

The word "GAMIFICATION" is written in a large, multi-colored, sans-serif font. Each letter is filled with a different color and has a slight 3D effect. Two circular smiley faces are positioned behind the letters: a teal one behind the 'A' and a purple one behind the 'O'.

# GAMIFICATION

PRESS START



**BC PATIENT SAFETY  
& QUALITY COUNCIL**  
Working Together. Accelerating Improvement.



★ = Gamify Your Improvement Initiative



1. Dissecting games



2. Dynamics, Mechanics & Components



3. The theory behind gamification

4. User types and components



5. User experience



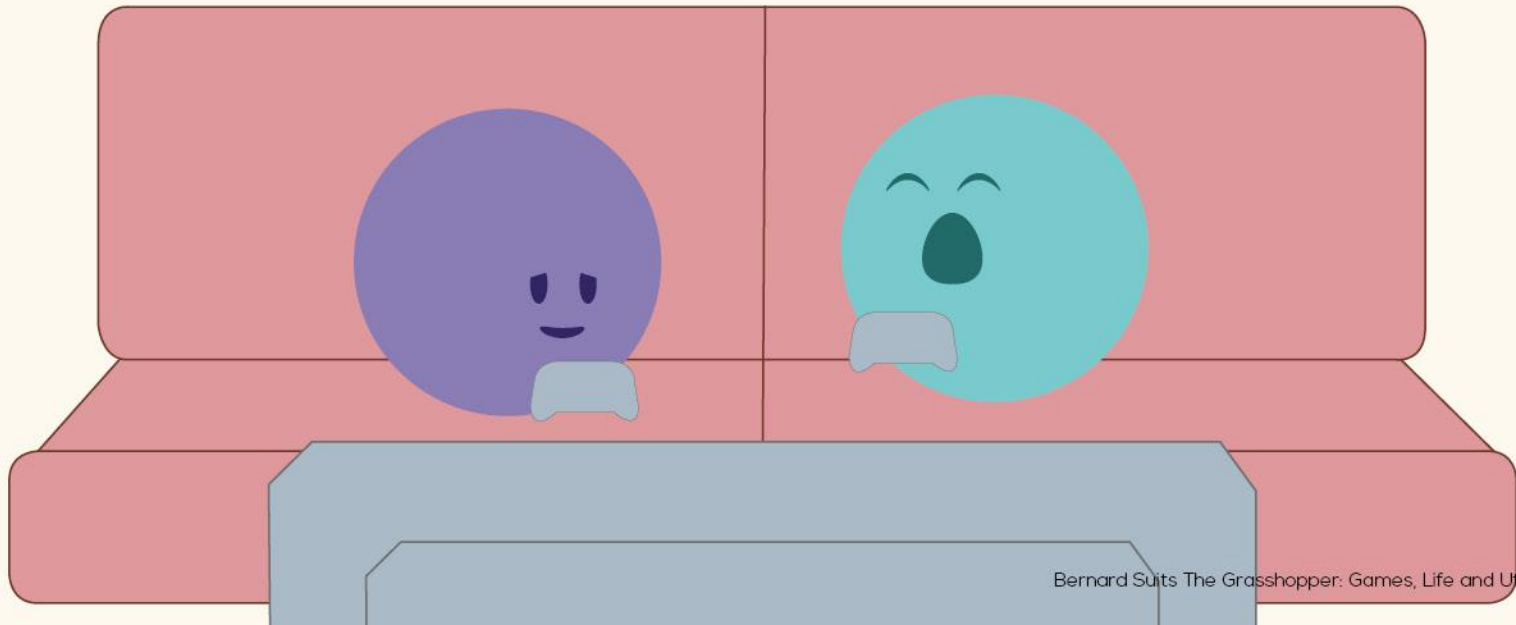


# Dissecting Games



# What is a game?

- The voluntary attempt to overcome unnecessary obstacles
- Games include three things:
  1. A goal
  2. A "lusory attitude"
  3. Rules





of American households include one video gamer



of gamers are female

**151.5 million**  
people watched televised NFL/NBA/NHL

**213.8 million**  
people watch competitive gaming

**73%** are  $\geq$  age 18

Average age of a gamer is **35**

Entertainment Software Association. 2016 Essential Facts about the Computer and Video Game Industry. [online report] Retrieved Aug 17, 2016 from <http://www.theesa.com/wp-content/uploads/2016/04/Essential-Facts-2016.pdf>

