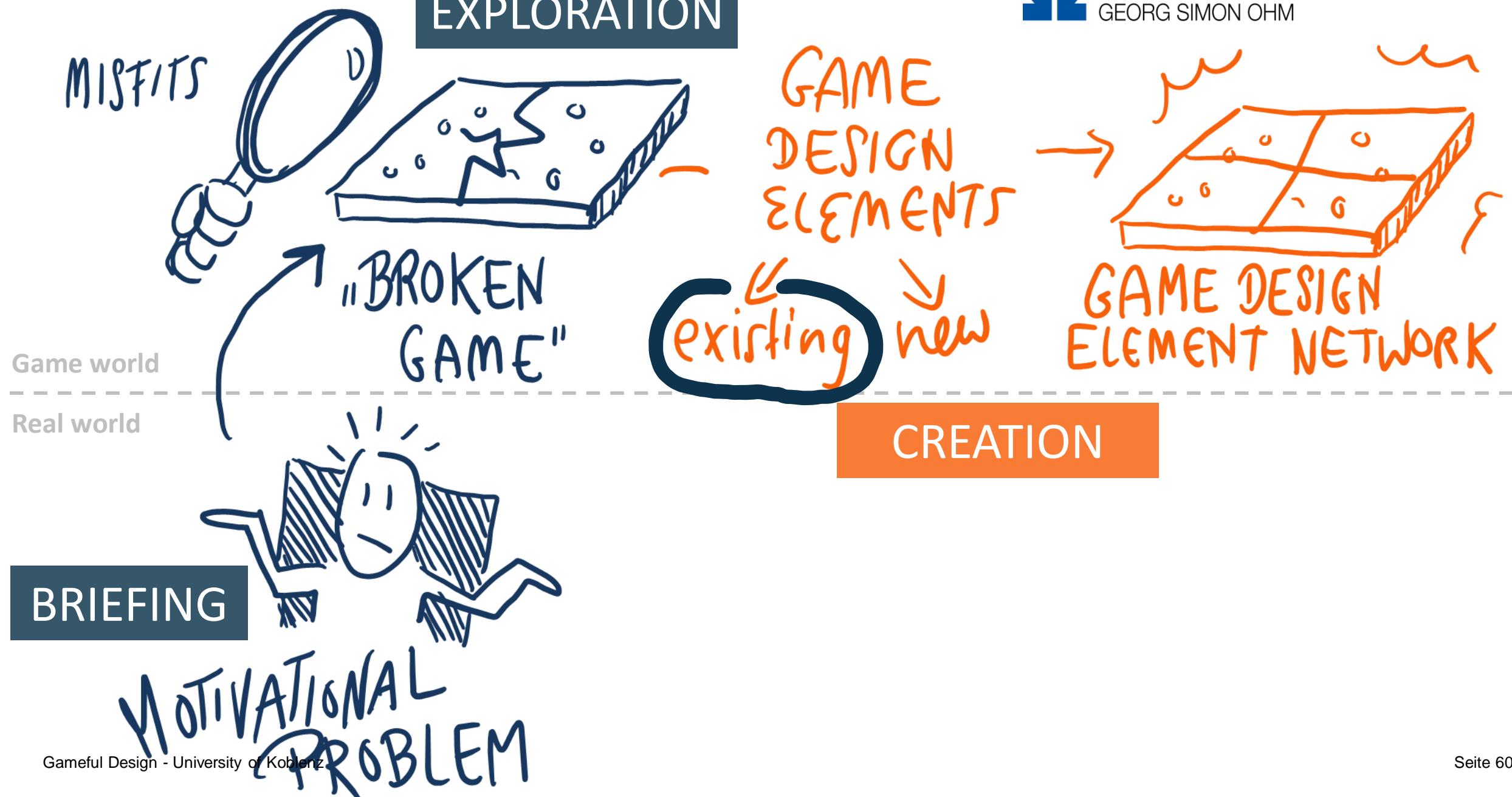
Pain of current gamification II

PBL: Points, Badges, Leaderboards



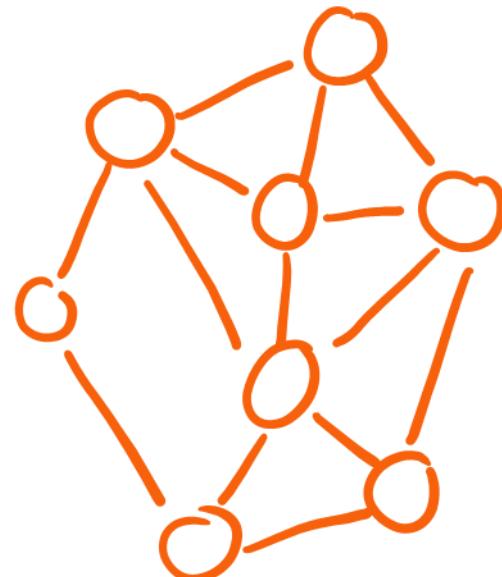
Employee of the month



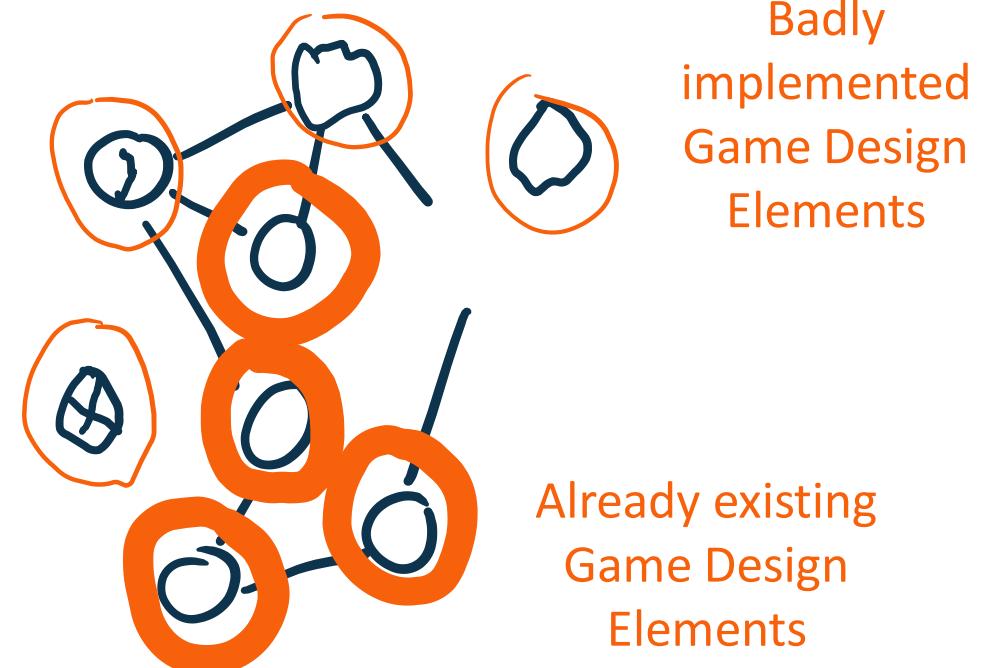


Misfits in the real world

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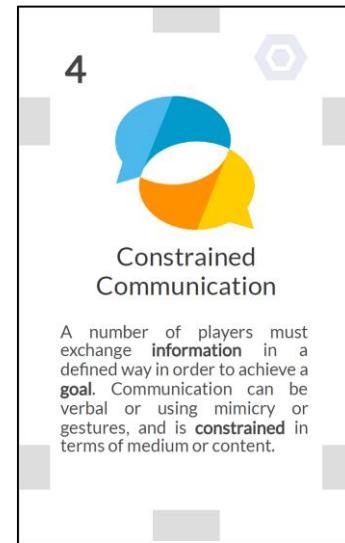
First of all: Look into you pantry!



Our real world settings are already full of game design elements: This is what we have already in our “storage”.

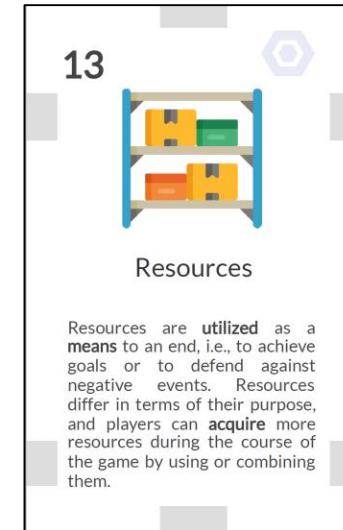
If we built up our gameful design on the fundamant of our storage, it will integrate better and the target group rather accepts it.

Examples



In online meetings people can be muted, they can use the chat instead of speaking, they can only see what is in front of the camera.

But also in common meetings communication can be constrained to the meetings' topic.



If you learn for exams, every knowledge about the content that might be assessed is a resource (that can be exchanged).

If you want to build up a social network, every person you know is a resource that makes your social network more valuable.

