



# The four levels of Game Based Design to engage everyone

Eduhub Days 2022 | Feb. 16<sup>th</sup> 2022 | online

## Wolfgang Rathert

lic.oec. HSG

Chief Engagement Officer

wr@wolfgangrathert.com

get / stay "in touch":



**HSLU** Hochschule Luzern

Weiterbildung und Beratung | Veranstaltungen | Lehr- und Lernumgebung

Zentrum für Lernen, Lehren und Forschen > Weiterbildung und Beratung > + > Hochschuldidaktik > Kompaktkurs – Game Based Design in der Lehre

### Kompaktkurs – Game Based Design in der Lehre

Game Based Design überträgt die Designelemente von Spielen auf spielfremde Kontexte wie Arbeit, Marketing, Selbstmanagement, Sport – oder eben auch auf das Lernen.

<https://www.hslu.ch/de-ch/zllf/weiterbildung-und-beratung/kursangebot-im-ueberblick/hochschuldidaktik/game-based-design-in-der-lehre/>

eduhub.ch

Home > Collaboration > Special Interest Groups > SIG Game Based Design

## SIG Game Based Design

SIG Leader: Wolfgang Rathert, HSLU

Applications for improvement and innovation of knowledge creation, application and transfer

<https://www.eduhub.ch/community/Special-Interest-Groups/sig-game-based-design/>

“Most people make the mistake of thinking design is what it looks like,” says

Steve Jobs, Apple’s C.E.O. [...]

“That’s not what we think design is. It’s not just what it looks like and feels like.

**Design** is how it works.”

From <https://www.nytimes.com/2003/11/30/magazine/the-guts-of-a-new-machine.html>

# Game Based Design

is all about

# Motivation

through

Points

Badges

Leaderboards

?!?

Game Based Design

is not!

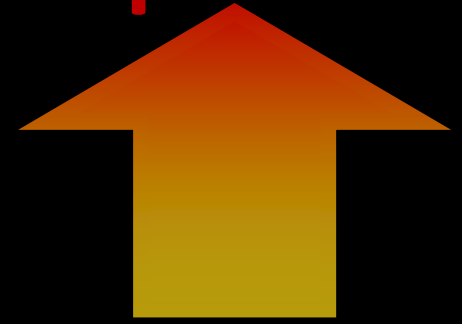
(primarily)

about Motivation

# Game Based Design

helps bridging the 'Gap' to Action

# Impact

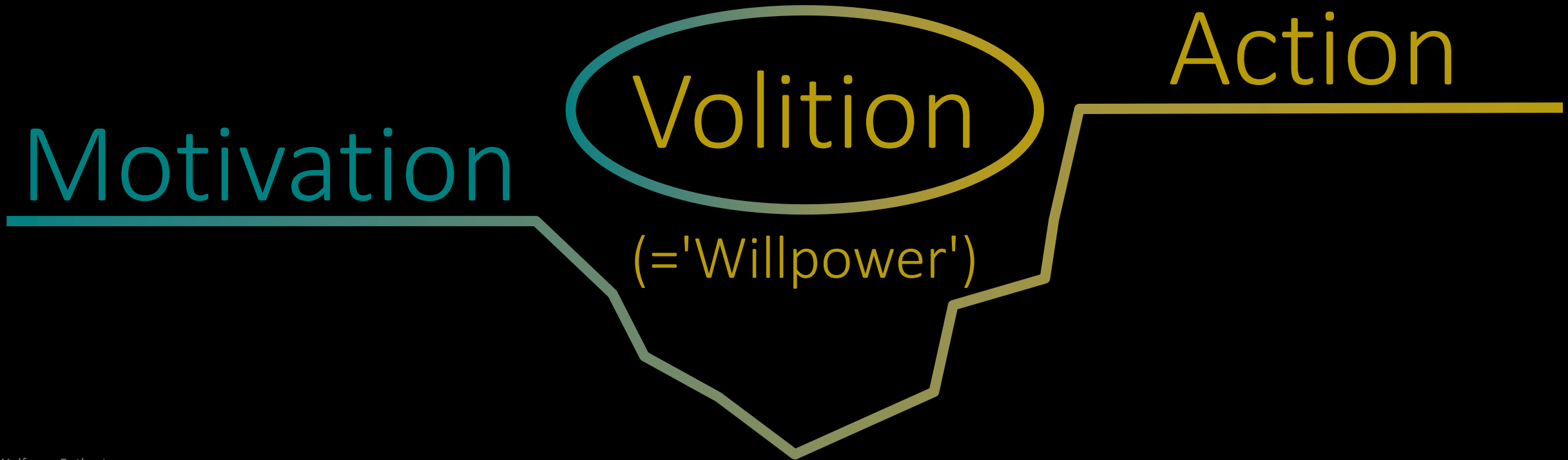


# Action

# Motivation

# Volition

(='Willpower')

