Serious Games

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Serious games

Content

- Why?
- What?
- How?
Serious games

Content
- Motivation
- Definition
- Classification
  Close-ups
  1. Edutainment
  2. "Simulatainment"
  3. VR hardware
- Questions

Today’s focus

Why? ➔ Motivation
- Contextual issue
- Evolution
- Main markets
**Motivation**

**Contextual issue**

**ISSUE**
- Too many information

**SOLUTION**
- New technologies
  - New ways to learn

**Evolution**

- Strong increase
- Only official SG

**Evolution of the number of serious games**

http://seriousgamesmarket.blogspot.com/
### Motivation

#### Main markets
- 3 markets available for serious game
- Healthcare
- Education
- Elderly people

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### What? Definition
- Two words
- Leading users
- Ultimate goals
- SG receipe
### Definition

**Two words (1)**

« Serious »

- Thoughtful
- Grave
- Solemn
- Stern
- Somber
- Grim
- Severe

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**Two words (2)**

« Games »

- Pastime
- Diversion
- Sport
- Amusement
- Entertainment
- Recreation
**Definition**

**Leading users**

To obtain

- New knowledge relative to a serious topic
- New skill relative to a serious knowledge
- New behavior relative to a serious skill

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**Ultimate goal**

- Be as engaging as a main-stream game
- Lead to new skill set development
- Lead to new individual knowledge development
- Promote reinforcement of new behavior past the game play

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*One day I’ll teach theory of relativity and market stock exchange just with games!*
How? ➔ Classification

- SG ingredients
- Keep in mind
- Close-up
  1. «Edutainment»
  2. «Simulatainment»
  3. VR HD for SG

Classification

SG recipe
Main ingredients have to be defined

- Theory
- Content
- Game design

⇒ Not an easy task

Heart of serious game

Ingredients

Much more than a game.
Classification

Keep in mind
Define

- A goal
- A field
- A public

General purpose

- Broadcast a message
  - For education
  - For information
  - To persuade
- Or train
  - Cognitive
  - Physical
- Or promote the exchange of data

Field of application

- State & government
- Military
- Healthcare
- Education
- Private comp
- Religion
- Art & culture
- Ecology
- Politic
- Humanitarian
- Media
- Advertising
- Scientific research

Target audience

- General public
- Specialists / professionals
- Students
- Young / elderly people

Classification close-up

1. «Edutainment»

Definition

- Edutainment
- also Info-tainment
- "education designed to educate as well as to amuse"
- Public: mainly K-12

Edutainment: a Trojan Horse for learning
### SG for learning

**Helping for**
- Not to be afraid of Numbers
- Practicing foreign languages

**Mia’s Language Adventure.** Players get to practice their French or Spanish language skills as they help Mia finding a missing person.

**The Number Devil**
Robert, who thinks math is a nightmare subject until the Number Devil appears in his dreams and shows him a new way to think about numbers.

### Health related SG (1)

**Training healthcare SG**
- Diagnostic
- Surgery

**Surgery**

**Diagnostic**
2. "Simulatainment"

### Health related SG (2)
Forecast threats
- E.g. Pandemic sim.
  - Fighting against diseases
- Some games try to make a perfect threat
  - Killing all humans
- Then, potential threats can be identified and fight


### Training SG
- @ Renault – 2011
- Evaluate commercial skills of staff
- Not a « fun » SG
  - Sales can win prices
  - Or probably potential issues when failing

http://www.youtube.com/watch?v=uZOad9yaIc4
### 3. VR HD for SG

#### Virtual reality (VR)

Changing paradigm
- Permits new perspective
- Potentially offers simplest solutions to non-trivial issues
  - Powerful tool for SG
  - Expensive for development

![HMD](image1.png)  
![virtusphere](image2.png)

#### Pain fighter apps

- Patient's attention is taken up
- Dentist
  - Especially for kids

VR can help young patients going to the dentist

VR games for young burned patients

Young patient diverts his attention away from a painful medical treatment
Conclusion

Presented
- Solution for learning & training
- Motivating by involving people
- Changing point of view

HE-Arc
- Getting even closer to industry
- Motivating student
- Being on the edge of innovation
  ➔ A great opportunity!

Thanks! Questions?

- Interested by knowing more?
  ➔ http://www.youtube.com/
    ➔ with keyword «Serious game»