

# Player Engagement and Gamification

Digital Media & Games  
Derek Groen



# Contents: 1st half

- Player engagement mechanics in computer games.
  - The “Grind”.
  - Meaning.
  - Mastery.
  - Autonomy.
- Game vs. Player: who plays who?
  - 7 psychological tactics for engagement.
  - The role of cheating.
  - Blending gaming and investing.



# Contents: 2nd half

- What is gamification?
  - Historical examples.
  - Gamification today.
- Incentives versus gamification.
- Major shortcomings.
- How to better gamify.



# Player engagement

What engages players to play a game?



# The “Grind”

A journey of heroic effort towards the achievement of incrementing numbers.

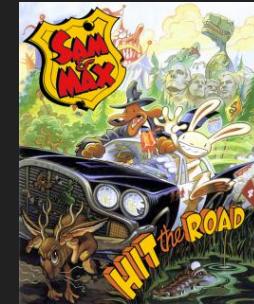


Game: Dungeon Village



# Meaning

- The player needs to care about the game.
- This can be done through different ways, e.g.:
  - Provide a captivating storyline or setting.
  - Incorporate interactions that are meaningful to the player.
  - Provide information that educates the player about a topic of interest.

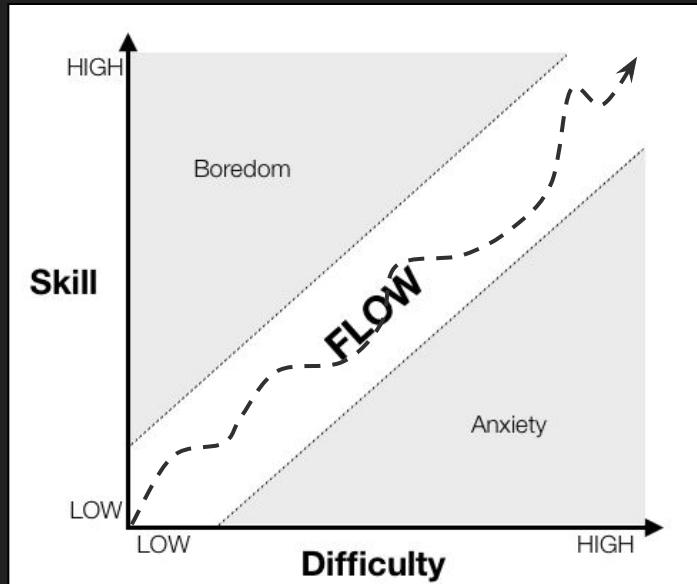


Source: <http://www.slideshare.net/dings/meaningful-play-getting-gamification-right>



# Mastery

- “With games, learning is the drug”
  - Raph Koster, *A theory of fun for game design* (2005).
- Goals + Rules = Challenge.
  - Goals need appeal.
  - Rules are used to control difficulty.
    - Gradual, bumpy progression is generally ideal.
  - Failure is key.
    - Opportunity to reflect & learn.
  - Avoid repetition.



Source BG image: Csikszentmihalyi, 1990



# Autonomy

- Core aspect of what it means to play, and why playing is fun.
- To experience something as play, we must feel that we have chosen to do it voluntarily.
- *Extrinsic* rewards reduce the feeling of autonomy, and its *intrinsic* rewards.
  - Players feel controlled.
  - Sends a signal that an activity is not worth doing for its own sake.

Game: Eve Online

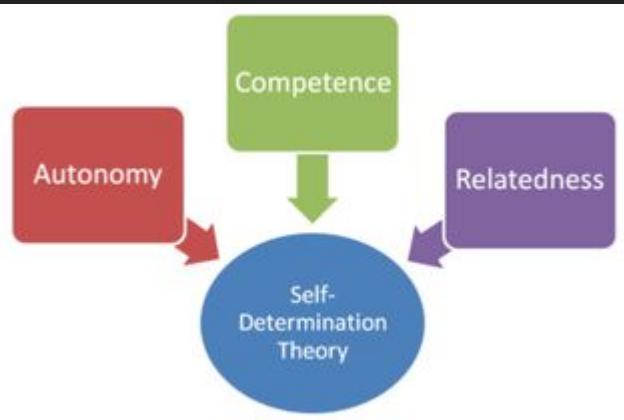
The image shows a screenshot from the game Eve Online. On the left, there is a Microsoft Excel-like spreadsheet titled "SALES PL". It has columns for Sales Volume, Unit Price, and Profit per Unit. The rows list various items: Flowers, Organic vegetables, Grains, Dairy, and Piggy. The right side of the screen shows a "SCIENCE & INDUSTRY" window with a table of manufacturing jobs. The table includes columns for Activity, Qty, and Location. It lists several entries for Manufacturing at various locations like Friggi VII, Moon 12, and Ishisoma VII. Below the spreadsheet, the word "Work" is written in large white letters. To the right of the spreadsheet, the word "Play" is written in large white letters.

