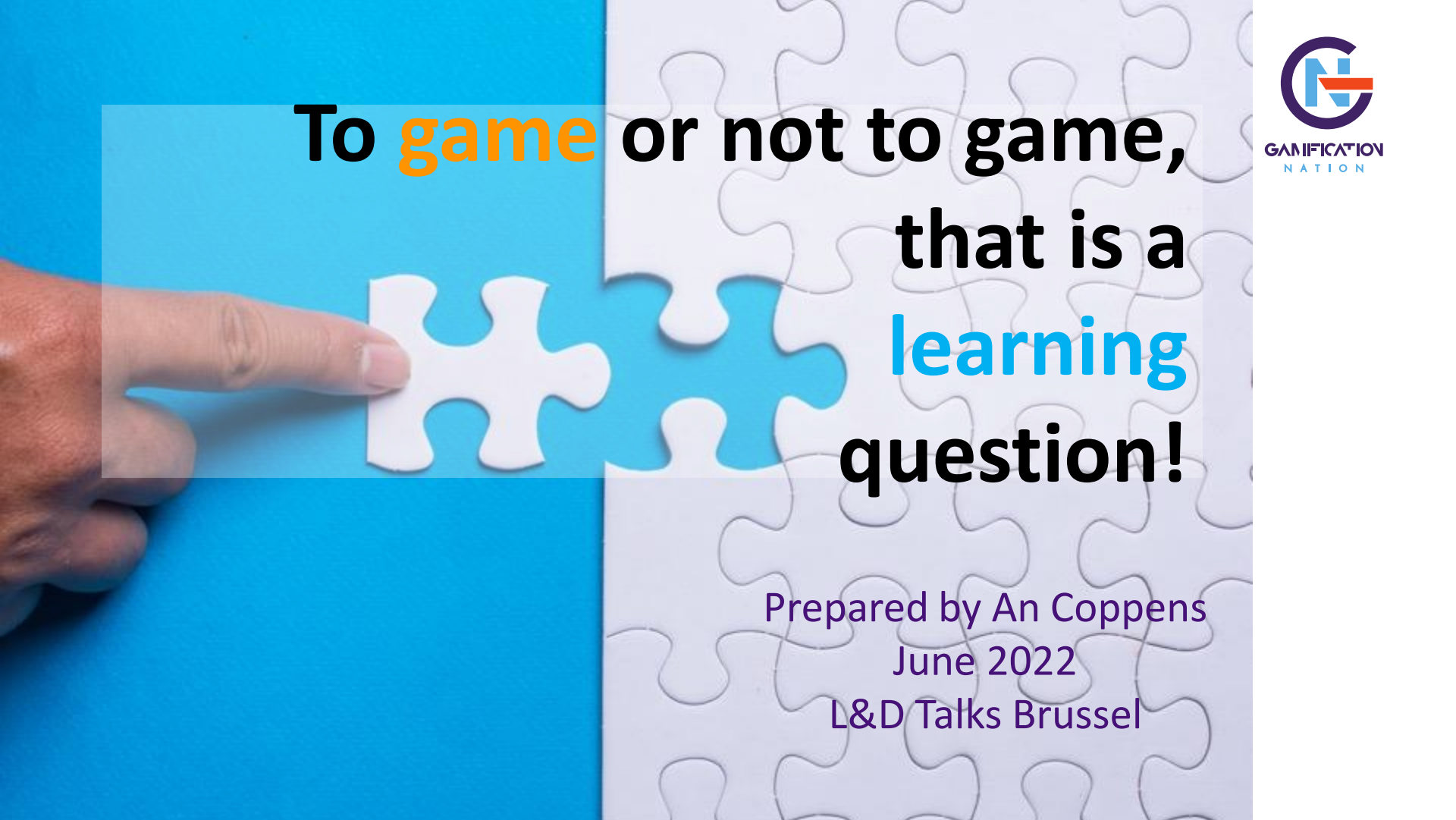




To **game** or not to game, that is a **learning** question!

Prepared by An Coppens
June 2022
L&D Talks Brussel

When is something a game and when is it gamification?



