GO WITH THE FLO: GAMES, LEARNING, AND SUSTAINABILITY

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Abstract: There are approximately 800 million gamers in the world today, and this number is constantly increasing. What is it about gaming that is so powerful? And why do so many people in all countries and across all age groups want to immerse themselves in these alternate types of reality? In the midst of too many tragic and violent events with potential links to video games, a new field is emerging, one that attempts to use gaming as a way to do good. It is called Serious Gaming and its proponents want to take the best from gaming psychology and mechanics and apply it to educational, social and environmental topics.

Imagine the possibilities if we can harness the dedication, courage, perseverance, expertise and optimism that gamers show and use this resource to make the world a better place. And imagine if we combine it with the power of the digital medium to enhance how we educate our children, to increase the relationship between sustainable companies and their various stakeholders, to help NGOs develop more effective campaigns that create awareness and engagement...

Our agency has been working for the past three years on serious gaming and digital storytelling for companies, NGOs and organizations that are interested in exploring how this medium can create awareness, social connectivity, collaboration, and engagement, with the end objective for all being that it can help bring about valuable change.

Keywords: Games, Sustainability, Gamification, Engagement, Storytelling

PLAVANJE S TOKOM: IGRE, UČENJE IN TRAJNOSTNA SONARAVNOST

Povzetek: Na svetu je danes okoli 800 milijonov uporabnikov računalniških igric in število nenehno narašča. Zakaj je to igranje tako vplivno? Zakaj se tako številni ljudje v vseh deželah in iz vseh starostnih skupin hočejo utapljati v teh alternativnih oblikah stvarnosti? Sredi preštevilnih tragičnih in nasilnih dogodkov, ki so potencialno povezani z video igricami, se pojavlja novo področje, ki poskuša uporabiti igranje računalniških igric za dobre namene. Imenuje se 'Igranje resnih igric'; njegovi zagovorniki hoče uporabiti najboljše iz psihologije takega igranja in mehanike ter to uporabiti za vzgojno-izobraževalne, družbene in okoljske teme.

Predstavljajte si možnosti, če zmoremo zajeti predanost, pogum, vztrajnost, strokovnost in optimizem, ki jih kažejo igralci računalniških igric, da bi ta vir uporabili, da bi izboljšali svet. In predstavljajte si, kaj bi bilo, če bi to povezali z vplivom digitalnega medija, da bi okrepili svoj način vzgoje svojih otrok, okrepili povezanost med sonaravnimi podjetji in njihovimi različnimi deležniki, in/ali pomagali nevladnim organizacijam razviti bolj učinkovite kampanje, ki ustvarjajo zavest in angažiranje.

Naša agencija se je zadnja tri leta ukvarjala z resnimi igricami in digitalnim pripovedovanje zgodb po naročilu podjetij, nevladnih organizacij in organizacij, ki jih zanima, kako bi uporabili ta medij, da bi ustvarjali zavest, družbeno povezanost, sodelovanje in angažiranje, končni cilj pa je za vse, da s tem lahko pomagajo doseči spoštovanja vredno spremembo.

Ključne besede: igre, sonaravnost, uveljavljanje iger, angažiranje, pripovedovanje zgodb.

1. Introduction

There are approximately 800 million gamers in the world today, and this number is growing every day. Globally, we spend about 3 billion hours a week playing games online. That is equivalent to 75 million full-time employees – more than the entire workforces of Germany and France put together.

What is it about gaming that is so powerful? And why do so many people across nationalities and age groups want to immerse themselves in these alternate types of reality? And – as leading game experts like Jane McGonigal have recently asked – how can we leverage gamers' dedication and perseverance for good causes?

Over the past few decades, video games have started playing a more important role in our lives with the arrival of the personal computer, the video game console and – most recently – the internet. Today, mobile devices and social networks allow millions of people to play games together, wherever they are, whenever they want.