Superdata. 2016 eSports Market Report. Executive Summary retrieved Aug 17, 2016 from <http://superdata-research.myshopify.com/products/spring-2016-esports-market-report>

Statista. Number of TV viewers of major sporting events in the United States as of June 2014. Retrieved Aug 17, 2016 from <http://www.statista.com/statistics/311949/number-tv-viewers-sporting-events-usa/>



# The BIGGEST game in the US



Surpassed Twitter for daily users

2 million active users within the first 2 weeks

More time spent on it than Facebook

Cafes, bars, restaurants purchasing 'lure modules' to attract monsters, driving customer traffic

Added \$7.5 billion to Nintendo's market value

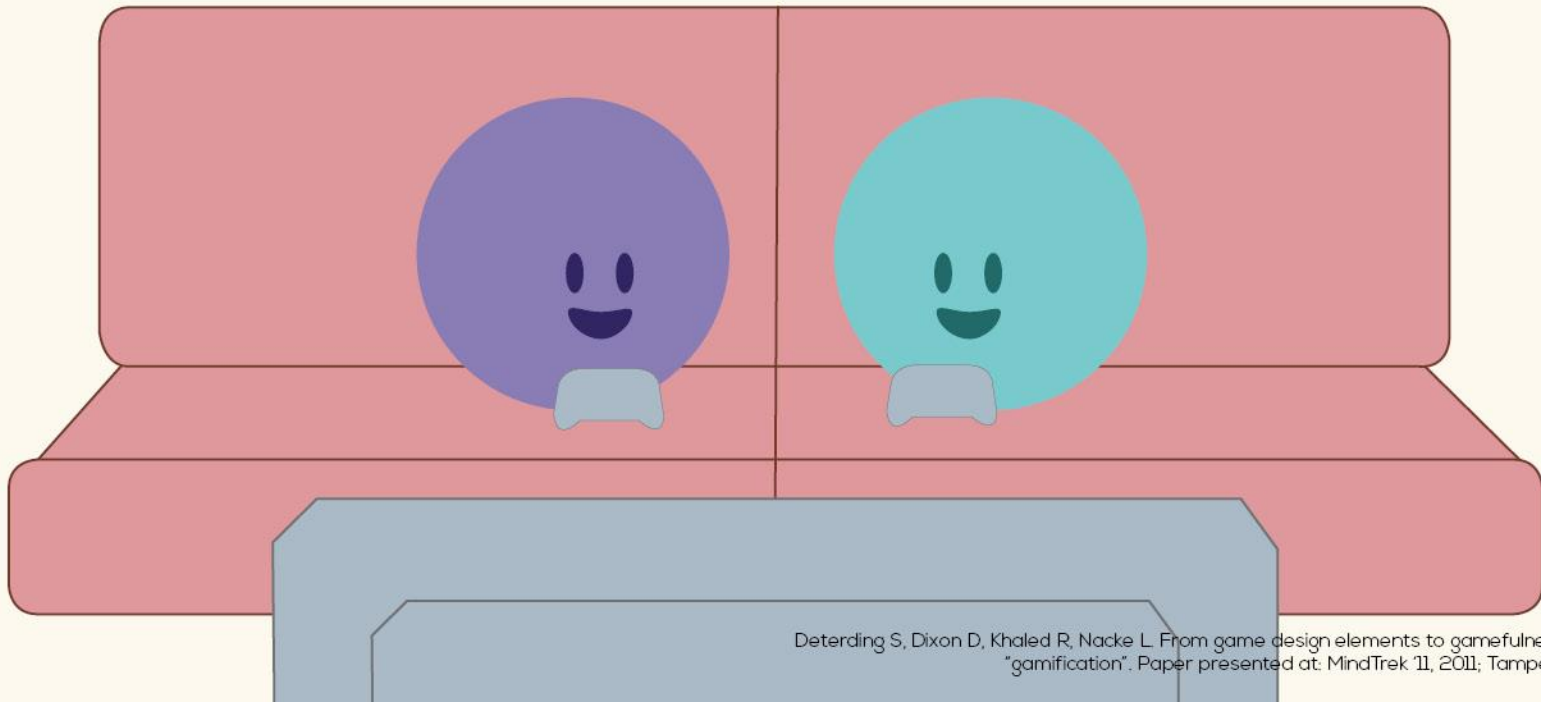
Image courtesy of CBC

Yu, H. What Pokemon Go's Success Means for the Future of Augmented Reality. Fortune, Jul 23, 2016  
Vincent, J. Pokemon Go's success adds 7.5 billion to Nintendo's market value. The Verge, Jul 11, 2016



