Developing Scrum Master competences through Gamification

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IPMA®

34th World
Congress

Reality

Video Game

ASSASSIN'S CREED II

A key factor contributing to the difficulties of adopting agility within organisations…

27%

of participants reported that insufficient training and/or education is a key factor hindering the effective implementation of agility.

Source:
digital.ai, 2023, p. 15; Alsaker & Olsen, 2022; Petrescu et al., 2023

What to expect from this session?
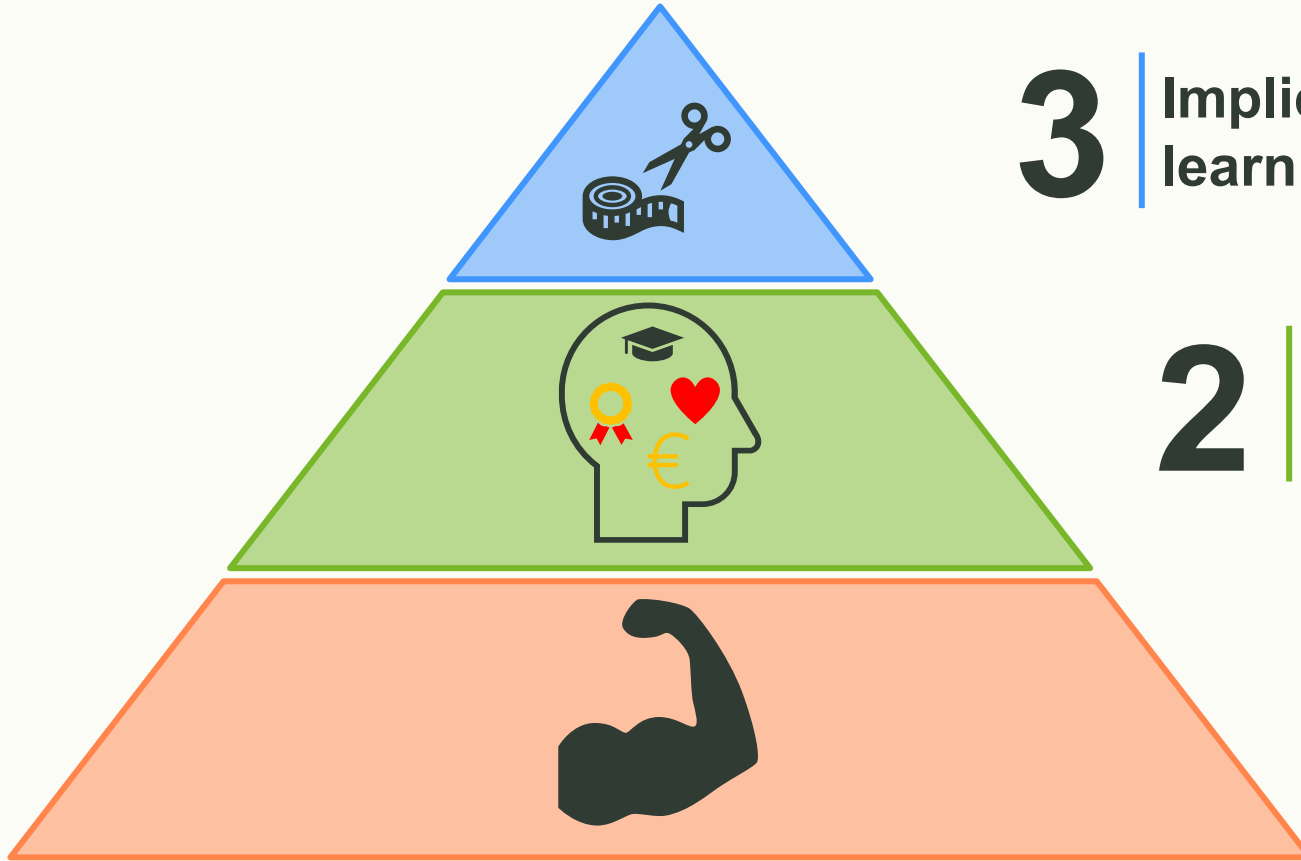
3 | **Implications for an individual gamified learning concept for Scrum Masters**

2 | **Key requirements for Scrum Masters when it comes to gamified learning**

1 | **Which competency areas should be covered by the learning experience for Scrum Masters?**

About co-author: Dr. Olya Neef

Overview:

