# SERIOUS GAMING

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# LET THE GAMES BEGIN

Games can be used for more than just entertainment. Serious Gaming or Applied Gaming combines game craft technique with business, leadership, culture, behavior, or social issues. In Serious Games, you can search for boundaries, experiment, change strategies, and make mistakes without immediately incurring real-life consequences. In this way, you practice skills and build experience with the new behavior, which increases the self-confidence to show this behavior in reality.

## What are Serious Games?

Everybody recognizes the excitement or frustration of playing a board game, for example, Ludo with friends or family. Games are fun, relaxing, enjoyable but can also be exciting or even frustrating. Games are an excellent pastime, but they can also teach us certain things.

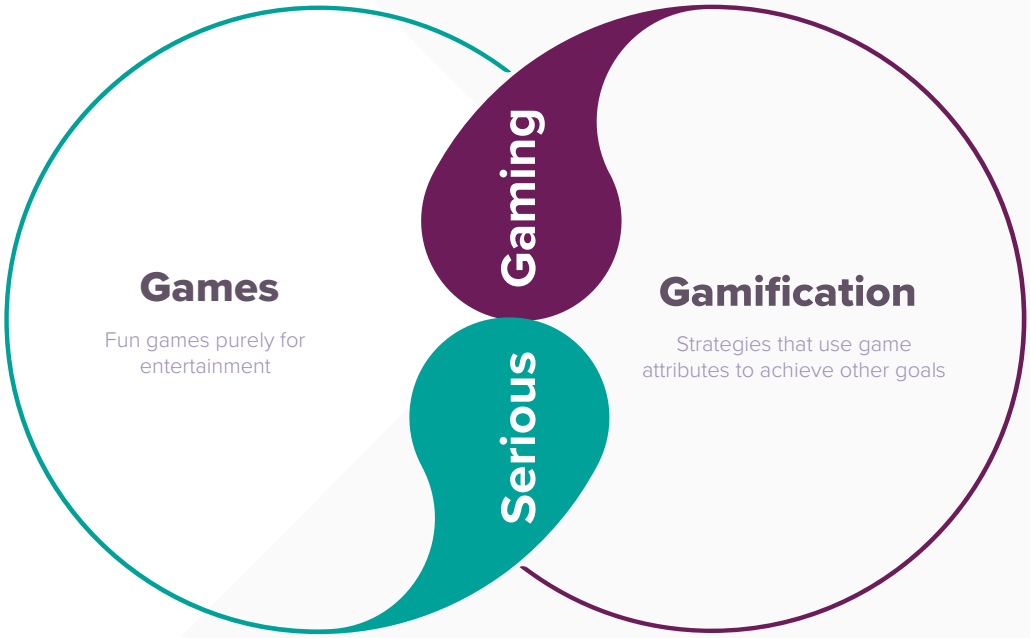
Even regular (video)games contain Serious Gaming elements. For example, when you play a video game, you mainly train your hand-eye coordination. A chess game helps you to develop and try out your strategic skills by thinking steps ahead. Because it is enjoyable and challenging, you probably don't even notice that you are learning.

Serious Games are games that don't have entertainment as their first goal. They are non-entertainment games with a learning purpose, such as knowledge or skills. In Serious Games, something is conveyed or practiced in a challenging way by adding game elements. They are used more and more in education, health care, defense, and business. Games like this imitate reality as realistically as possible. Participants can take risks, make mistakes, and experiment in a safe learning environment such as a video game, role-play, or simulation.

## Gamification vs. Serious Games

What is the difference between gamification and serious games? Gamification leverages game mechanics such as points, levels, badges, and achievements to create engagement and interest. Whether your challenge is to adopt a new way of working or processes, behavior, or increase productivity, gamification is a potent tool to motivate, reward, and engage people. It stimulates players towards a particular goal or positive behavioral change in a fun and engaging way.

Serious Games bring powerful stories to life around paradigm concepts such as leadership agility, business agility, multidisciplinary teams, empowerment, and more. By simulating reality, Serious Games create an experiential learning experience.