Gamification

- Gamification is the application of game dynamics, game psychology and game mechanics to non-game situations and applications
- In other words, you have a process (learning) and people continue to stay engaged in the process with game elements to aid their journey.

Game

- Games are a series of obstacles players voluntarily choose to overcome. They have a goal, rules and feedback mechanisms.
- You step into a game environment and typically you need a debrief to extract the explicit learning opportunities

Social



Achievement



Immersion



Why do people play games?

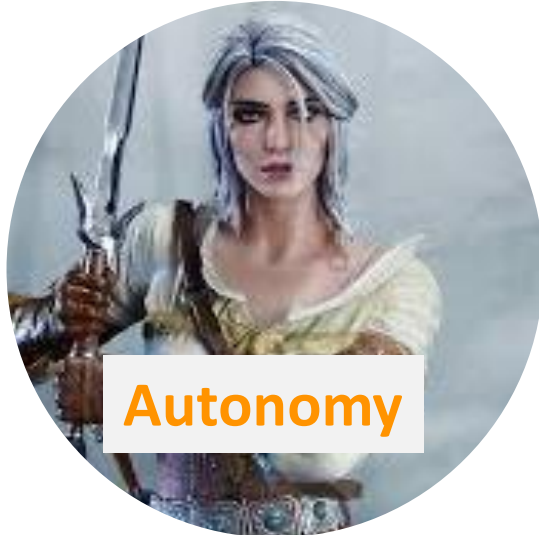
According to self-determination theory



Competence



Relatedness



Autonomy

What does gaming teach people?



Problem solving
Resilience



Strategy
Critical thinking



Team work
Communication
skills



It is a young person's thing?

Who is playing?

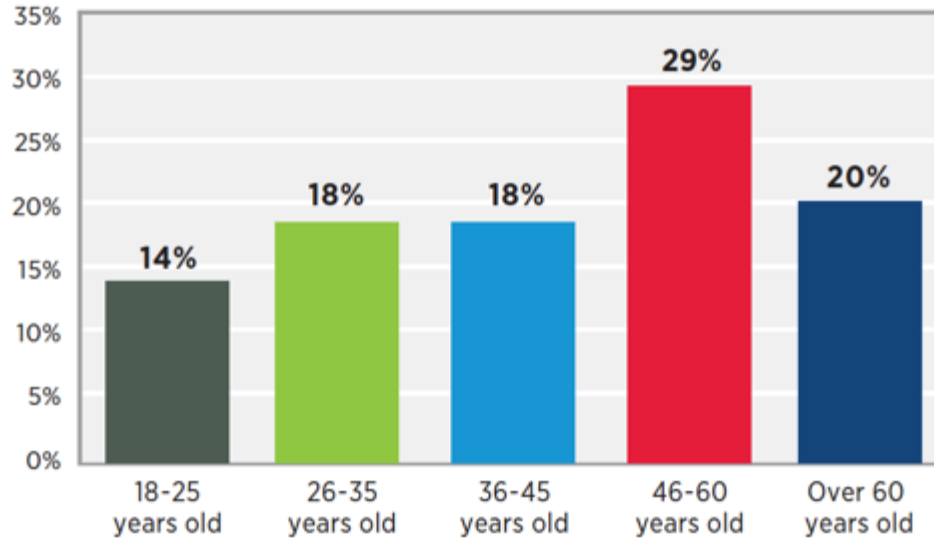
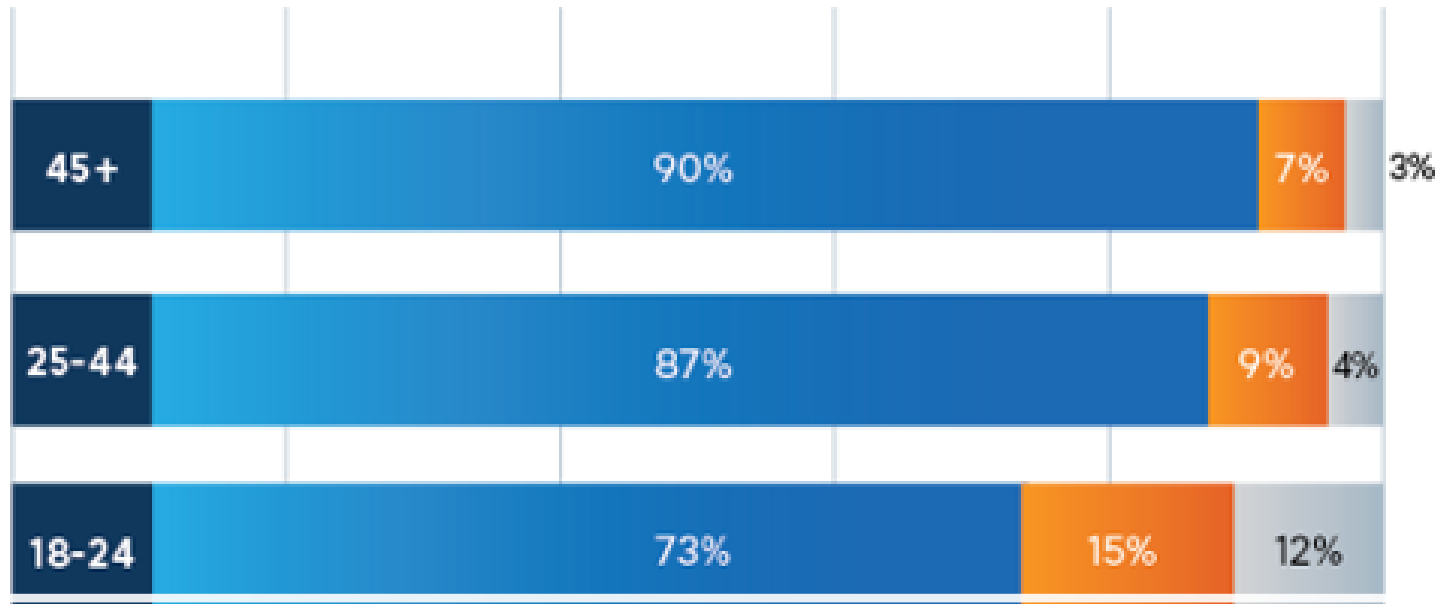