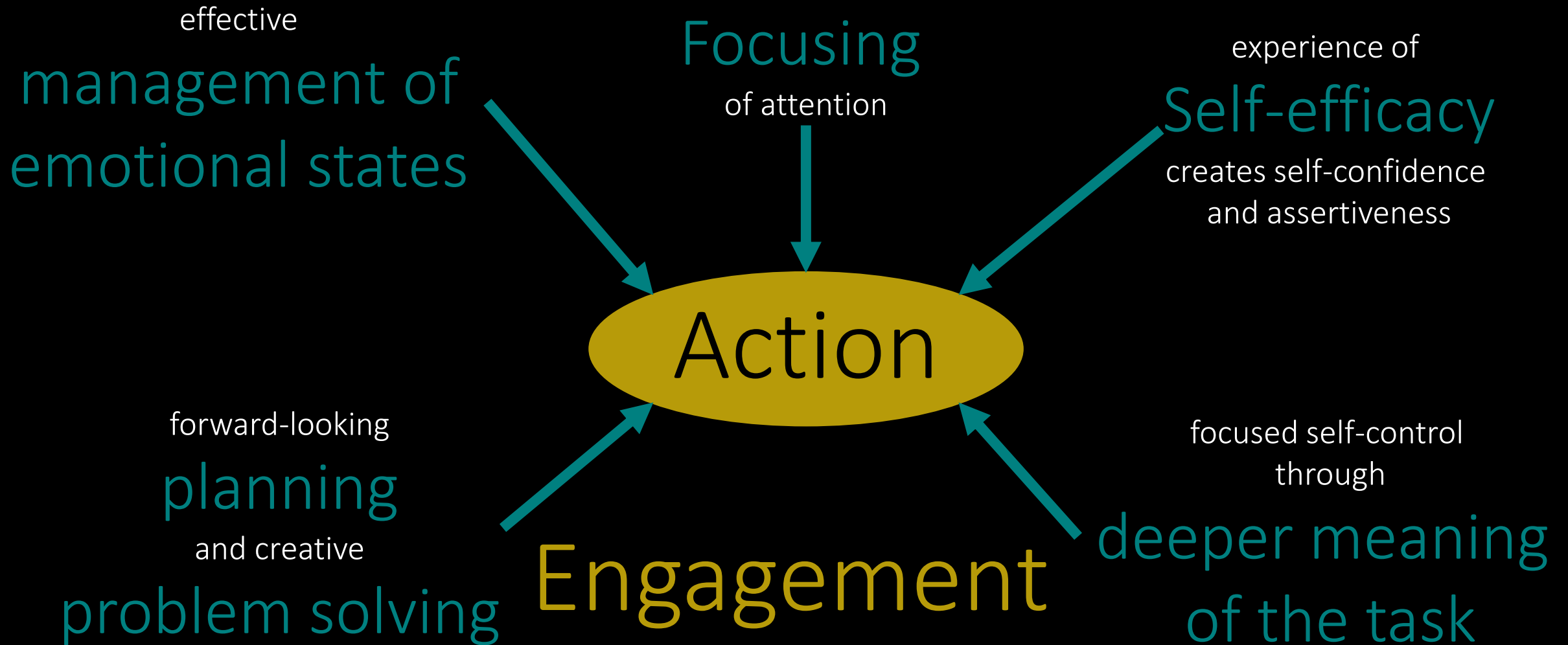


The Gap between Motivation and Action

# Volition

Volition is the cognitive process by which an individual decides on and commits to a particular course of action. Volitional processes can be applied consciously or they can be automatized as habits over time.