♻ Focus areas: Implementation of agile & hybrid PM, trainings

♻ 18 years in Project Management (PM) (incl. agile and hybrid)

♻ 8 years as trainer in PM areas esp. agile PM

♻ SAFe SPC (inkl. DevOps), Scrum, Prince2, ITIL4, IPMA (D)

Education:

🎓 2018: Dr. Sc. M. Sc. in Project and Programme Management (Germany/Ukraine)

🎓 2017: M.A. in European Project Management (Germany)

🎓 2007: M. Sc. in Project and Programme Management (Ukraine)

Experience:

⚒ 2019 - today: Vice President for Agility/Digital Transformation at PMG-G (earlier PMI Cologne) (Germany)

⚒ 2022 - today: Senior Agile Coach at Vodafone GmbH (Germany)

⚒ 2020 - 2022: Associate Professor at PM Master programme (FH Dortmund, Germany)

⚒ 2018 - 2020: IT Consulting at CGI (Germany)

⚒ 2015 - 2018: PM, Training, Research (Insititute for the Digital Transformation of Application and Living Domains

⚒ 2007 - 2015: PM consulting (worldwide)

Standards and Methods – Comprehend and Connect

Project Management Group – Germany: Facts, Vision & Mission

➢ Non-profit organisation, founded 2003 as a local chapter of PMI, renamed as **Project Management Group – Germany** in Aug. **2021**.

➢ 600+ members, 2000+ followers on LinkedIn

➢ Support of professional project management, independent from any other organisations.

➢ Credo: **Standards and Methods – Comprehend and Connect**.

➢ Co-operations with varied standards, companies, public sector, and universities.

➢ SAFe, PM² Group, Praxis Framework, PMI, ISAPM, GPM, PRINCE2, Scrum, LeSS, Nexus, etc.

➢ Events, Expert Groups, Meetups, Speeches, Workshops, Lean Coffee, etc.

➢ Trainings (from our sponsors only), jobs,…and open to **lifelong learning**.

Development of a Gamification Learning Concept:
Play between Blended-Learning, Competency-based Approach and Interdisciplinarity

Blended-Learning	Interdisciplinarity	Competency-based Approach

Image Source: Rawpixel. (2025) Freepik 1, 2 (2025)

Development of a Gamification Learning Concept:
Play between Blended-Learning, Competency-based Approach and Interdisciplinarity

Blended-Learning

- Implies diverse pedagogical approaches and technologies
- Can profit from including innovative educational approaches like gamification

Image Source: Rawpixel. (2025)

Standards and Methods – Comprehend and Connect

Development of a Gamification Learning Concept: Play between Blended-Learning, Competency-based Approach and Interdisciplinarity

Interdisciplinarity
• Increasingly needed in numerous areas esp. in Digital Transformation • Inherited in the development of gamified software, requiring integration of psychology, design, programming, etc.

Image Source: Freepik 1 (2025)