Figure 43: How old are you?

AGE vs GAMIFICATION ATTITUDE



Will people like it?



What kind of gamer?

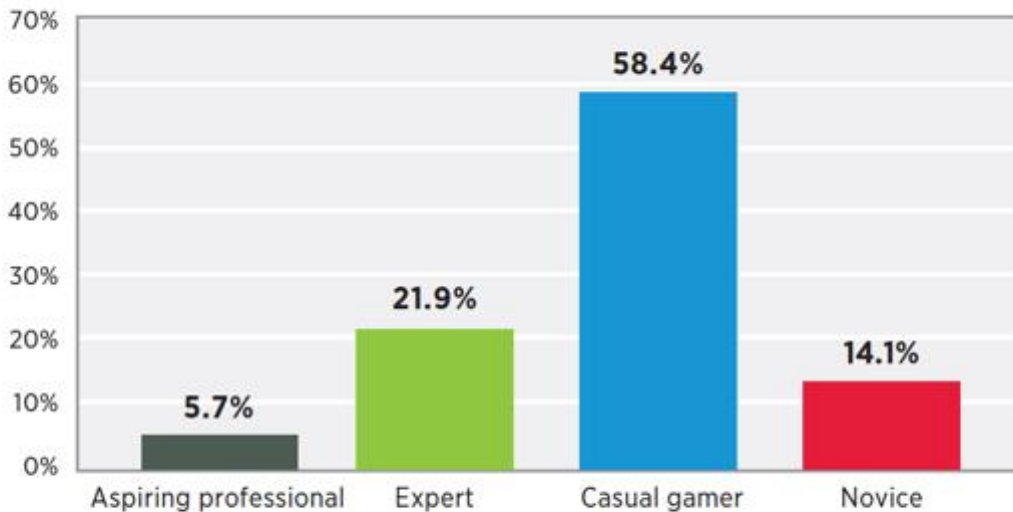
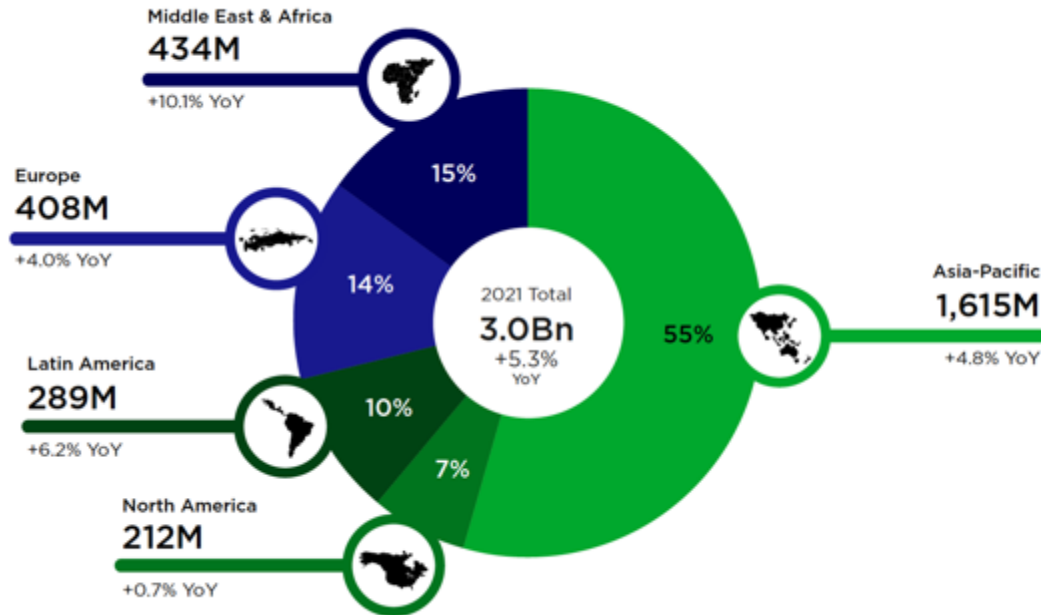


Figure 42: Gamer Type

Who plays more games?



Report by Newzoo 2021

Why the growth of gamification and serious games?



Games test ability to overcome obstacles



It is the language of young people all over the world



Games transcend diversity barriers



During the pandemic it was in the top 3 activities across all age groups

A close-up photograph of a tiger's face, focusing on its eyes and the stripes on its fur. The tiger has greenish-yellow eyes and is looking directly at the camera. A semi-transparent white rectangular box is overlaid on the upper part of the image, containing text.

Game designers zone in on a specific player and do whatever they can to create the most engaging game for **that player**