# Five competencies of Volition





# Designing for sustainable Engagement



Relatedness

Autonomy

Mastery

Purpose

articulate as

**needs**

activate as

**MOTIVE**

for action

use as

**MEDIUM**

for impulses  
and feedback

Status

Access

Power

Stuff



# Game Based Design

≠

points,  
badges and  
leaderboards



=



triggering experience  
of self-efficacy  
and meaning



# Your Design

meaning

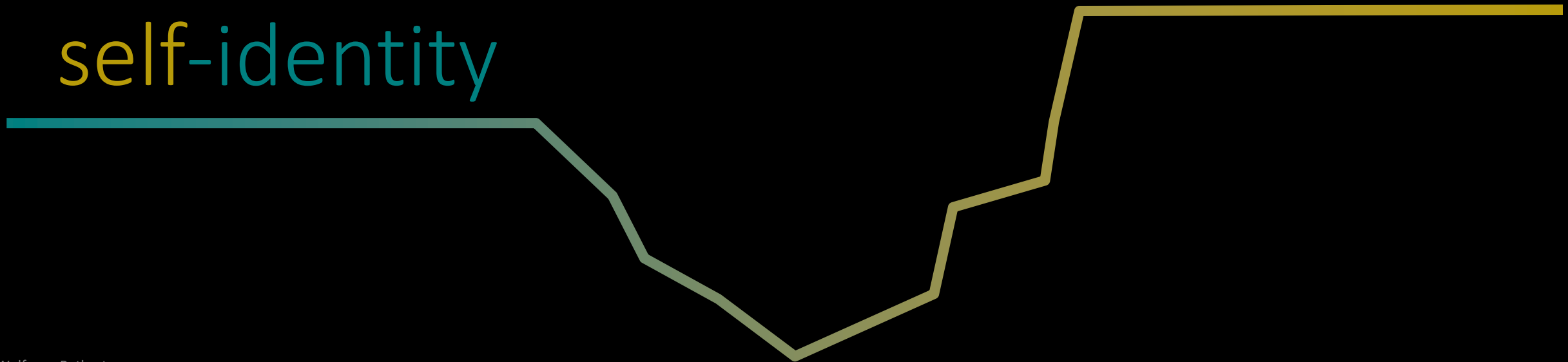
aspirational  
self-identity



a better  
'me'!



Action

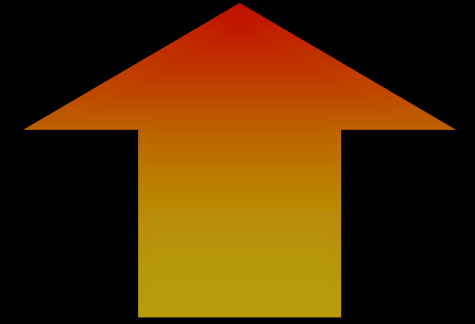


# Your Design

helps your audience to progress  
in a meaningful TRANSFORMATION  
towards an

aspirational  
self-identity

a better  
'me'!