A new age of ubiquitous and social computing is creating a society where gaming is no longer only the pastime of geeky teenage boys sitting in a dark bedroom. The average age of a gamer today is thirty. One out of every four gamers is over the age of fifty and forty-seven percent of all gamers are women.

One of the positive aspects of this evolution in gaming demographics is that gamers are starting to demand new experiences and meaning in their games. A desire to use gaming for good has emerged.

This article will argue that games can help us educate our children, foster closer relationships between sustainable companies and their stakeholders, and help NGOs develop campaigns with more impact. But before we discuss how gaming can be used for positive change and looking at some examples, it is worth exploring briefly why gaming has such a powerful grip on people.

2. Why we play

One of the biggest draws of games is that they offer an escape from reality. They allow us to fulfill needs and desires in ways that reality rarely does. When someone plays a well-designed game, they are often able to use their full potential, and to tap into powers they either did not know (or forgot) they had.

But gaming does not only mean escaping; it can also mean finding meaning by doing the things we truly love to do. It means activating various happiness and optimism hormones and neurotransmitters such as dopamine on a regular basis, whereas in "real life," these would only be occasionally triggered.

Psychologist Mihaly Csikszentmihalyi describes a state of "flow" in which people feel so perfectly at ease and concentrated in their task that they can spend several hours at a time doing it while feeling a very high level of satisfaction. A great video game will keep players in the flow for as long as possible with the right balance of mastery and challenge. That way, players can happily spend hours and even weeks designing cities, creating empires, or saving civilizations.

In fact, some of the most popular "casual games" on the market today ask players to do things that – at least on the surface – don't seem like much fun. In *Diner Dash*, for example, players must step into the shoes of an overworked restaurant owner named Flo. In *Flight Control*, players work as air traffic controllers, constantly preventing disastrous airplane accidents. Neither might sound like much fun to someone who has never played them, but both games have been purchased, downloaded, and played by millions of people the world over.

It turns out that when the game is designed to be fun, not only does the theme not matter much, but players stop really caring about failing. In fact, according to Jane McGonigal, gamers spend 80 percent of their playing time failing. Nonetheless, they keep playing. It is quite remarkable that we as humans are so afraid of failure in real life, but thrive on it in gaming environments.

Game designers also fail all the time. This is often because they are too focused on their motivations for building a game, and fail to meet players' expectations.

One of the reasons for this is that games are no longer only built by large game studios, and only for profit. Today, there are thousands of games out there that have been commissioned by companies, NGOs, and governments as tools for education, fundraising, and marketing, or as vehicles for winning awards, getting press coverage, or winning new fans on Facebook.

Most players don't share these priorities. They usually have only one reason for playing a game: to have fun. When a company brands something as a "game," that game must quickly convince players it will be fun. Otherwise, they will simply stop playing it, and won't share it with friends and family.

Educational video games have been particularly bad at this. Most "games" designed to teach kids and adults are either not fun enough or – worse – no fun at all. In fact, Gabe Zichermann, a US-based games expert, argues that there has not been a real hit educational video game since *Where in the World Is Carmen Sandiego?*, a popular geography video game released in the mid-1980s. This is because educational software developers have forgotten that learning – at least in video games – is a byproduct of fun.

"Once teachers and parents got involved," writes Zichermann, "they systematically extracted the fun from the game. Kids could smell that shift from fun to work a mile away."

3. Games that work

This is not to say that games cannot be educational; they certainly can. Hit games like *SimCity* and *Civilization* taught millions of teenagers during the 1990s about geography, history, civics, and even city planning. And even seemingly trivial, entertainment-focused children's games like *Animal Crossing* can teach kids valuable lessons about household economics and debt. But kids can only learn these things from games if the games are actually fun.

Not all learning in games is incidental, however. According to games expert Ian Bogost, one of the many things that games can do is inspire empathy, which can be an essential part of learning. Bogost cites the example of *Darfur is Dying*, a free web browser game that starts by putting the player in the shoes of a young child in Sudan who must fetch water for her family. This task is complicated by the aggressive militia that the player must avoid at all costs. With no weapons or special powers to fight back, the player is put in a constant position of weakness.