You need to know
how your players

Understanding the players





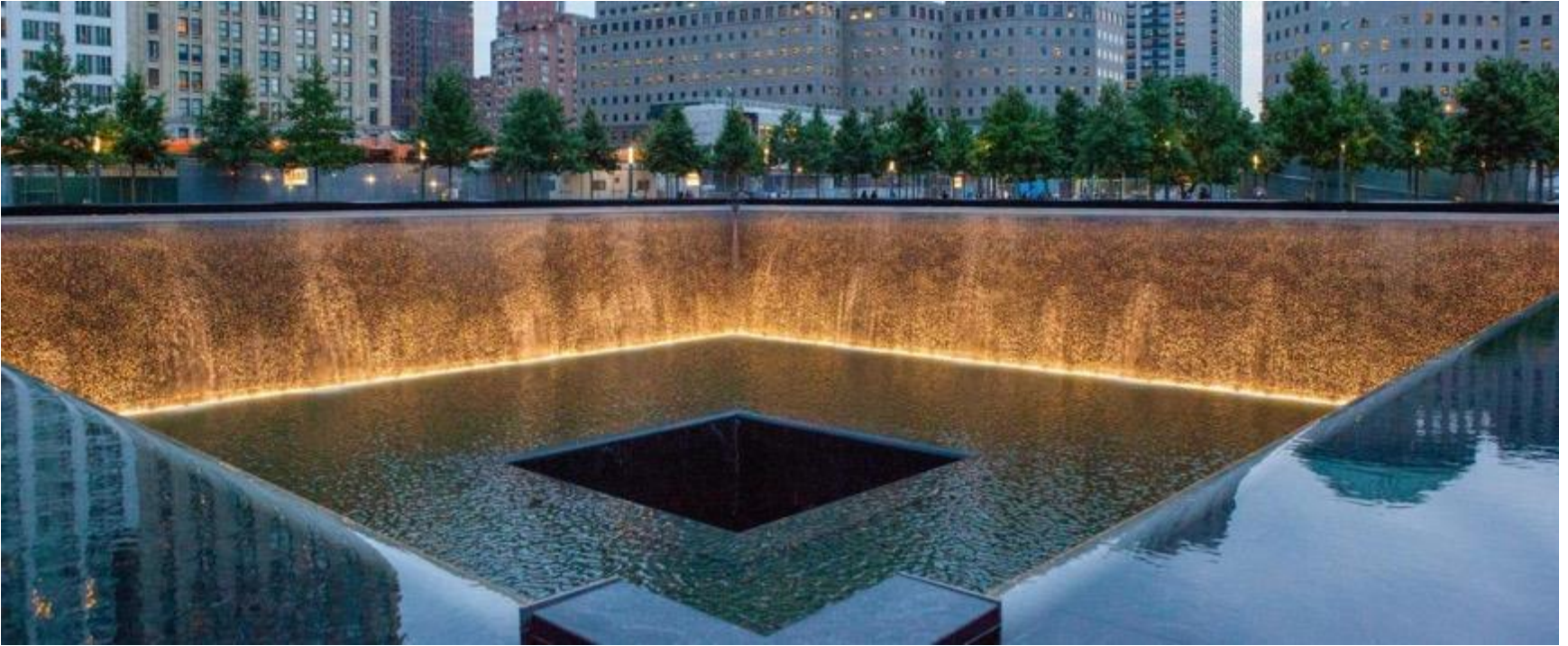
GAMIFICATION
NATION

“Game designers are
obsessed with creating
emotionally intense
experiences”

Jane Mc Gonigal

What about learning?

Memories are a curious thing...

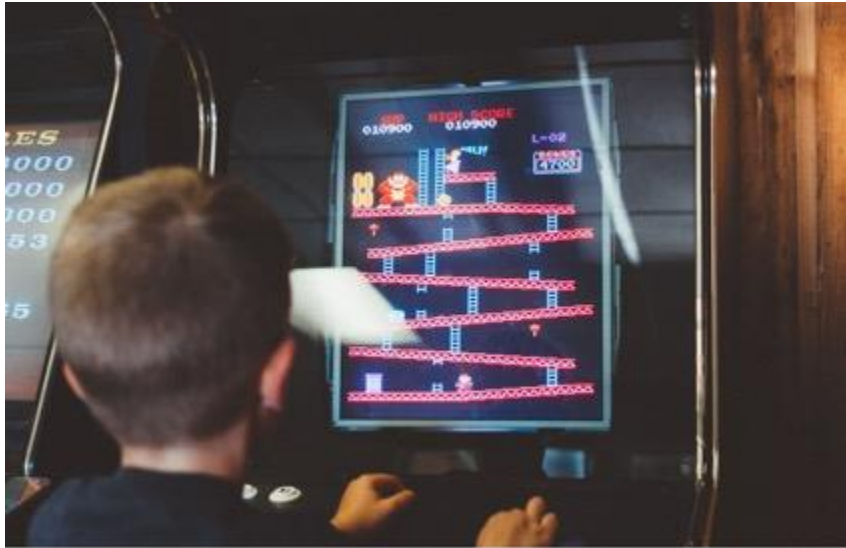


What did you have for breakfast?