	Sales Volume	Unit Price	Profit per Unit
1 Flowers	100	\$2.00	\$2.00
2 Organic vegetables	100	\$3.40	\$3.40
3 Grains	100	\$3.40	\$3.40
4 Dairy	100	\$5.00	\$5.00
5 Piggy	100	\$6.00	\$6.00

Activity	Qty	Location
Manufacturing	50	Friggi VII - Moon 12 - Lai Dal Corp
Manufacturing	50	Friggi VII - Moon 22 - Lai Dal Corp
Manufacturing	50	Ishisoma VII - Moon 14 - Propel Dy
Manufacturing	50	Ishisoma VIII - Moon 11 - State Wa
Manufacturing	50	Ishisoma VIII - Propel Dynamics Fact
Manufacturing	50	Olttoh IV - Moon 1 - Lai Dal Corp
Manufacturing	50	Olttoh VII - Moon 3 - Chief Executiv
Manufacturing	50	Sakkikainen VI - Moon 1 - Lai Dal Corp
Manufacturing	50	Sakkikainen VI - Moon 8 - School c



# Other perspectives



Ryan, R. M., & Deci, E. L. (2008).  
*Handbook of Personality: Theory and Research* (pp. 654-678).

Gameful design is evaluated along 4 criteria:

Positive Emotion

Relationships

Meaning

Accomplishment

(Hint: it spells PERMA)

[https://www.slideshare.net/avantgame/we-dont-need-no-stink  
in-badges-how-to-reinvent-reality-without-gamification](https://www.slideshare.net/avantgame/we-dont-need-no-stink-in-badges-how-to-reinvent-reality-without-gamification)

Motivation Theory

<b>Relatedness</b> Type : Socialiser Needs : Social Status, Social Connections, Belonging
<b>Autonomy</b> Type : Free Spirit Needs : Creativity, Choice, Freedom, Responsibility
<b>Mastery</b> Type : Achiever Needs : Learning, Personal Development, Skill Up
<b>Purpose</b> Type : Philanthropist Needs : Altruism, Meaning, A Reason Why



# Psychological tactics in Games

1. Loss aversion
2. Endowed Progress
3. Envy/Embarrassment
4. Reciprocity
5. Scarcity
6. Triggering
7. Endowment Effect

Extreme versions of monetizing games are called “skinnerware”.

*Source: Dori Adar, <http://www.doriadar.com/psychological-tactics-in-games-a-deck-full-of-examples/>  
Richard Garfield, <https://m.facebook.com/notes/richard-garfield/a-game-players-manifesto/1049168888532667>*



# Loss aversion

People put more importance in not losing £10 they have, than in gaining £10 they don't have.



*Game: Candy Crush Saga*



# Endowed Progress

Partial progress is shown when quests are first accepted.

This leaves the impression that the player is already almost halfway to completion.



*Game: Candy Crush Saga*

# Envy/Embarrassment and Reciprocity

“Want!”



Game: *The Simpson's Tapped Out*

Do you return the favour, or do you prefer to feel guilty for not doing so?



Game: *Candy Crush Saga*



# Scarcity

People especially want things that are difficult to get.

However, this psychological tactic should be classified as “common”.