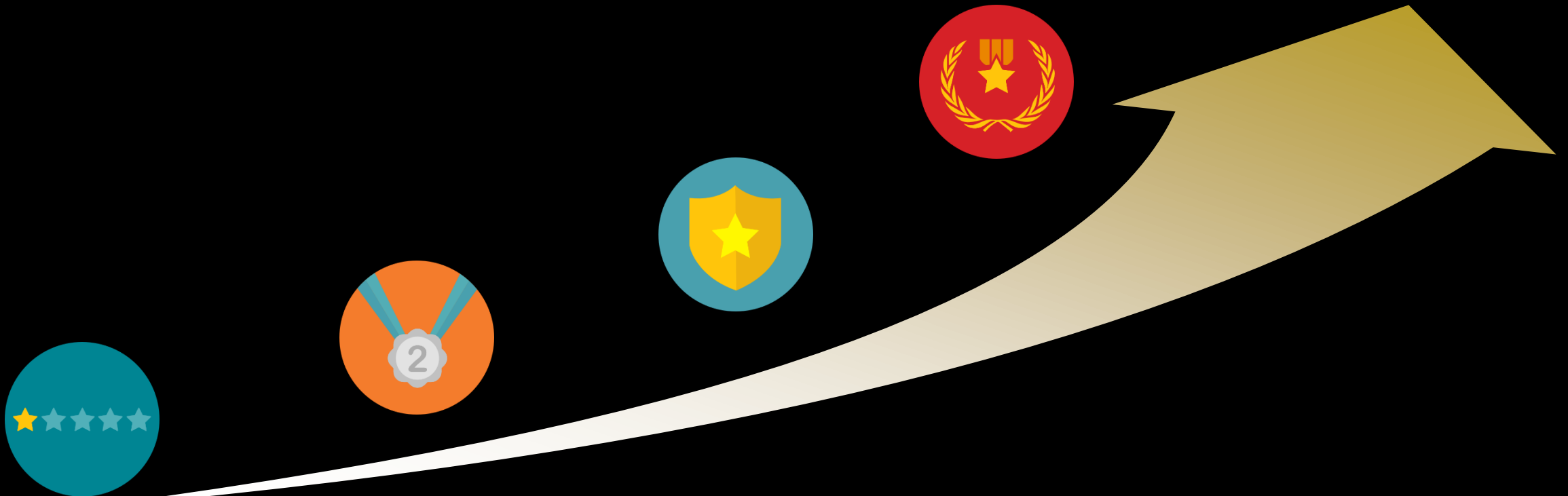


Action



# Game Based Design

## four levels



who?

where?

with whom?

why?

when?



four levels



level 1

we all

play (most of the time)

by the everyday

rules of the game

of social interaction



level 1



Space Shuttle "Challenger", January 28<sup>th</sup>, 1986





level 2



# useful games



level 2

exercises

icebreaker

rituals

facilitation tools

useful games



level 2

why? to facilitate things – 'social lubricant' for communication

who?

facilitator

when?

constantly

where?

interactions

with whom?

with all participants

# useful games



level 2

icebreaker

exercises

rituals

facilitation tools

## YOUR GOAL:

Score as many points as possible in the time given.

## THIS IS HOW YOU CAN SCORE

You get one point for every individual person's signature that is on your card when the time stops.

## RULES:

The facilitator gives the "start" and "stop" signal. You may only sign cards that you hold and control personally.

One person walks through her home with the camera turned on. The others watch and discuss

for what movie

is this the set:

which genre?

what is the title of the movie?

who is the protagonist?



level 3



"content  
gamification"

# serious games



level 3





"content  
gamification"

# serious games



level 3

scenario-  
simulations



prozess-  
simulations

"finance for  
engineers"

change  
leadership  
conflict



"content  
gamification"

# serious games



level 3

scenario-  
simulations



prozess-  
simulations

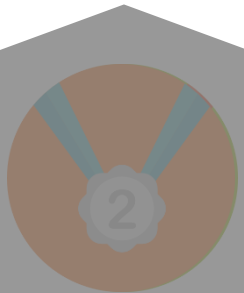
"finance for engineers"

change  
leadership  
conflict



"content gamification"

# serious games



scenario-  
simulations



prozess-  
simulations



level 3

why? cognitive impact (learn, reflect, sensitize)

who?  
experts

when?  
special events

where?  
protected space

with whom?  
invitation only

# market structure and cost situation

## ZIEL DES SPIELS:

So viele Punkte wie möglich in einer vorgegebenen Zeit zu sammeln.

## SO PUNKTEN SIE:

Sie erhalten 1 Punkt für jede Unterschrift unterschiedlicher Personen die sich auf Ihrer Autogrammkarte befinden wenn die Zeit abgelaufen ist.

## REGELN:

Die Moderation gibt Start und Ende der Spielzeit bekannt. Sie dürfen nur Karten unterschreiben, die Sie persönlich halten und kontrollieren.

	<b>total</b>	<b>var</b>	<b>fix</b>
cost per card	10	10	
cost per signature	5	5	
salary employee production	15		15
salary employee sales	15		15
cost per delivery	5	5	
# of employees in production			
# of employees in sales			
signatures needed per card	8		
market value finished card	80		
contribution margin			

# Budget Teilkostenrechnung

Kosten (Budget)	Produktion		Verkauf		Total Kosten	
	var	fix	var	fix	var	fix
<b>Gemeinkosten</b>						
Anzahl Unterschriften						
x Kosten pro Unterschrift						
<b>= Produktionskosten</b>						
Anzahl Auslieferungen						
x Kosten pro Auslieferung						
<b>= Total Lieferkosten</b>						
x Anzahl Mitarbeitende						
Lohn pro Mitarbeiter						
<b>= Total Lohnkosten</b>						
<b>Gesamtkosten der Kostenstelle</b>						
<b>Einzelkosten (Material)</b>						
Anzahl Autogrammkarten						
x Materialkosten pro Karte						
<b>= Total Einzelkosten</b>						
<b>Umsatz</b>						
verkaufte Autogrammkarten						
x Marktpreis fertige Karte						
<b>= Umsatz verkaufte Karten</b>						
- variable Kosten						
<b>= Deckungsbeitrag</b>						
- fixe Kosten						
<b>= Gewinn / Verlust</b>						