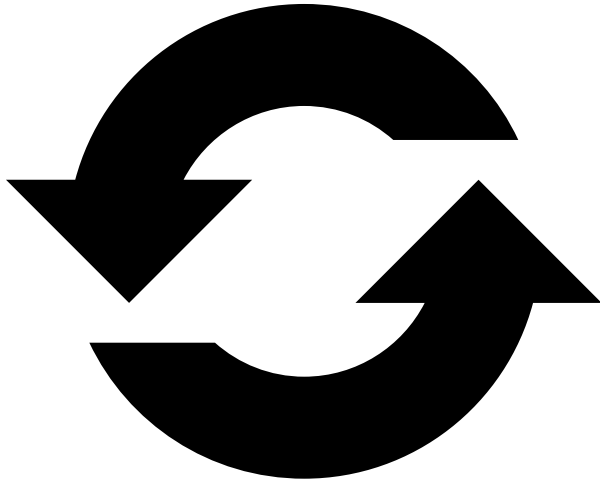
How often do you change this?

What do these games have in common?

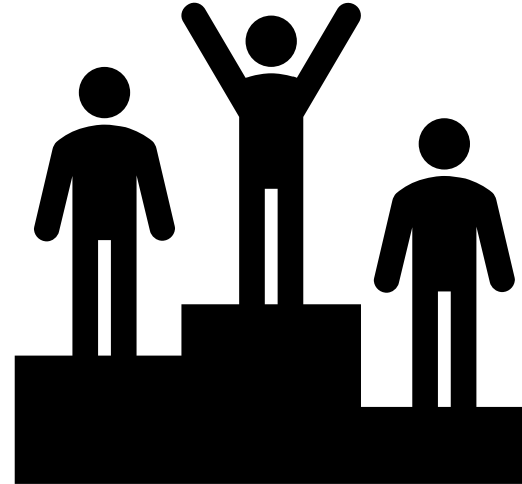


Games are often played more than once

Practice & repetition reinforce learning



Winning and losing teach us things



What is cognition?

The mental action or process of acquiring knowledge and understanding through thought, experience, and the senses



Cognitive behavioural science and gamification



- Rewards for behaviour that is desired
- No rewards for undesired behaviour or even punishment



GAMIFICATION
NATION

Social cognition

Responding to emotion-laden stimuli

Emotion Recognition

Identifying emotions in facial expressions

Emotional Bias

Information processing biases for positive/negative stimuli

Executive function

High level thinking and decision making

Mental flexibility

Ability to adapt thinking and behaviour

Planning

Strategic problem solving

Working memory

Strategy

Response inhibition

Ability to suppress inappropriate responses

Memory

Short-term or long-term storage of information

Episodic memory

Associating an event with a place and time

Working memory

Holding and manipulating information in mind

Recognition memory

Recognition of visual, object and spatial information

Attention

Attending to specific information and ignoring others

Sustained attention

Continuous performance and visual sustained attention.

Psychomotor speed

Detecting and responding to the presence of a stimulus

Choice Reaction Time

Choice reaction time, movement time and vigilance

PROVE IT!

THE LEARNING GAMIFICATION FRAMEWORK BY AN COPPENS



Why are they learning?