Development of a Gamification Learning Concept:
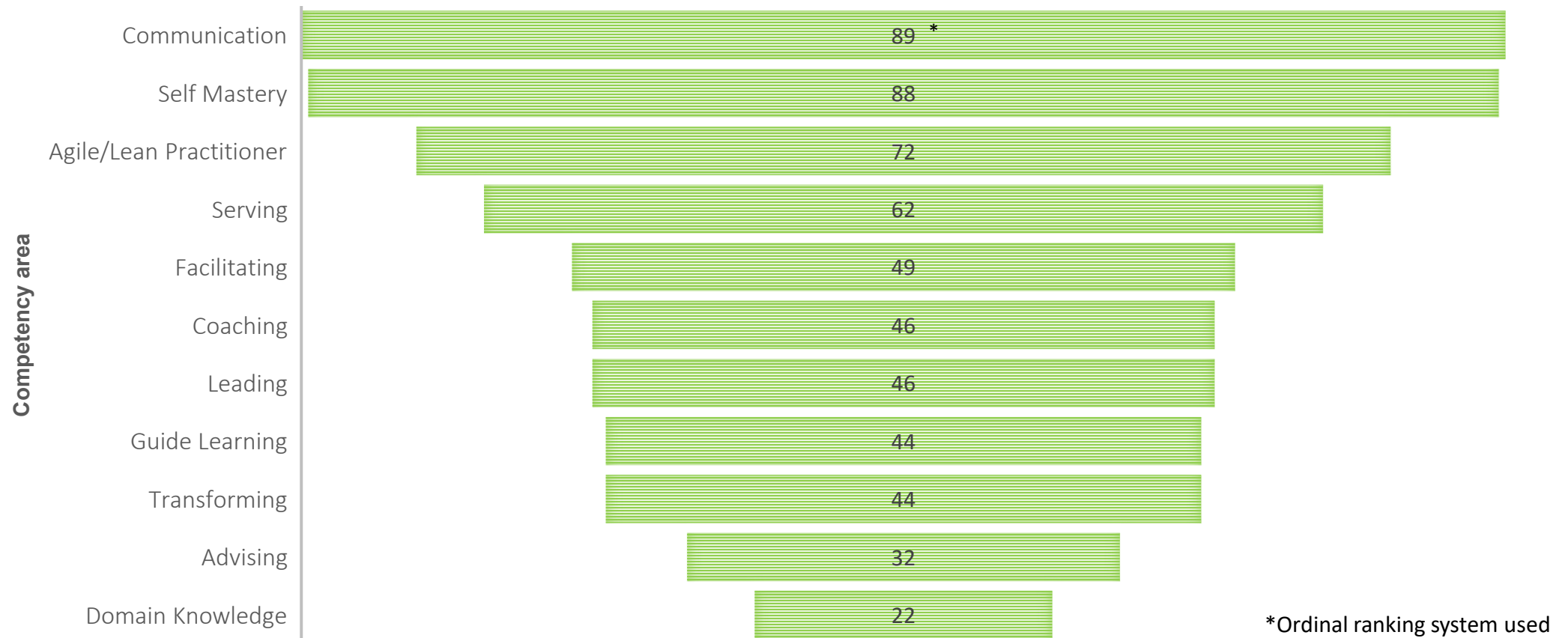# Play between Blended-Learning, Competency-based Approach and Interdisciplinarity

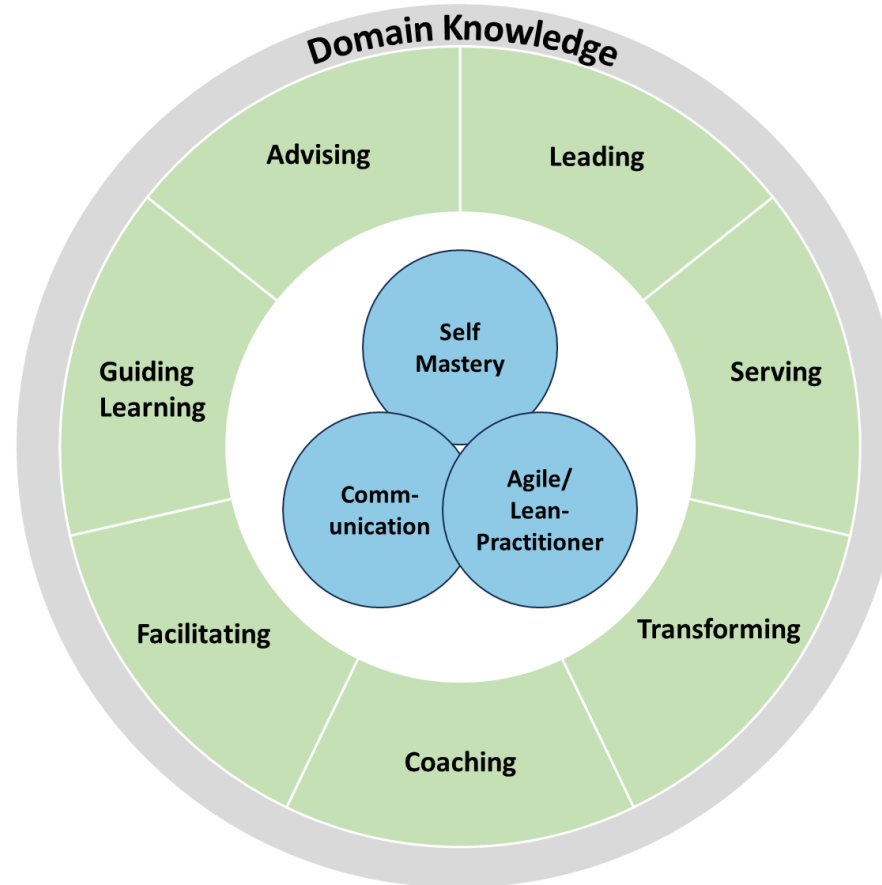| Competency-based Approach |
| --- |
| • Provides tangible learning goals
• Helps to address requirements and needs of Scrum Masters systematically |