## Zuschlagssätze (normalisiert)

### Kostenstelle Produktion

Anzahl Unterschriften

variable GK pro Unterschrift

### Kostenstelle Verkauf

var. HK der verkauften Karten

Zuschlagssatz var. GK Verkauf

# BAB Normal-Teilkostenrechnung

Kostenarten	Kosten ER	Kostenstellen				Lager				KTR verkaufte Karten
		Produktion		Verkauf		Karten in Arbeit		fertige Karten		
		var	fix	var	fix	Dt	Cr	Dt	Cr	
Produktionskosten										
Löhne										
Lieferkosten										
<b>Total Gemeinkosten</b>										
var. Einzelmaterialkosten										
Umlage var. Normal GK Produktion = total var. Normal Herstellkosten										
Umlage variable Normal GK Verkauf <b>= variable Normal Selbstkosten</b>										
<b>Umsatz</b>										
+/- Änderung Lagerbestand WIP										
+/- Änderung Lager fertige Karten										
<b>= kalkulierter Deckungsbeitrag</b>										
fixe Kosten										
Deckungsdifferenzen										
<b>Betriebsergebnis (Gewinn / Verlust)</b>										







level 4



"structural  
gamification"

# game based design



level 4

"on-the-job"





"structural  
gamification"

# game based design



level 4

"on-the-job"  
performance



"structural gamification"

# game based design

'subtle' or 'loud'

"on-the-job"

performance

(business- / learning-)

process

ethics



level 4



"structural gamification"

# game based design



level 4

## "on-the-job"

Why? real-life performance (Compliance, Engagement)

Who?

designer

when?

'moment of truth'

where?

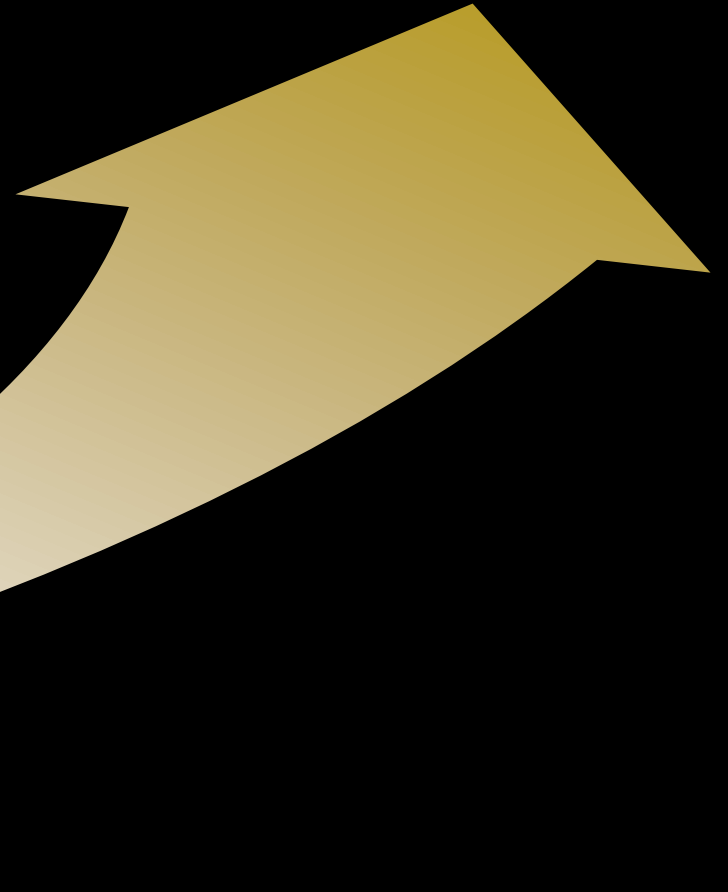
real life

with whom?

roles (student, patient, customer...)

Metaverse

level 5...



Welcome  
to your role as

CEO\*

\*Chief Engagement Officer