# Gamification:

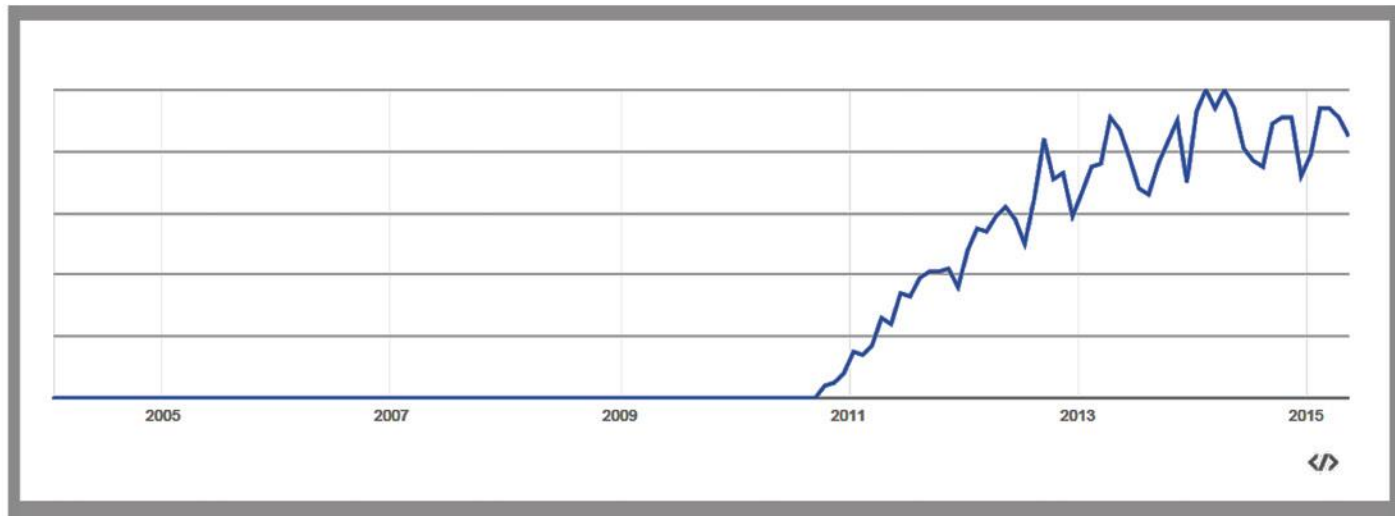
The use of game design and elements  
in non-gaming contexts





Google

gamification





**dodgeball.com**





# FOURSQUARE

By 2011, the company was valued at  
**\$600 million**

By 2013, the company had achieved:

over **2 BILLION** check-ins  
**📍📍📍 3 million per day**



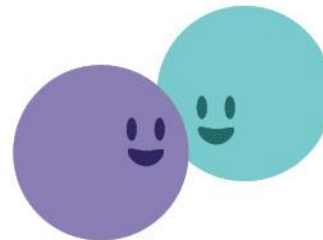
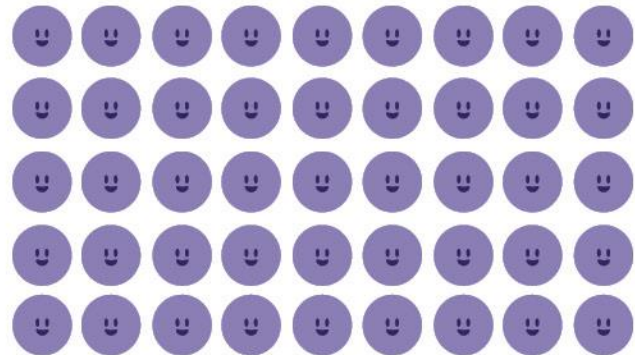
support in **11** countries