LEVEL 1
Content gamification

LEVEL 2
Systems gamification

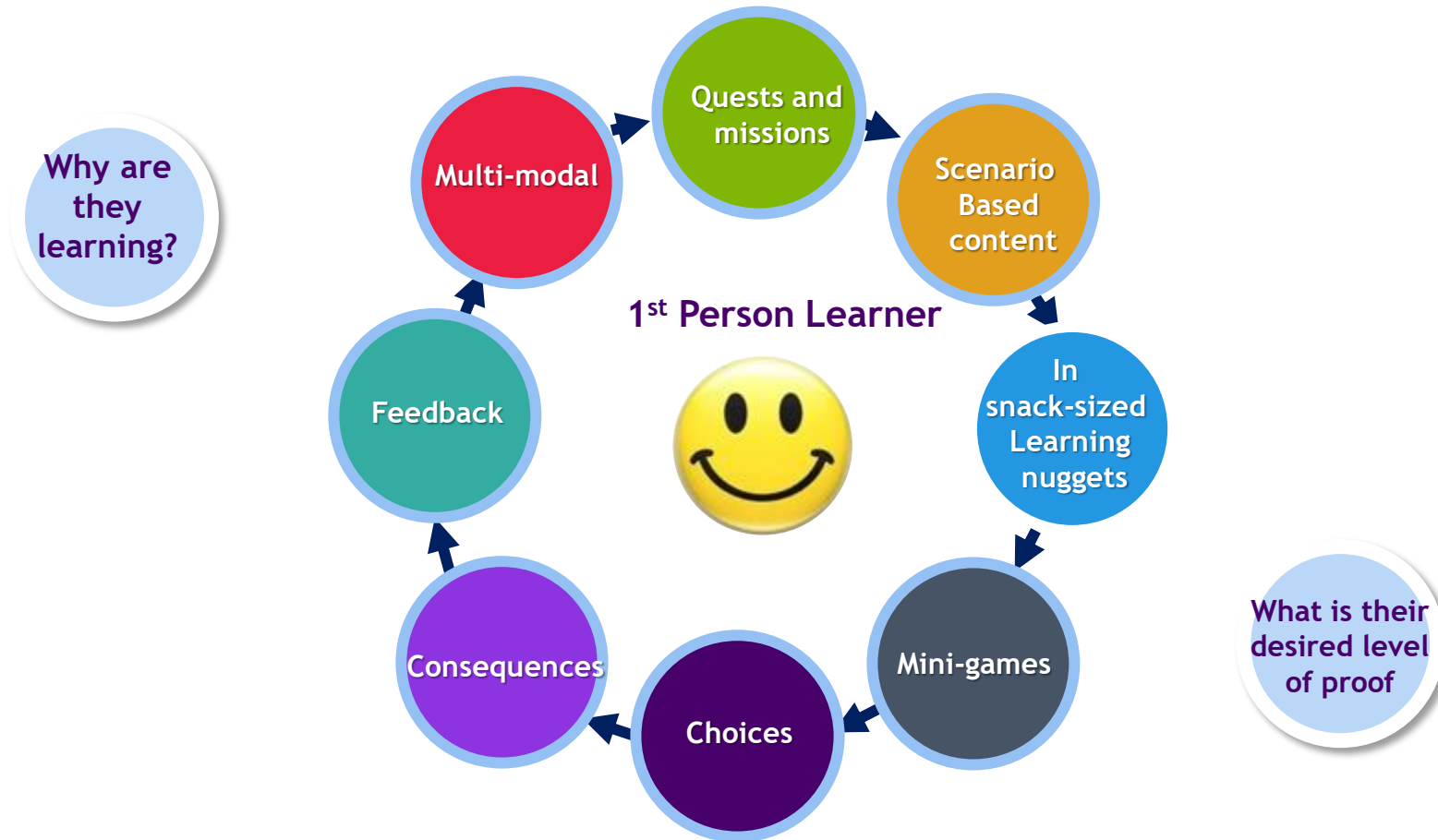
LEVEL 3
Evidence of learning gamification