Look at your pantry:

- Browse through the pile of Game Design Elements and divide them into three groups:
 - 1) already implemented properly
 - 2) implemented, but rather badly
 - 3) not yet implemented
- Category 1: Use blue sticky notes to translate the generic description of the Game Design Element into your context.
- Category 2: Use red sticky notes to indicate the problematic implementation of the element.
- Take a picture for your documentation and the pitch

Method: Single Solution

- Start with step 3 (draw five random Game Design Elements)
- Choose one of the randomly drawn Game Design Elements as a potential solution for your problem
- use **green sticky notes** to translate the generic description of the Game Design Element into a solution description for your case
- The Game Design Element might already be in your context (storage category 1 or 2): Then discuss, if you want to implement it in a better way or use it in a completely different way

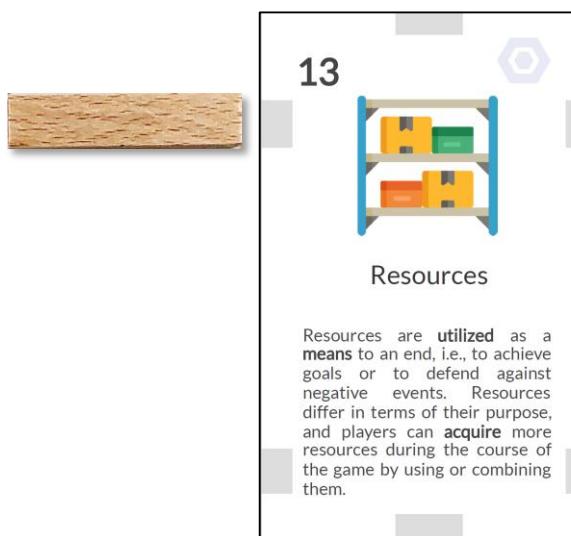
Game design networks



Example

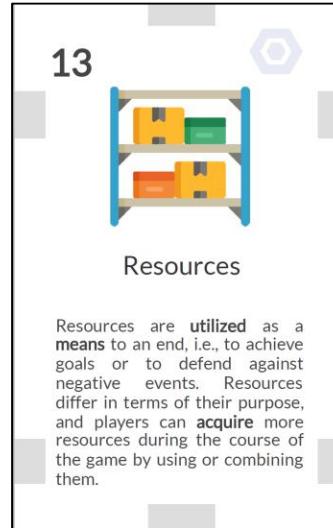


If we have constrained communication, how could we allow players to relieve the constraint?

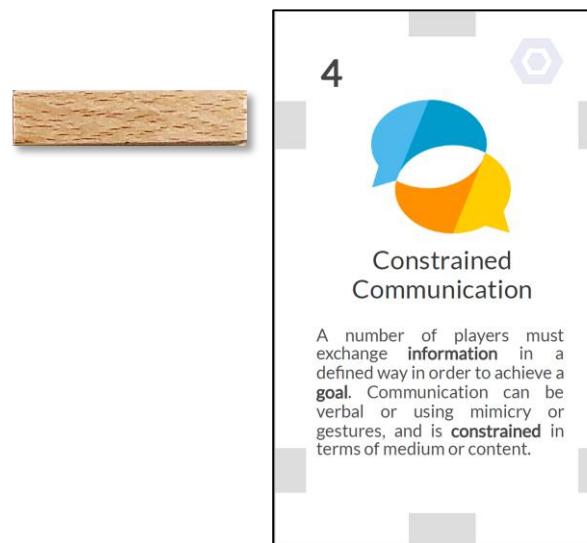


We could provide limited resources, so that player can use their resources to free themselves from constraints, if they deem it necessary.

Example



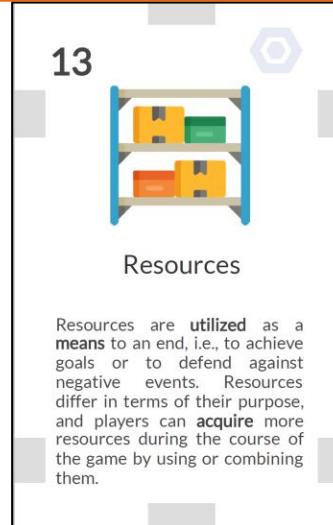
There are resources that can be won.
How do we divide the resources?



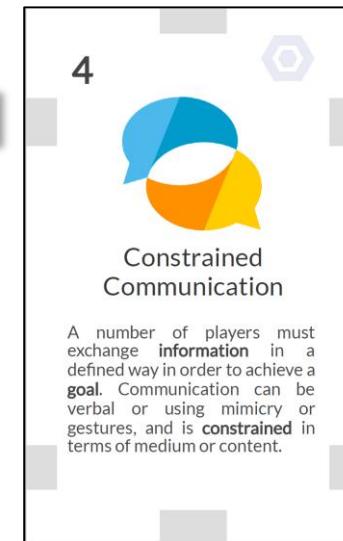
If players stick to the constrained communication they get resources. If not, they lose resources.

How to interpret a connection?

X



Y



Element X raises a question and element y is the answer.

Element Y buttresses element X in order to enhance / enable its effect.