They place people in a risk-free environment and support their engagement in an authentic experience that contextually demonstrates benefits and consequences. Serious Games can have different forms, such as simulations, role-plays, card games, board games, and escape rooms. There are three types of Serious Games:

- problem-based learning puts the player in the role of problem solver
- trial-and-error is useful to get on-the-job training without real-life risks
- scenario-based games teach many aspects in a short period by creating virtual scenarios (6 months à 1 hour)

## Skills

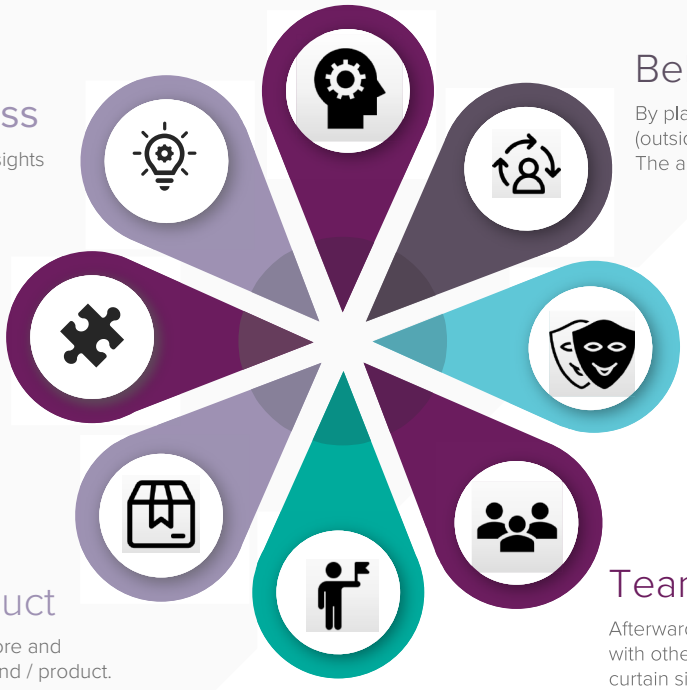
Training games in which people.
Afterwards you master something (better) that you can use outside the game.

## Behavior

By playing you will behave differently (outside the game).
The activation of behavior.

## Awareness

Afterwards you have new insights



## Role play

Afterwards you will know whether a person fits a position, learn about how to handle a certain situation.

## Knowledge

Afterwards you have new insights about a specific topic.

## Product

Afterwards you like something more and you feel more connected to a brand / product.

## Teamwork

Afterwards you will know how to collaborate with other people and wat is most effective in a curtain situation.

## Leadership

Personal and public leadership.
How to lead yourself and others.

### The Goal of Serious Games

It is not new that you can motivate, connect, and challenge people by playing games. Companies and employers are increasingly using Serious Gaming for a variety of issues in the workplace. The goals of Serious Games can be many. It may be something small or a life-changing experience. Usually, it will fit in one or more of the following categories.

The great thing about Serious Gaming is that you can get better at something while it doesn't have to go right the first time. Just play again or practice a particular situation.

### The Impact of Serious Games During Transformation

Serious Games are designed for impact, not entertainment. They change the way you do things. The effect of Serious Games is measured by how much is learned, for example, by measuring:

- In-game score: Small steps during the game are measured. For instance, Agile theory elements.
- Before-after test: How much knowledge or skills do you have before and after playing the game. What knowledge and skills did you learn, and can you apply them in a controlled environment?
- Deep learning test: Can you apply the knowledge or skills in a different environment than the controlled Serious Game environment.

### Serious Game Myths

There are many myths about Serious Games. Let's have a look at three.

#### Serious Games Are Played on a Computer

Many people think that Serious Games can only be played with computers. However, the concept already existed before the computer age and has grown through the use of computers. An excellent example of this is a war game in which soldiers learned combat tactics without casualties. Another is Lego® Serious play [2], in which a problem is solved together by the group by creating a 3D model using Lego® bricks. The interactive process then leads to solving a problem and serves as a basis for group discussion, knowledge sharing, problem-solving, and decision-making.

#### It Looks Simple

Some serious games look simple at first. This simplicity is usually their strength as it surprises participants. Once they are playing, it is quite challenging to get it right. And before you know it, people get serious about the game. Think of the ballpoint game. The Simulation is a simple production process.