Image Source: Freepik 2 (2025)

Prioritisation of Agile Coaching competency areas: interview results

Competency area	Value
Communication	89 *
Self Mastery	88
Agile/Lean Practitioner	72
Serving	62
Facilitating	49
Coaching	46
Leading	46
Guide Learning	44
Transforming	44
Advising	32
Domain Knowledge	22

*Ordinal ranking system used

Source: own source

Agile Coaching Growth Wheel: Adjusted model based on the interviews

Gamification aims for meaningful game-like experiences – 'pointification' is not enough to encourage motivation
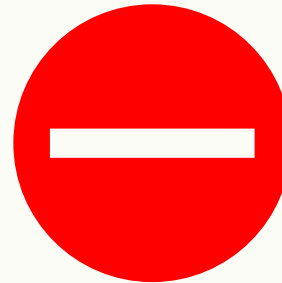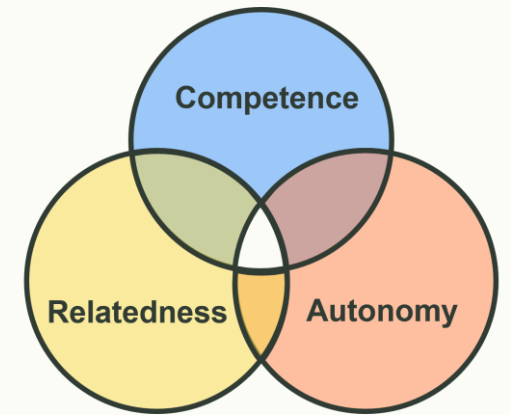
Create a game-like experience
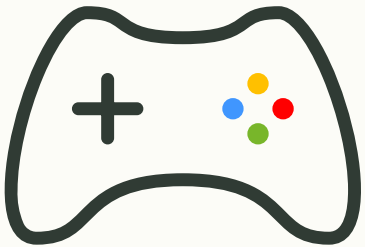
Think systemically, meaningful and experientially

Avoid 'pointification' and one-size-fits-it-all approaches
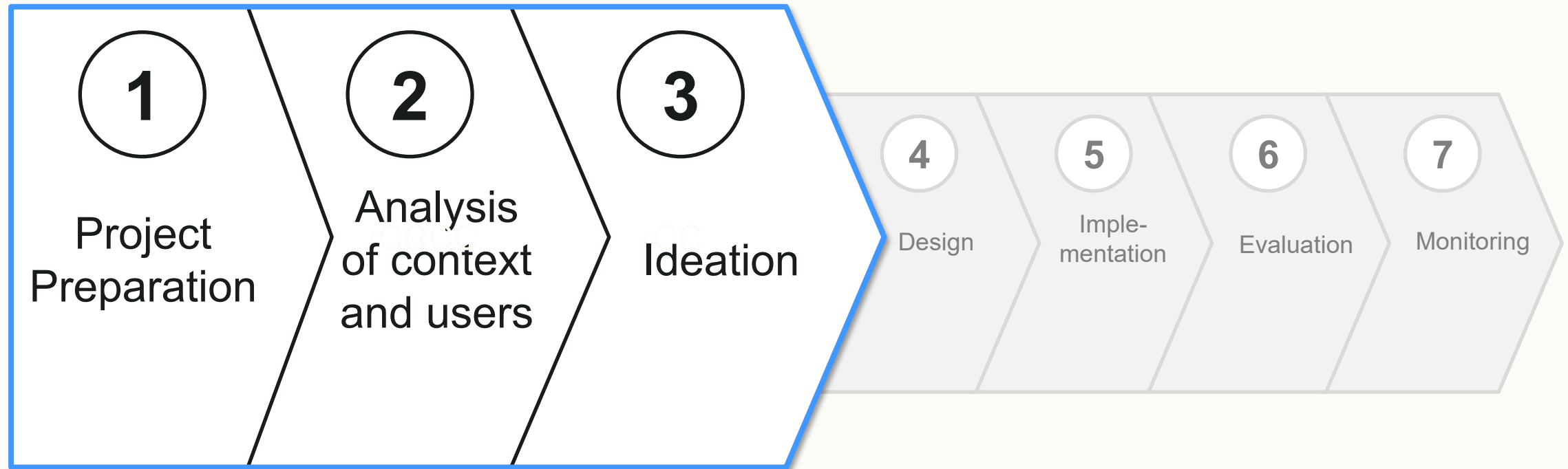
Motivation through combination of autonomy, competence and relatedness

