



GAME DESIGN AS A TOOL FOR RETHINKING THE MUSEUM EXPERIENCE

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INTRODUCTION

METHOD : GAMESTORM

RESULT

In **2015**, the Montreal Science Centre opened a new permanent exhibition on the human body.

To engage the visitors even more, we decided to leverage the power of *game design* to create an interactive web experience that would complement the physical exhibit.



The MSC hired an independent game studio, Affordance Studio, to develop this fun educational game experience. And the process began with a unique tool called the **GameStorm**.



GAMESTORM : USER-CENTRIC GAME DESIGN

is widely utilized throughout by video game designers to achieve several goals: brainstorm the project's mission, define the objectives, target users, cull game mechanics, develop the game narrative, and estimate costs for development and support.

THE TOOL

The Gamestorm Tool is a board game that different people with **different backgrounds** can use to create **one design vision**. At the end of the process, everyone not only shares one vision but also a similar **vocabulary** to use throughout the development process.

Gamestorm aims to empower non-game designers with **game design thinking**.

01 THE VISION

Define the project objective in one sentence

The MSC team wrote the following project objective: stimulate interest in epidemiology and raise awareness for health disasters so that the users can make good decisions during a major disaster.



THE KEY ELEMENTS

Select 3 core elements that will stand out in the game to make it a success

- Understand the makeup of a medical epidemic
- Identify the different decisions a public health organization will make during an epidemic (e.g. quarantine)
- Explain past Canadian epidemics and their containment

03 THE VERBS

Define the objectives for each key element. What are we aiming to do with this game exactly?

- Pique curiosity (about pandemics, Canadian history, and more!)
- Manage time and human action
- Learn (e.g. difference between virus and bacteria)



06 THE NARRATION

Define the genre, emotions, theme and "rabbit holes" to engage your users!

Our game could be described as a "scientific thriller graphic puzzle novel adventure game!" How would you describe your game?



THE GAME DYNAMICS

Find the right game dynamics that will appeal to users and support the game objectives

Going through the cards and after a little bit of brainstorming, we selected 6 game dynamics for the core gameplay (e.g. Easter Eggs, Puzzle Solving, Boss to defeat).

04 THE USERS

Describe the users that you are targeting with different game personalities (persona)

After talking with different potential users, we found that our users have the following profiles:

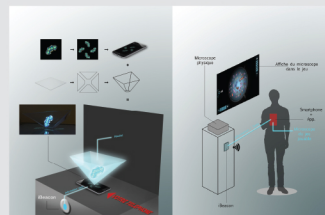
- Champion**: Want to put their skills to the challenge
- Explorer**: Want to expand and develop their knowledge
- Strategist**: Want to analyse and defeat a system



07 THE TECHNOLOGY

Determine how the game will be deployed and engage the museum visitors at the MSC

- Use his phone to scan the room and with the help of the iBeacon technology, he will discover areas with hidden viruses and collectable items that he can use in the web-based game.
- See what he has collected using the 3D holographic pyramid at the museum.
- Recreate the hologram outside of the museum (i.e. back at home) using a simple transparent plastic sheet.



HOW DO WE REDESIGN THE MUSEUM EXPERIENCE?

Games have the power to immerse us in new and engaging universes. By understanding your user's intrinsic motivations, using the right game mechanics and creating an engaging world, you will immerse them in an compelling experience that will not soon be forgotten.

We believe that this *playful approach* to design has helped to develop an engaging game that is perfectly suited to the user through a seamless integration with the traditional museum experience.

IT'S YOUR TURN TO PLAY!

Launch date : March 2017