What is their desired level of proof

Source: An Coppens (2014)
www.gamificationnation.com

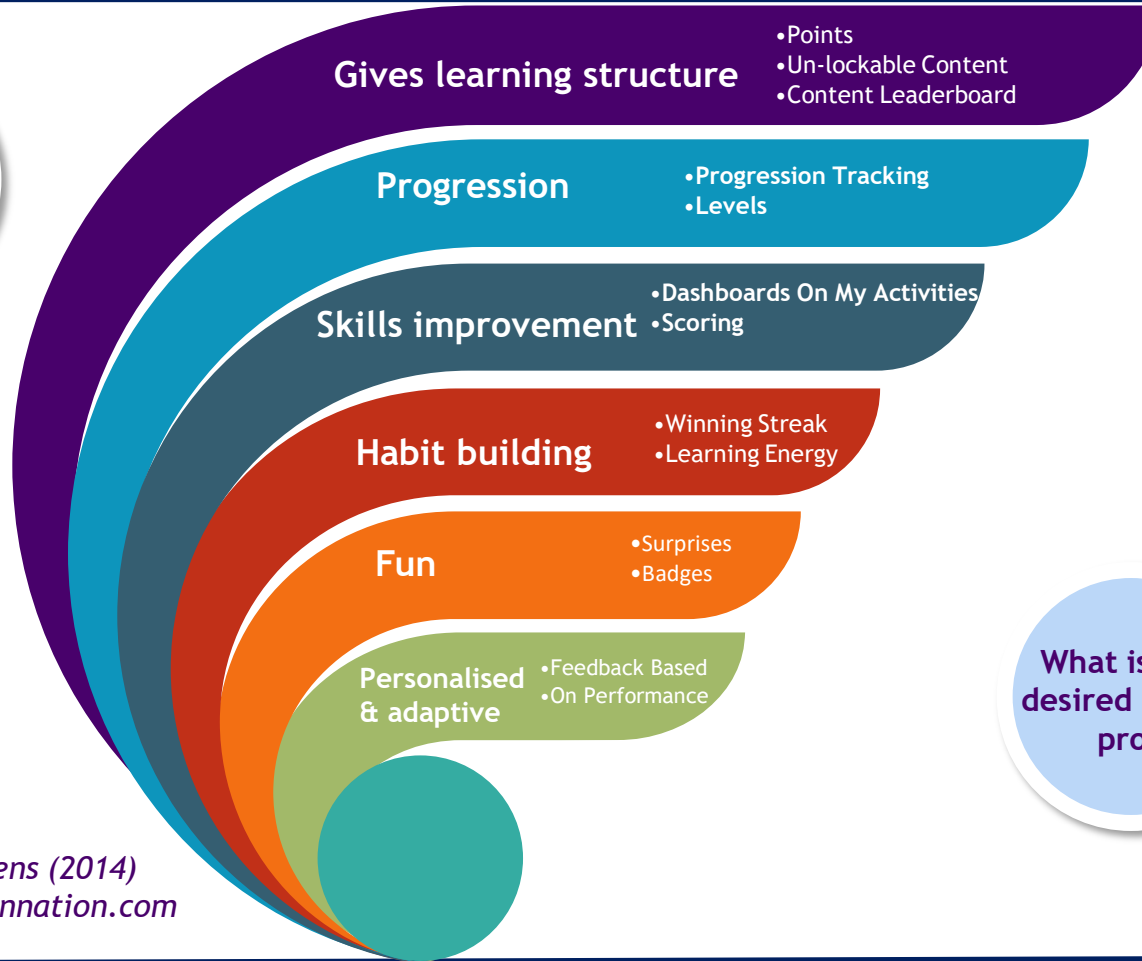


LEVEL 1 - CONTENT GAMIFICATION



LEVEL 2 - SYSTEMS GAMIFICATION

Why are they learning?



What is their desired level of proof

LEVEL 3 - EVIDENCE OF LEARNING GAMIFICATION

Why are they learning?

Source: An Coppens (2014)
www.gamificationnation.com



What is their desired level of proof

PROVE IT!

THE LEARNING GAMIFICATION FRAMEWORK BY AN COPPENS



Why are they learning?

LEVEL 1
Content gamification

LEVEL 2
Systems gamification

LEVEL 3
Evidence of learning gamification

What is their desired level of proof

Source: An Coppens (2014)
www.gamificationnation.com



When to use gamification or not?

Not useful when

- Learner wants a quick fix
- Emergency
- Checklist is more appropriate
- A learner has no base knowledge

Useful when

- Creating an experience matters
- It serves a clear purpose
- Retention of knowledge is important
- On paths to mastery
- Nudging will lead to implementation

Play is the highest form of research

Albert Einstein



Guess the game?



GAMIFICATION
NATION



Guess the game?



Guess the game?



GAMIFICATION
NATION



Guess the game?



Guess the game?



GAMIFICATION
NATION



Mixed reality



**To game or not to game, that
is a learned question:
You choose what is right for
your learners**

Thank you