Source:
Deterding, Khaled, et al., 2011; Nicholson, 2014; Landers et al., 2018; John et al., 2023; Huotari & Hamari, 2016; Deci, Edward L. & Ryan, Richard M., 1993

How to create a Gamification concept in seven steps:

Today's focus areas

| 1 Project Preparation | 2 Analysis of context and users | 3 Ideation | 4 Design | 5 Imple-mentation | 6 Evaluation | 7 Monitoring |
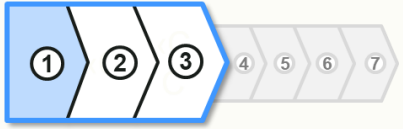
Clarity first, Gamification second
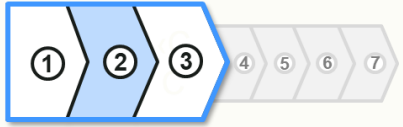
Project Preparation

- Define measurable goals

- Gamification Go/No-Go

- Check need for prototype

- Secure stakeholder buy-in

- Create initial project plan

Our Goals

- Sustain motivation

- Steer engagement

- Achieve sustainable knowledge

- Design for Personas

Source:
Hunter & Werbach, 2020; Morschheuser et al., 2018; Herzig, Strahringer & Ameling, 2012; Schmidt, Brosius & Herrmanny, 2015

Scrum Masters prefer cooperative, practice-based mechanics and meaningful elements
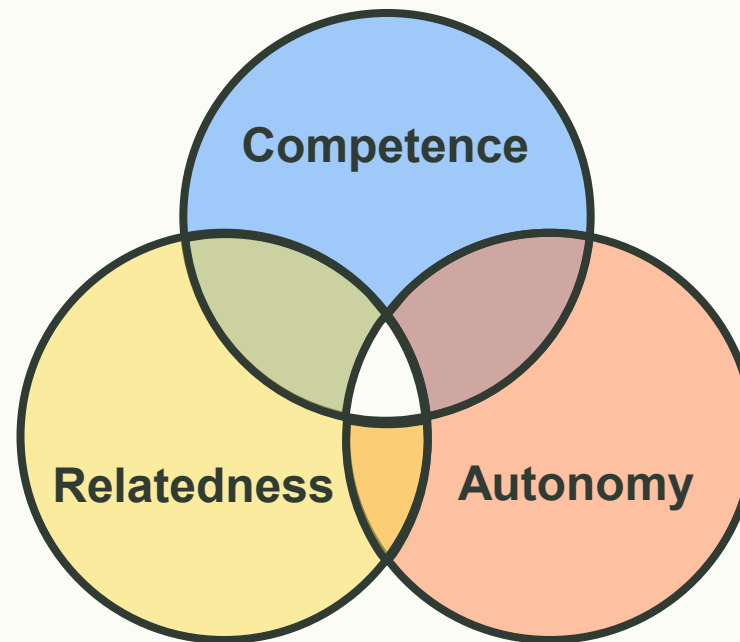
Difficulty ramp & unlocking (baseline → advanced)
Progress feedback (XP bar + reflection of interaction)

Co-Op assist & mentoring
(social-invite)

Community Building
(no leaderboards or comparison)
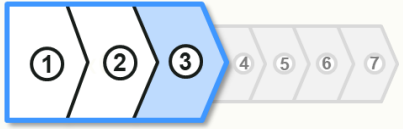
Gaining XP through mentoring

Skill trees & quests
(T/Pi-shape choice)

Focus tokens
(limited, guide priorities)

Option to redeem XP
(e.g. learning time, trainings)

Source:
Kim, 2014; Bjork et al., 2013; Busch et al., 2015; Morschheuser et al., 2017; Krath and Von Korflesch, 2021; ScrumAlliance & Business Agility Institute, 2023; own research