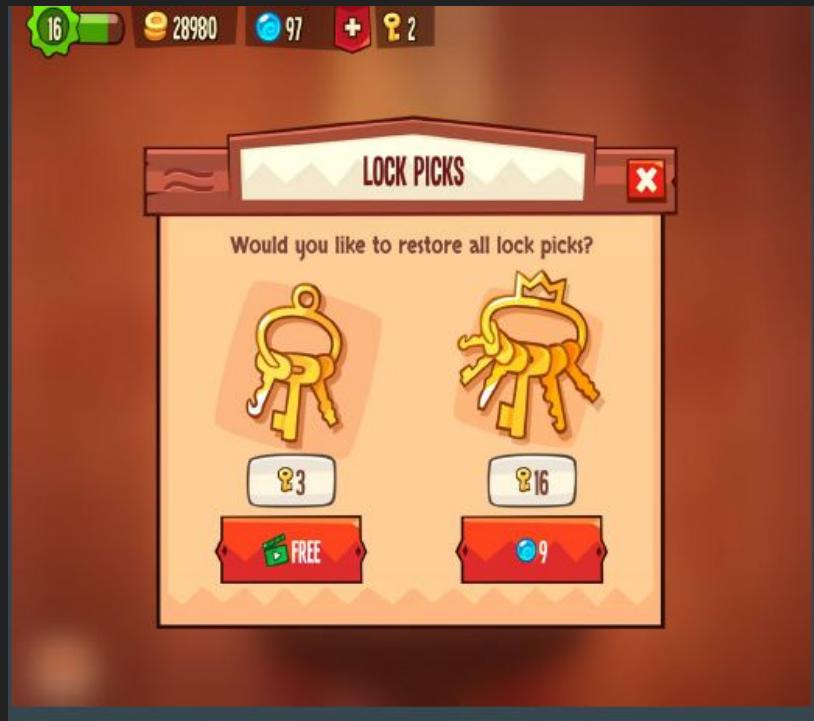
Game: *Fallout Shelter*



# Triggering

Providing the right tool for the right occasion of player need.

Of course at the right price.



Game: *King of Thieves*



# Endowment Effect

Do I really want to  
abandon all this  
by uninstalling?



*Game: Sim City 4*



# The role of cheating

- Excessive player engagement can lead to gaming addiction, particularly when the game is challenging.
- Cheats eliminate challenges, and therefore can help mitigate or eliminate game addiction.



# The role of cheating

- Yet this aspect has *regressed* in recent decades:
  - 90s: cheat by pressing ↑,↓,↑,↓,  
←,→,←,→,A,B
  - 10s: cheat by spending e.g.  
£57.99 in the online shop.
  - Or worse...
    - £1000s can be extracted  
using loot box systems.



Game: Angry Birds Go!



Loot Boxes in Overwatch.



# Blending gaming and investing





# Blending gaming and investing

- A recent trend in gaming is the use of NFTs, non-fungible tokens.
  - These represent unique, non-fungible assets that can be bought, transferred, destroyed or sold.
- These games combine cryptocurrencies with gaming.
  - NFTs are stored on the blockchain (so stay even when a game disappears).
  - Cryptocurrency rewards for in-game achievements.
  - Let NFT/token assets to other players for rewards.
  - NFTs or token asset staking for rewards.

[https://en.wikipedia.org/wiki/Non-fungible\\_token](https://en.wikipedia.org/wiki/Non-fungible_token)



# Example: CryptoKitties

- Aim: buy cats, breed cats for new unique cats.
- All operations require an Ethereum blockchain transaction (costing \$0.5-\$50 depending on the time).
- Hugely popular in 2017-2018, but in decline since.
- Cats can cost \$10s, or \$100,000+

<https://www.investopedia.com/news/cryptokitties-are-still-thing-heres-why/>



# Recent Examples



Axie Infinity - A monster training game on the Ethereum blockchain.



Splinterlands - Pre-plan card game using the HIVE blockchain.

# Benefits and drawbacks of NFT games.

- Earn money from playing games.
- NFTs have monetary value and can be sold.
  - Can be seen as investments that can go down as well as up.
  - Some games allow letting NFTs to other players for extra income.
- The value of the ecosystem can motivate developers to keep improving the game.
- Link between gaming and e-sports becomes straightforward.
- NFTs can be disproportionately expensive.
- Difficult/expensive for new players to enter mature games.
  - E.g. one would have to invest \$100,000+ to obtain a top-rated deck in Splinterlands. (or rent for \$100s per day).
- Hacks can lead to asset losses.
- Some games have excessive inflation, diluting existing assets.
- Some games never get beyond a “pre-sale”.
- Exit scams.
  - Most likely in pre-sale stage, as game dev takes effort, time and resources.



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# What is gamification?

gamification

/ˌgeɪmɪfɪ'keɪʃ(ə)n/

*noun*

noun: **gamification**

The application of typical elements of game playing (e.g. point scoring, competition with others, rules of play) to other areas of activity, typically as an online marketing technique to encourage engagement with a product or service.

"gamification is exciting because it promises to make the hard stuff in life fun"



# Historical examples

- 1900+: Loyalty schemes such as S&H green stamps.
- 1900+: Collectibles.
- Boy scout badges.