Element Y specifies element X

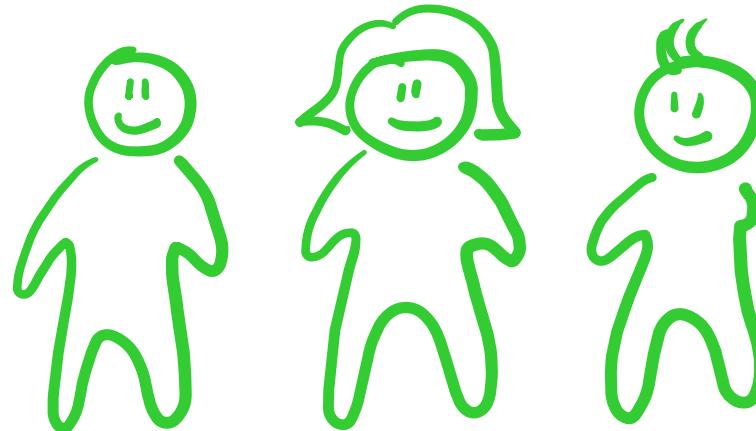
Method: Network

- Start with the results of your “single solution”
- Try to find new elements and/or new connections between elements
- use green sticky notes to translate the generic description of the Game Design Element into a solution description for your case

motivation

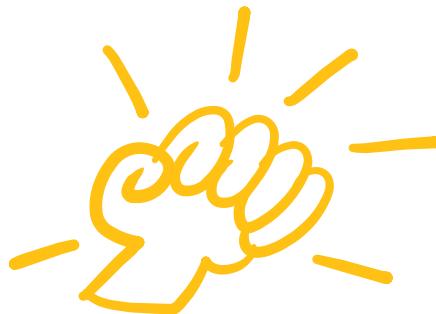
Motivation

Humans



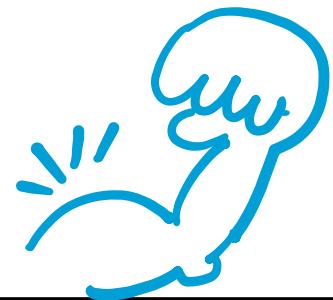
... and social interaction

4 dimensions of motivation



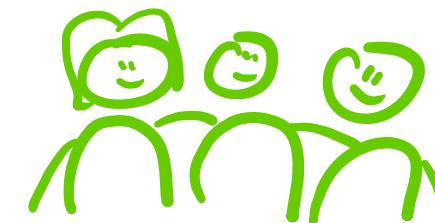
Autonomy

We experience ourselves as self-determined and not externally determined in what we do.



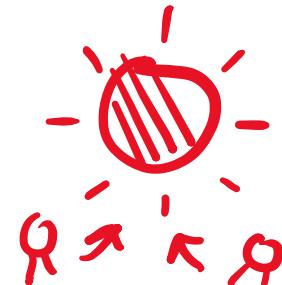
Competence

We experience ourselves as capable of learning and acting to achieve the desired results.



Relatedness

We feel connected and accepted and recognized by others.



Meaning

We experience our actions as meaningful, because what follows from them is important for us or others.

Method: Motivational Poker

- Analyze your Game Design Network concerning the motivational dimensions
- Everyone can use every motivational dimension just ONCE
- If you have different results: discuss it in your group

potcgo.

Use the S.U.C.C.E.S.S. Framework to built your Pitch





simple

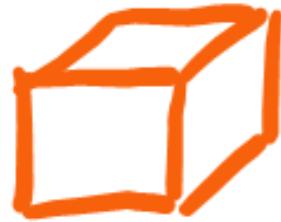
- Use brief, clear and easy understandable statements
- Use analogies (“We are Netflix for Travelers”)
- Your main statement should be usable for a twitter post or a newsletter headline



- unexpected -

- Try to **surprise** your audience
- What does the audience expect in your topic / context? How can you **break with this expectations?**
- Can you create a **secret** that is revealed in your pitch?





concrete

- How can you explain your idea in an understandable way?
- Which pieces of information needs your audience?
- Use metaphors, images, objects, prototypes to make your idea tangible
- Work with real / your own experiences
- Use examples



credible



- How can the audience trust you?
- Why are you the experts for your topic?
- Who else is convinced by your idea → testimonials
 - statistics, empirical data, research articles
 - statements from real persons
 - newsletter articles





- How can you touch the audience emotionally?
- Show examples from real cases that the audience can relate to.
- Built a bridge between your idea and the audiences everyday life.





- Use storytelling to catch your audience better
 - Hero's journey
 - Friendship between unequal people
 - Fight / concurrence
 - Winning after having no chance
 - ... which stories (from movies, books etc.) touched you?



- Make your presentation appealing (but not invest too much time in embellishment of details)
- Visually: graphics, images, design, font, readability
- Acoustic: slow, loud and pronounced speaking
- Haptic: Objects, interaction



See you soon!

Max Höllen

max.hoellen@th-nuernberg.de