...with **12** languages

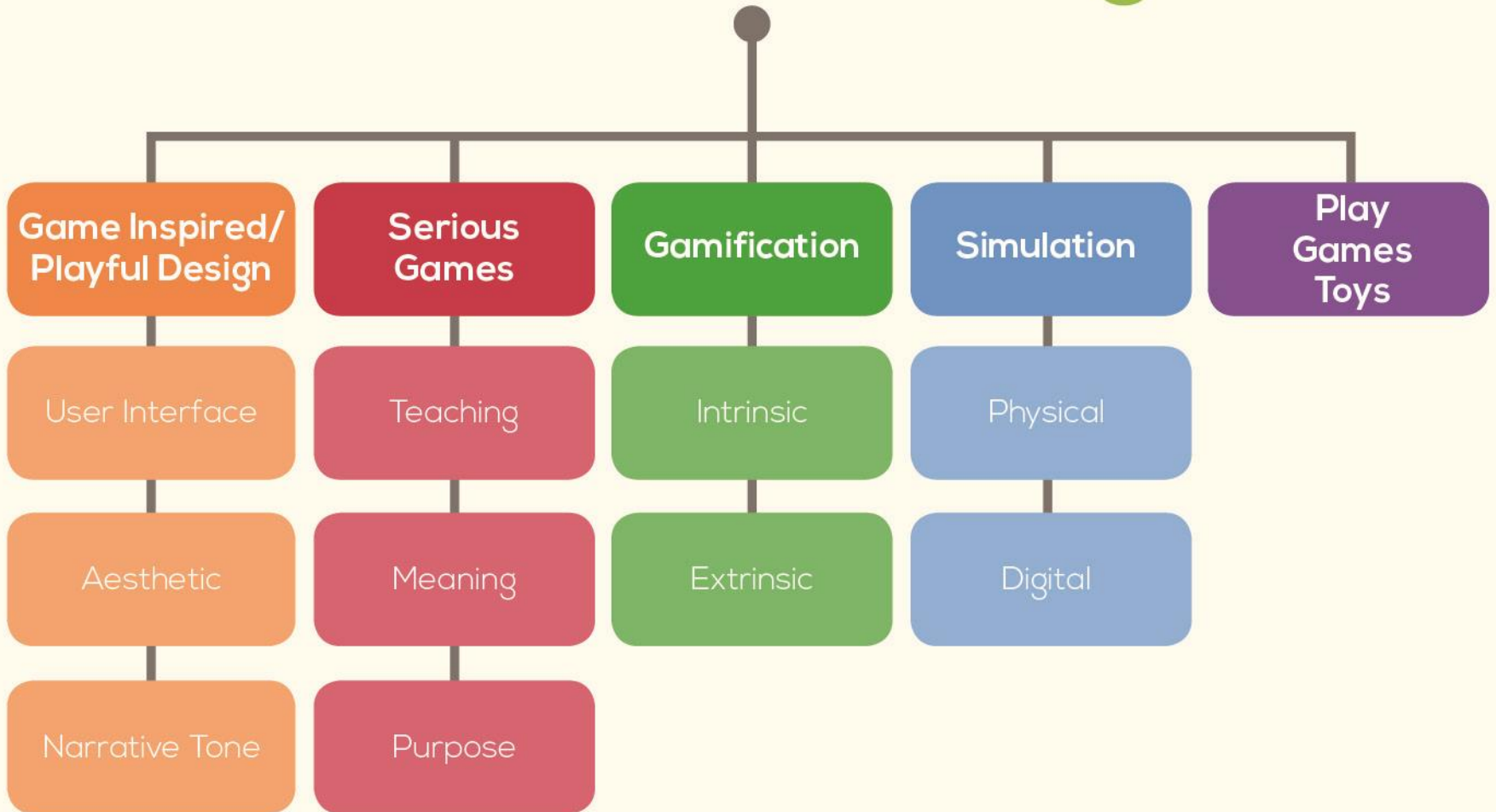
**X2** "Foursquare revenue is at least doubling every year"  
- CRO Steven Rosenblatt