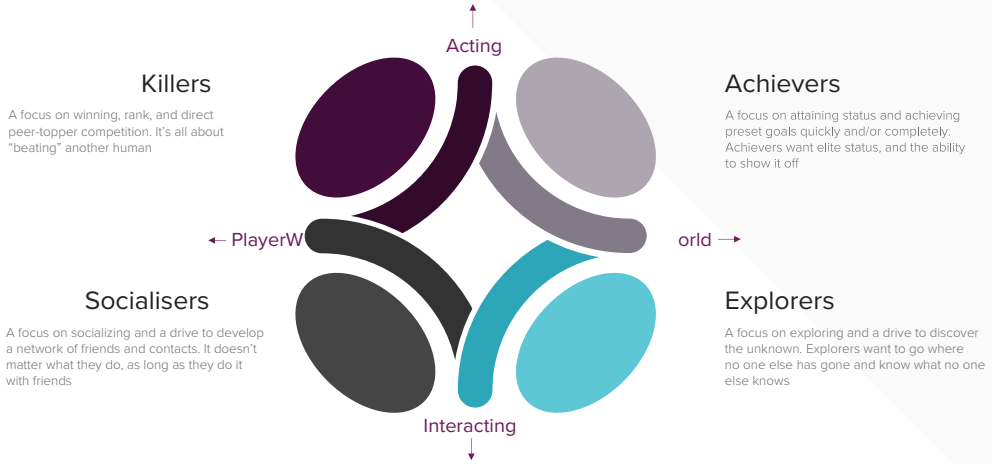
Throwing the ball is not the challenge, but cooperation and listening to each other under stress is.

Another example is the construction of a spaghetti tower from marshmallows and spaghetti sticks. The beginning is easy, but the higher it gets, the more collaboration is needed. It also shows the different stages of group formation and their associated behavior.

Finally, our Accelerate simulation game [3] we created helps people collaborate creatively in a new way of working by using pixels. The mechanics are relatively simple, but the interaction to get stakeholders to collaborate with other teams is all the more complicated. Serious Games often look simple because they focus on the game's goal rather than the mechanics.

## Behavior During a Serious Game Is Not Real

Players sometimes question the behavior during a Serious Game. The situation is not real, or this is a situation the player would never encounter or try to avoid. This is understandable because a game depicts a situation that is not real or that rarely occurs. The player takes part in a quest or builds something like a theme park, rocket, or has a conversation with a board of directors when this is not actually the case.




The interesting part is that the behavior in the false situation is real. The player plays from his own mindset and is not suddenly someone else. In the beginning, it may feel like it is not real, but after a couple of interactions, the natural behavior pops up, especially when the player is put in a challenging and stressful situation. So the behavior says something about the player. Why is the player taking a risk or does not communicate in a certain way even if the player knows that is not the most effective way.

The Bartle player model [1] describes four areas of players in which the players usually act. Is the player taking a risk? Does he play solitary, or does he work together a lot? Fight or flight? Embrace change or being rigid? These are all qualities that come from the person himself. An action always says something about the person who does this.

When players are challenged, they forget it is a game and show their real behavior in the game. In our experience, a player's behavior in the game often predicts real-life behavior. Sometimes, when confronted with their in-game behavior, players look for "the fault" in the environment, in this case, the game.

We experienced an example of this during the job application of a candidate. A part of the intake is a Serious Game with role-playing. The candidate has been placed in a real customer case situation, in which the candidate has to complete it further from a specific point in time. At first, it feels uncomfortable for the candidate, but you put yourself in the customer's position as an assessor. From that moment, you only deal with the candidate from that position. There is no going back as a candidate, and you will have to participate in the role play. If the behavior shown is unsuccessful, then the case is referred to as not being real. However, around the role-play, the candidate demonstrates the same behavior without being aware of it.

## The Future of Serious Games

The world becomes more complex, and we face more paradigm shifts in a shorter period of time. To keep up this pace, we need to adopt these changes. Just gaining some knowledge isn't enough due to the complexity of these changes. Simulation can only overcome the skills, social, and leadership challenges. Serious gaming, therefore, becomes essential in creating a whole new intellectual and practitioner workforce as well as scenario, market, and organization simulation.

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## References


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