Embark on your personal learning journey, invite a mentor, or exchange your XP

Levels and skill trees enable individual learning paths – based on basic skills, with increasing difficulty
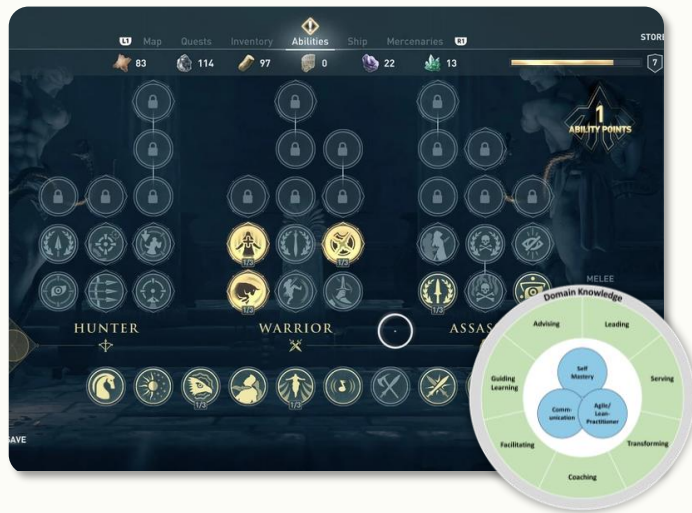
Integrate redeemable points, XP to unlock e.g. trainings. Limit the amount of token to encourage focus

Advanced mentors serve as multipliers for exchange & growth. Support novices with specific challenges & reflection

Image Source: Assassin's Creed Wiki, Ubisoft
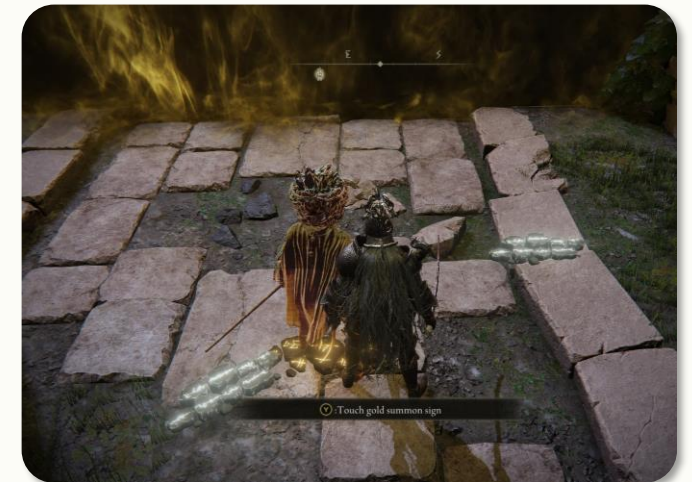

Image Source: Starbucks

Image Source: PC Gamer, Fromsoftware

Leveraging AI to facilitate real-time mentoring and collaborative sparring

- 24/7 assistance

- Support preparation

- Practice with simulations & feedback

- Virtual mentor for reflection

! **Please note in context of AI**:
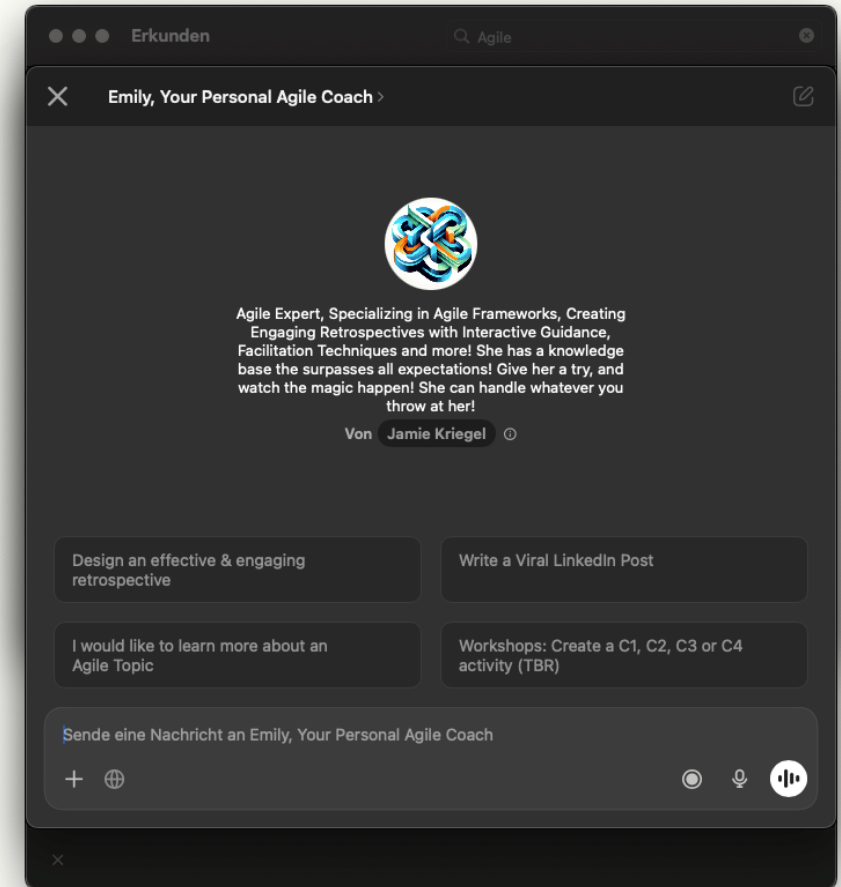Data protection, possibility of errors and ultimate responsibility lies with the user