**45 million**  
registered users

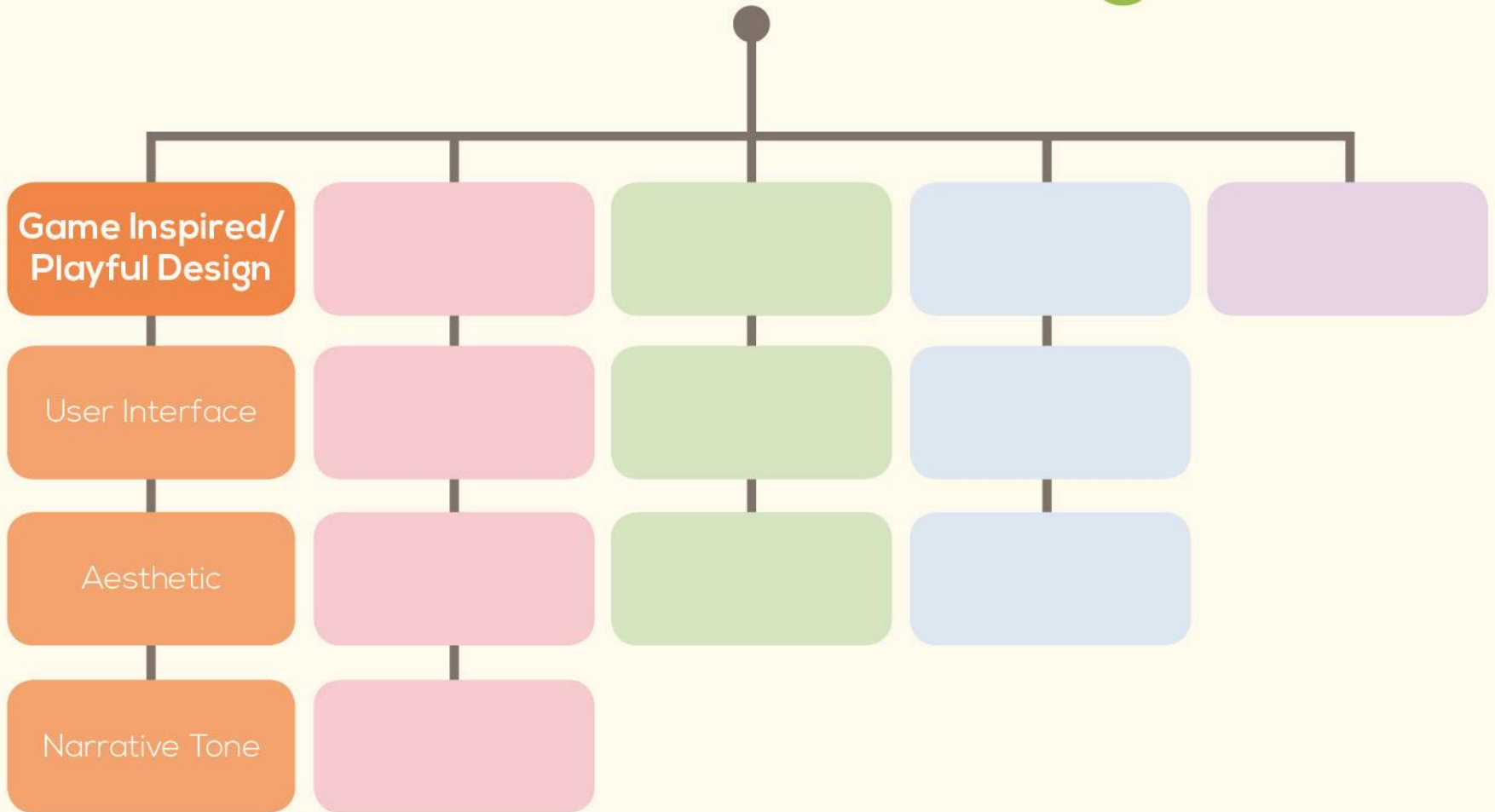


partnerships including  
**American Express, Zagat, Bravo, and Condé Nast**

# Game Thinking

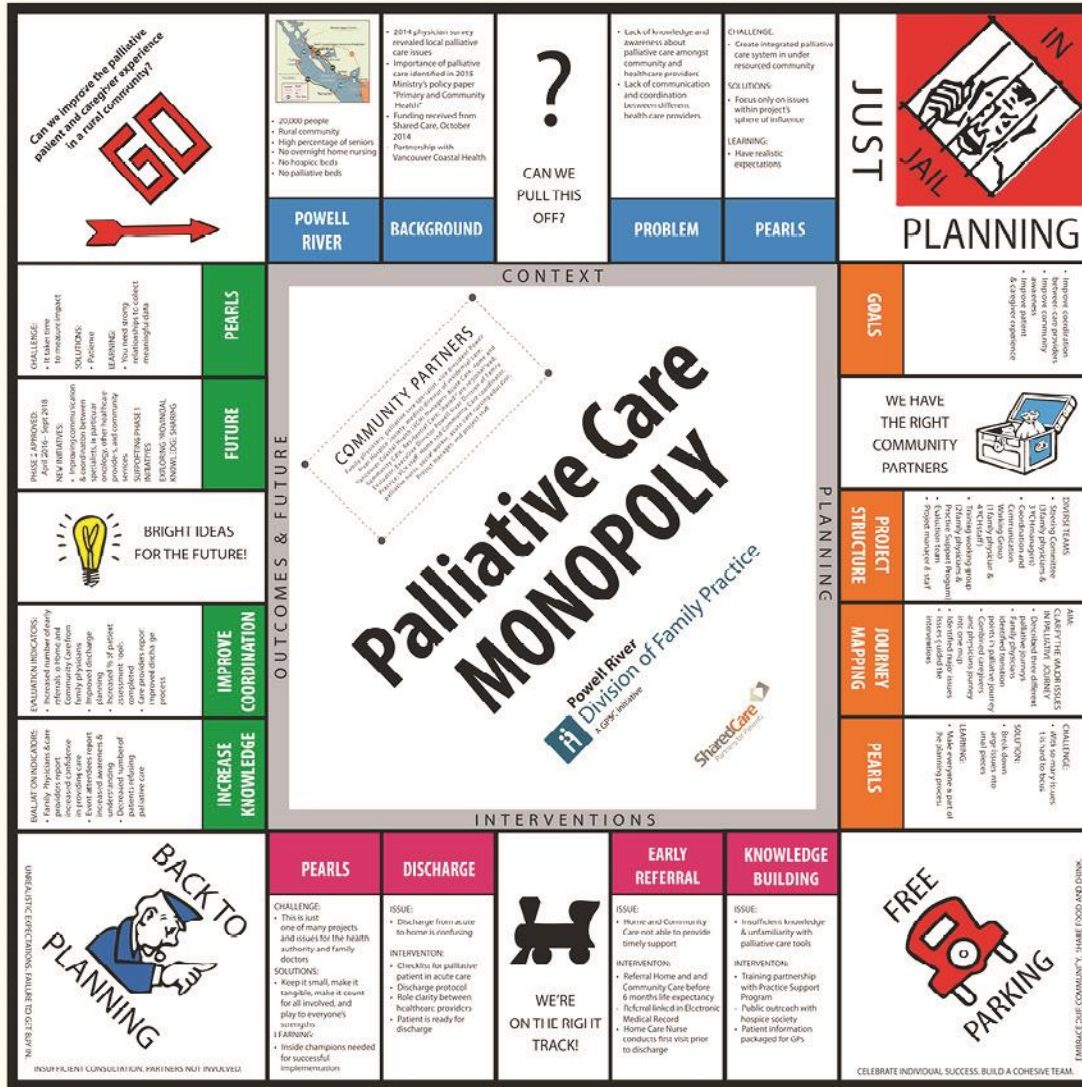


# Game Thinking

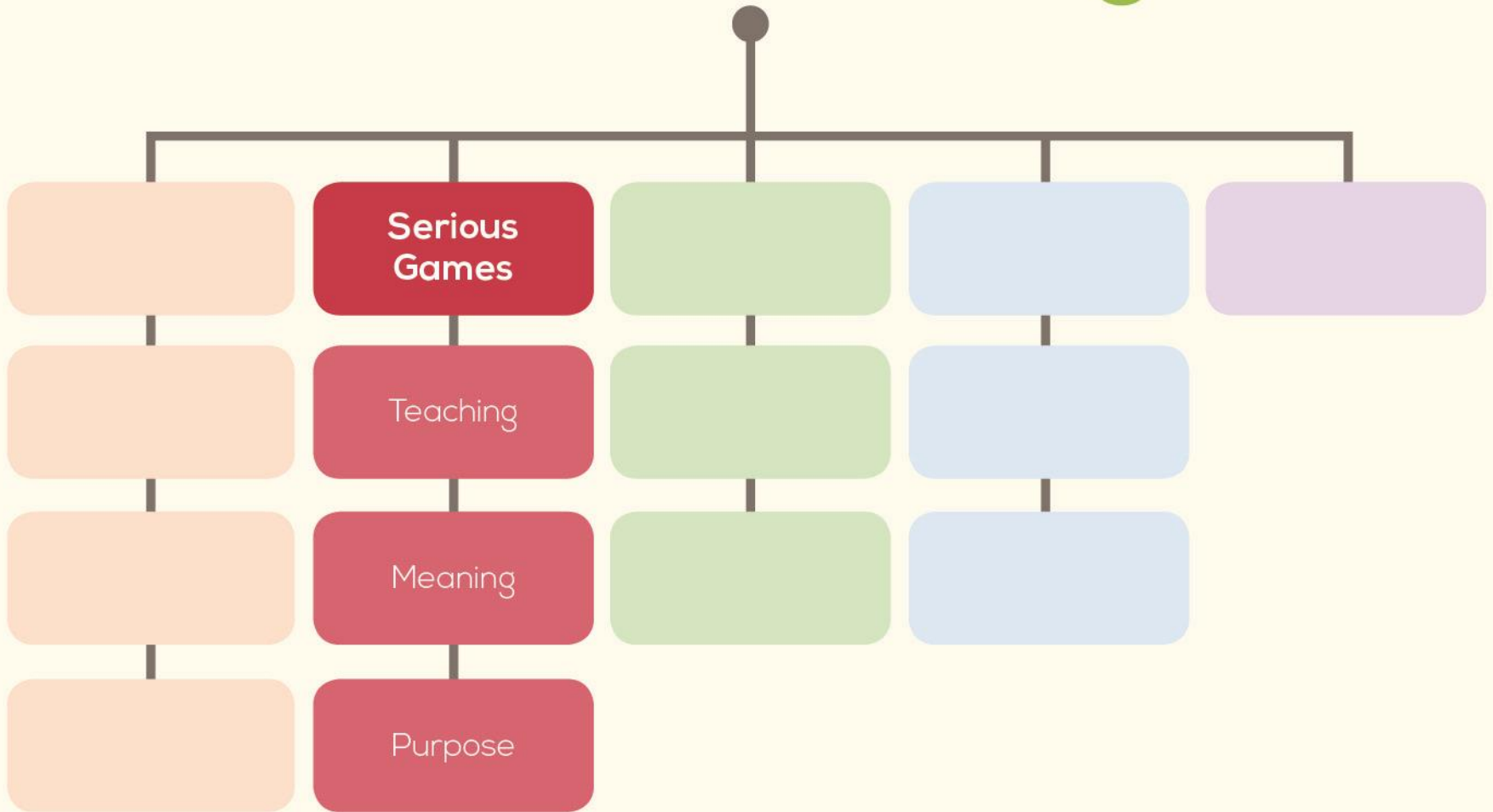




# Game Inspired/ Playful Design



# Game Thinking



# Serious Games

**DO NOT IGNORE**  
**iHobo** 1.2  
The world's first homeless tamagotchi

**Problem**  
Depaul UK needed to attract younger donors (affluent socially-conscious 30-somethings).



**Solution**  
The iHobo App. Players were responsible for a young homeless person on their iPhone. After living with - and building a sense of responsibility for - him for 3 days, the app prompted users to donate with one click.