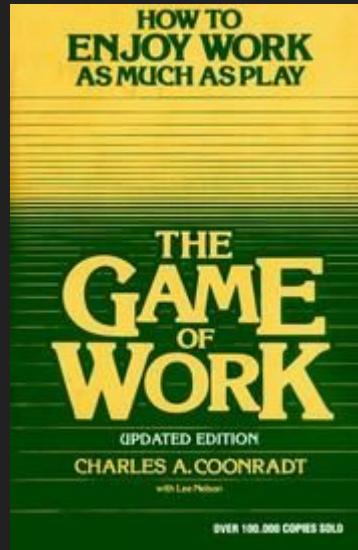


By Larryzap - staged photo, CC BY 3.0,  
<https://en.wikipedia.org/w/index.php?curid=37969811>



# Historical examples

- 1973: Charles Coonradt finds “The Game of Work”, introducing engagement mechanics from sports into the workplace.



Coonradt, Charles; Nelson, Lee (1985). *The Game of Work: How to Enjoy Work as Much as Play*. Deseret Book. ISBN 087747771X.



# Gamification examples today

Do you know any?



Search All... Search

Home Chatter Campaigns Leads Accounts Opportunities Forecasts Contracts Cases Solutions Products Reports Documents Dashboards Engage +

Engage Profile

Mark  
Fuller  
13842 Points

Level 10

77% to the next level!



Current Challenges

- Daily Calls
- Advancing Opportunities

Create New...

Recent Items

- 3 Opportunities
- 1 Lead
- 1 Account
- 1 Opportunity
- 1 Contact
- 1 Case
- 1 Record
- 1 Home

Recycle Bin



## Mark Fuller: 13842 Points

Position

Overall	Quarterly	Monthly	Weekly
<b>#1</b>	<b>#1</b>	<b>#3</b>	<b>#5</b>

### Level 10

77% to the next level!

Recent Achievements



Quarterly Stats:

Closed Revenue: \$165k

**#1**

Aug. 10/14

Pipeline Revenue: \$362k

**#1**

Aug. 10/14

Opportunities Created: 15

**#3**

Aug. 12

Opportunities Closed: 6

**#1**

Aug. 4

Avg Revenue per Deal: #27k

**#4**

Aug. 10/14

Avg Days since Opportunities Updated: 8

**#2**

Aug. 15

People I Follow

Show All (24)



Statistics

Challenges Completed

**19**

Challenges Available

**2**

Achievements Completed

**6**

Achievements Remaining

**34**

Achievements



#### Team Support

Unlocked on 8-4-2011

Helping team members close deals shouldn't go without recognition.



#### Abracadabra

Unlocked on 8-4-2011

Putting a deal out of your hat isn't easy - but this impressive





## Day & Night

The Fitbit app has a purpose for every part of your day.

### All-Day Activity

View progress towards your daily goals for steps, distance, calories burned and active minutes, and see your trends over time.

### MobileTrack

If you want to track your activity but don't have a Fitbit tracker, you can use your smartphone to record basic stats like steps, distance and calories burned.

### Sleep Goals & Tools

Use a [Fitbit tracker](#) to record your sleep at night. Then, use the sleep tools in the app to set a weekly sleep goal, create bedtime reminders and wake targets, and review your sleep trends over time.

### Multi-Tracker Support

Connect multiple trackers to one account and the Fitbit app will automatically detect when you switch between them. So you can wear Fitbit Surge during workouts and use Fitbit One to discreetly track your day.

## Activity & Workouts

## Background blur with CSS



Love remote work?

Find it on a new kind of career site



Get started



I want an Vista/7-aero-glass-style effect on a popup on my site, and it needs to be dynamic. I'm fine with this not being a cross-browser effect as long as the site still works on all modern browsers.



My first attempt was to use something like

```
#dialog_base {  
    background:white;  
    background:rgba(255, 255, 255, 0.8);  
  
    filter:blur(4px);  
    -o-filter:blur(4px);  
    -ms-filter:blur(4px);  
    -moz-filter:blur(4px);  
    -webkit-filter:blur(4px);  
}
```

However, as I should have expected, this resulted in the content of the dialog being blurred and the background staying clear. Is there any way to use CSS to blur the background of a semitransparent element instead of its contents?

[css](#) [popup](#) [aero-glass](#)

share improve this question

edited Oct 7 at 11:37



Damjan Pavlica  
1,709 ● 10 ● 33

asked Jan 28 '13 at 15:37



Supuhstar  
4,071 ● 15 ● 70 ● 128

1 In case you haven't visited [this website](#) already – Morpheus Jan 28 '13 at 16:43

1 @Morpheus I don't see how this helps me. – Supuhstar Jan 28 '13 at 18:50

add a comment

### 7 Answers

active

oldest

votes



OCT. 2016 UPDATE

Since the `-moz-element()` property doesn't seem to be widely supported by other browsers except to FF, there's an even easier technique to apply blurring without affecting the contents of the container. The use of pseudoelements is ideal in this case in combination with svg blur filter.