Image Source: ChatGPT, OpenAI, Jamie Kriegel

Summary: Design for meaningful Gamification – Goals, context-aware & user-driven game elements

- A valuable approach within a blended learning strategy

- Define the required competences

- Goals & users first

- Possibility to define focus areas

- Community is more valuable than points

- AI can be a helpful tool when a mentor is not present

From research to practice

Image Source: Quest for Scrumlight (2025)

Have you ever learnt something about your business from a game?

Would you like to get in touch with us?

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https://www.linkedin.com/in/olya-ee

Backup

Back Up Slides:

Competency area is a broad area that the skills of Agile Coaching are categorised into. (Carter, et al., 2023)

Self-mastery implies investing in yourself through reflection, learning, and caring for your well-being, and it starts with your emotional intelligent relationship with yourself and others. (Carter, et al., 2023)

Agile and Lean Practitioner is about understanding Agile and Lean frameworks and principles, incl. the practices, underlying principles, and values (mindset) and being able to apply this knowledge and mindset and apply it with real teams, in real organizations. (Carter, et al., 2023)

Motivation is the driving force behind commitment, participation, performance and changes on behavior

Intrinsic
over
extrinsic motivation
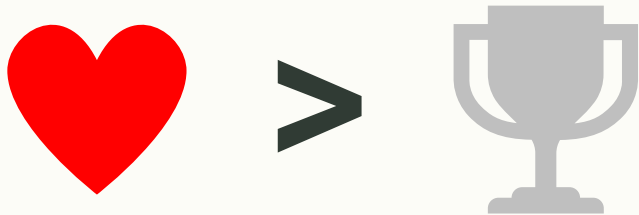
Motivation through combination of
autonomy, **competence** and **relatedness**
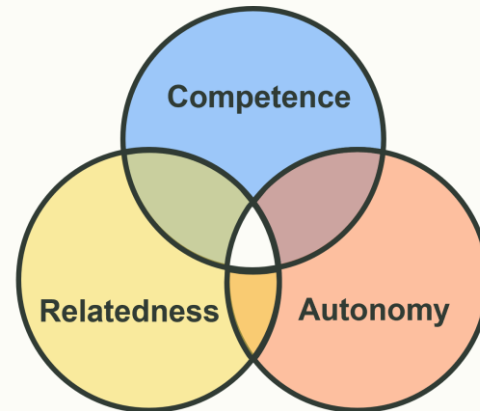
Engagement improves performance

Source:
Sailer, 2016; Seaborn & Fels, 2014; Wesseloh & Schumann, 2019; Ryan, Rigby & Przybylski, 2006; Mora et al., 2018; Huotari & Hamari, 2016; Deci, Edward L. & Ryan, Richard M., 1993

Interviewed Scrum Masters are intrinsically driven and practice-first learners

Role Motivation
- Intrinsically motivated, enjoy working with people
- Extrinsic motivation → not relevant

Values & Principles
- Openness, courage, respect, focus, commitment
- Willingness to learn, (self-)responsibility, adaptability

Positive & Negative Learning Experiences
- \+ Interactive, experiential, communities, storytelling
- \− Lecture-style teaching, certification focus, no scope for experimentation

Learning Goals
- Role development over career advancement
- Confidence in the role, (self-)effectiveness
- Connecting knowledge

Learning Attitude & Definition of Success
- Agile Mindset, intrinsic motivation to learn
- Success means practical application and visible progress

n = 9

Levels and skill trees enable individual learning paths – based on basic skills, with increasing difficulty

- Fix the basics first!