**Results**  
600,000+ downloads, becoming No 1 downloaded app in UK within 5 days of launch (more downloads than any free or paid for app). 68,298 reviews on the app store. Equivalent engagement in conventional digital channels would have cost approximately £2.3million. 7 times more money raised through in-game donations. 93 x as many individual donors as previous campaigns. 1,200 new contacts on the Depaul UK database, with a potential lifetime donation value of as much as £1.76m (an ROI of 294:1).

A charity marketing masterstroke  
**guardian**

Revolutionary  
**JustGiving**

**TOP FREE APPS**

1		<b>iHobo</b> Depaul UK Released 30 April 2010 Free <a href="#">GET IT ON</a>
2		<b>My Good Free</b>

# Serious Games

The screenshot displays the Foldit game interface. At the top, the title bar shows "foldit" and "Pull Mode". The main display area shows a 3D protein structure with a score of 9455.364 and a rank of 34. The structure is composed of various colored segments (green, yellow, orange, blue, grey) and is surrounded by two red spheres. The interface includes several toolbars and panels:

- Top Bar:** Rank: 34, Score: 9455.364, Soloist 223: Core and Tail Design 2, No conditions.
- Right Panel:** Group Competition and Soloist Competition tables.
- Bottom Bar:** Actions, Undo, Social, Modes, Behavior, View, Menu.
- Bottom Right:** Chat window showing a conversation.