Since its launch in 2006, *Darfur is Dying* has had over two million players. Not everyone would call it a particularly "fun" game, mostly due to the very serious subject matter, but it does use game mechanics effectively to give players a reason not to turn away from the grim reality. By virtually putting players "on the ground" in this perilous region, the game has contributed to public awareness about this complex and tragic humanitarian crisis.

Communicating complexity is also a primary aim for recent games and simulations developed by corporations, which are focused mostly on stakeholder education and engagement.

IBM's *CityOne*, for example, is a simulation game that challenges players to improve the energy, water, and transportation infrastructure of a fictional city. IBM says the game was designed to be a "conversation starter" about the technological solutions available to make cities more efficient, clean, and secure.

In 2010, the authors of this paper developed a simulation game, CEO_2 , for Allianz - a large financial services provider – and the conservation NGO, the World Wide Fund for Nature (WWF).

 CEO_2 lets players be the CEO in one of four major industries: carmaker, energy company, chemical producer, or insurer. Players must choose strategic options and business models, and then see how these choices affect their company's stock prices and carbon dioxide (CO_2) emissions over the next twenty years.

Allianz and WWF commissioned CEO_2 to illustrate the future business risks and opportunities of climate change to a broad audience. It was also an integral part of an internal Allianz employee initiative about climate change.

Both CEO_2 and CityOne are examples of companies using games and simulations to enhance corporate accountability, examine future scenarios, and educate stakeholders in funny and interactive ways. Instead of just publishing a print and PDF report, both organizations invested in creating a playful interface, engaging audiovisual content, and meaningful feedback.

"Gamification" is another strategy increasingly used by companies. It means the application of game design and mechanics to do things like increase productivity, motivate employees, build brand loyalty, and boost customer engagement. A famous and successful example of gamification has been Nike's *Nike Plus*, which encourages runners to run more through game and social elements like leaderboards, challenges, and Facebook integration.

Finally, NGOs and non-profit organizations dedicated to social change are using games more to generate awareness, support, and impact for their causes. Many of the best examples of these types of games can be found on the Games for Change website.

Games for Change (G4C) is a New York-based network that "facilitates the creation and distribution of social impact games." As of February 2013, the G4C website had nearly 100 games listed on the site. The games vary from strategy games like *Peacemaker*, where the goal is to establish peace in the Middle East, to the satirical *Phone Story*, a critical game exposing the "dark side" of smartphone production and consumerism.

Interestingly, some of these games are seeking to connect digital experiences more with reality. For example, *Free Rice*, is a game that donates 10 grains of rice to the UN World Food Programme each time a user correctly answers a vocabulary question.

Half the Sky Movement: The Game is another G4C effort that seeks to have a real-life impact. Set to launch later in 2013, this Facebook game will draw on some of the social gaming strategies used in hits like Farmville to draw attention and generate donations for NGOs working to stop the oppression of women and girls.

Finally, the authors of this paper recently launched three web-based games on the subject of human rights and discrimination on behalf of the Danish Institute for Human Rights. The audience for these games are 12 to 17 year old students in schools across 10 European countries. The three games are *Escape from Volcano Island*, *A History of Normal* and *Walk in My Shoes*, and the aim is to provide the students with a funny and rewarding gaming environment that allows them to engage with difficult and complex topics without ever having the feeling that they are playing to learn.

4. Conclusion

In conclusion, gaming is one of the most important digital phenomena in our society today. For anyone interested in the future of education, and for that matter, in the future of our planet, the role that games can play must not be underestimated. NGOs, academics, and companies that ignore gaming will do so at the risk of losing one the most powerful engagement tools ever created by mankind, and forgo innovative ways to engage, educate, motivate, and collaborate.

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