- Earn tokens for levelling up and unlock new learning paths.

- Tokens are limited at the beginning to encourage focus (T/Pi-shape).

- The skill tree and content are based on theAgile Growth Wheel.

Image Source: Assassin's Creed Wiki, Ubisoft

Advanced mentors act as multipliers for exchange. They support novices with specific challenges

- Experienced users coach novices

- Novices can activate a social invite when faced with challenges in their work

- Motivates both mentor and mentee alike

- A reward for the mentor in the form of redeemable points is conceivable.

Y :Touch gold summon sign
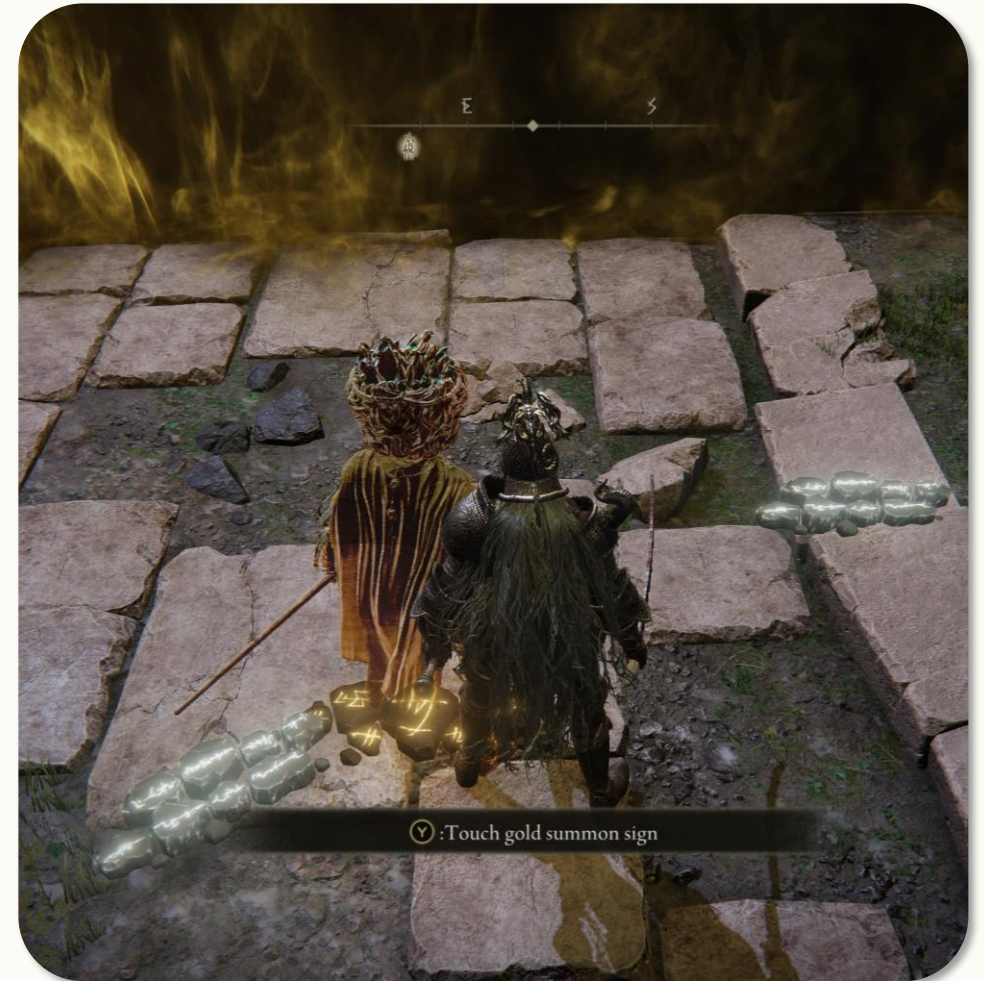
Integrate meaningful points, XP and tokens into your concept

Limited tokens allow free choice – and encourage focus.

- Onboarding before unlocking full content

- Basic lessons as mandatory gate

- Unlock relevant content for the user based on progress made

- Token limit encourages focus (T/Pi-shape approach)

Use XP to unlock additional training opportunities

- Redeemable for external training courses/learning or conferences

- Meaningful instead of useless trophies

- Consider costs/benefits and long-term budget

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