[Check the demo using pseudo-element](#)

asked 3 years ago

viewed 110269 times

active today

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Bought By Many 🇬🇧 London, UK  
python [mongodb](#)

## Linked

1 [Blur background - Jquery / Pure CSS / Image?](#)

0 [Blurring the bootstrap nav bar, without bluring content in it](#)

-1 [CSS3 or JAVASCRIPT for hover](#)

1 [How can I make a blur effect on overlay](#)

0 [Blurred and transparent button background](#)

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## Topics

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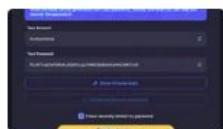
polish



therealwolf (76)

inji

• 40 minutes

**Simple, Fast & Secure Way To Create Hive Accounts**

If you're looking for a simple, fast & secure way to create Hive accounts, then make sure you check out this brand new service by inji: The interface provides you with the option to either claim account



jayna (72)

Actifit

• an hour

**Sublime and Beautiful Sunday - Woods and Waters - Actifit: November 7 2021**

It truly was a beautiful and and Sublime Sunday! I had a birthday breakfast with my family (the last in my extended birthday extravaganza which started last Wednesday), and we all took a nice walk because



arnyray (55)

Loving HIVE ❤

• an hour

**THE CREATIVE BLOGGER TAG - Its gonna be Olyray!**

Greetings to all hive bloggers, as you all know that I am new to this platform therefore an opportunity like this to share my answers in this creative blogger post that I have been tagged is too good to



\$ 36.68

139

3



...



# Limitations of Gamification

What are the downsides?



# Perhaps a bad example...

FOURSQUARE

Foursquare Swarm Developer Enterprise Small Business

Log In Sign Up

FOURSQUARE

Find the best places to eat, drink, shop, or visit in any city in the world. Access over 75 million short tips from local experts.

I'm looking for... London Search

Food Coffee Nightlife Fun Shopping



# Why is this bad?

<http://fredmcclimans.com/2011/01/26/gamification-and-the-gaming-of-foursquare/>

Close

OK! We've got you @ NVS Salon & Spa.  
You've been here 8 times.

**Mayor**

Congrats! You just stole the title  
of Mayor of NVS Salon & Spa  
from Emily E.! 

**Points**

Nice check-in! You earned: +5

You just stole the Mayorship! +5 

**Leaderboard**

Allison's in your rear view mirror!

#10		Lois Rossetti	45
#11		Brad Gerick	34



## Gamification fatigue

“Two, as adoption of cookie-cutter gamification increases, fatigue sets in. As consumers are faced with the disparate badges and rewards from all the brands that they are exposed to, novelty will wear off and along with it their interest as “gaming” will increasingly become a chore.

In fact, I do believe we are already at the cusp of this as you see Foursquare, a pioneer of sorts in gamification, constantly revamping and improving its badging system to keep it from malaise.”



# Gamification today

- Strong focus on achievements/badges.
  - And rankings to introduce a competitive element.
  - Mastery tends to trump Meaning & Autonomy, though gamified blogs are shifting this.
- Quantitative goals versus qualitative goals
- Used to stimulate e.g.:
  - learning, mastery,
  - socializing, competition,
  - achievement, status,
  - self-expression, altruism, or closure.





# Incentives versus gamification

- Incentives are only a subset of gamification.
  - But can encourage “gaming” behaviours.
- Quick example: Enron 2002
  - Energy, commodity and services company with 21,000 employees.
  - High profits → higher share price → good for the company.
  - Side effect: begins hiding debts.
  - Outcome: \$40B lawsuit and bankruptcy.





# Limitations of Gamification

- Can't make people do things against their own will.
- Difficulty aligning *business* goals with *game* goals.
  - Player goals need to be of primary importance.
  - ...the company may then tangentially benefit.
- Extrinsic rewards reduce intrinsic motivation.
  - Can devalue the worthwhileness of targeted activities.
- A gamified bad product won't become any better.
- Chance for (negative) side effects.



# Gamify better

- Know your users.
  - Tailor your gameplay/gamification elements to the specific objectives and needs as much as possible.
  - Ensure the activities encouraged are meaningful to the player.
- Apply the principles of good game design.
  - Prototype, playtest, iterate.
- Analyze player data to strengthen the fun factor of your game.
- Align it with an objective that is of benefit to the overarching organization.



See you in the labs!