Group Competition	
# Group Name	Score
1 Contenders	9628
2 Richard Dawkins Foundation	9627
3 GoFolgers	9613
4 Natural Abilities	9611
5 Another Hour Another Point	9596
6 Czech National Team	9590
7 Void Crushers	9584

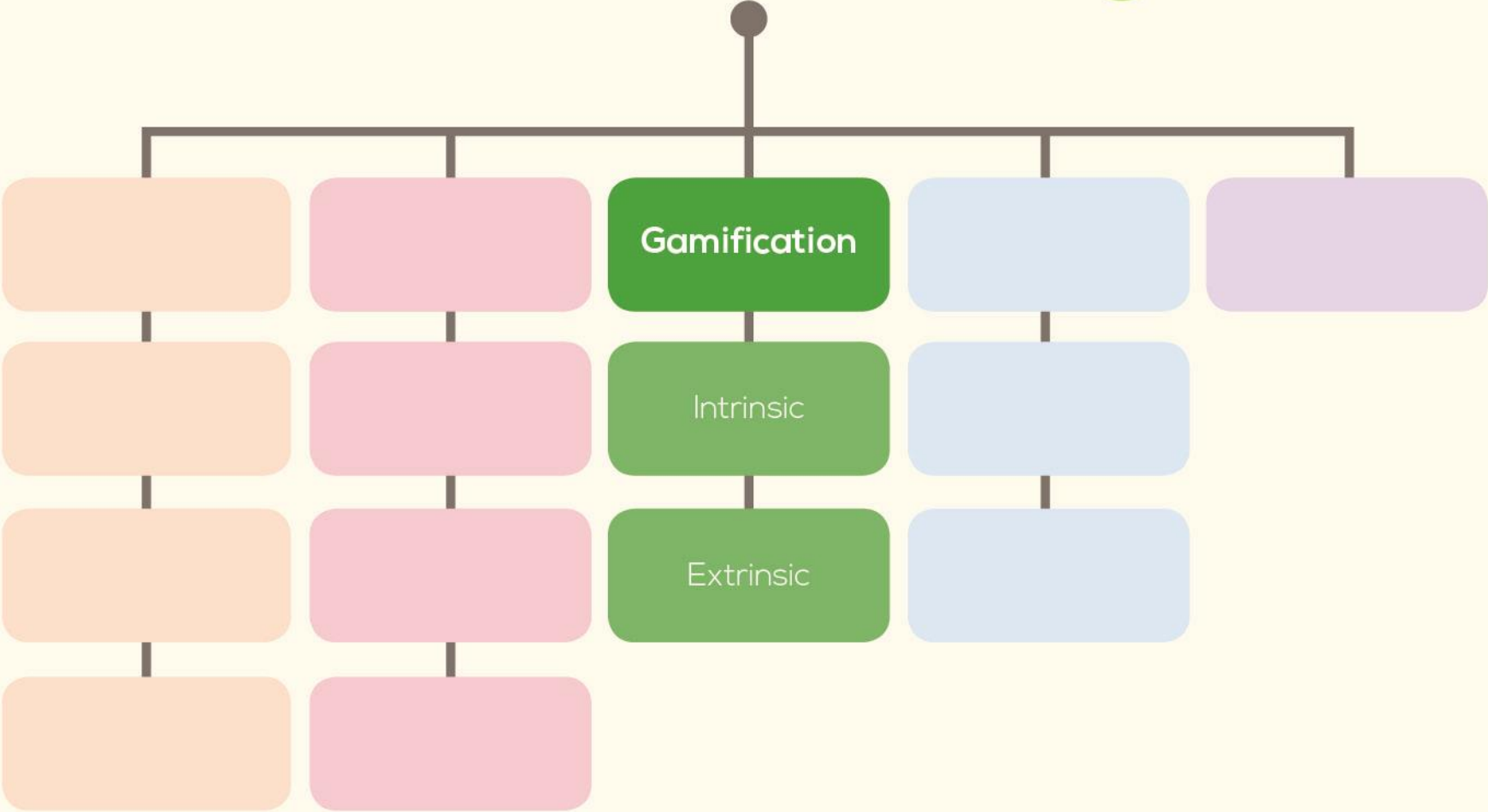
Soloist Competition		
# Player Name	Current	Best
1 BootsMcGraw	-	9628
2 vertex	-	9627
3 themarquis	-	9625
4 Mark	-	9624
5 infjamc	-	9613
6 Mr_Jolty	-	9611
7 kevoad5	-	9604

Chat - Group (auto show)  
Chat - Puzzle (auto show)

shpalmina: and so?  
BletchleyPark: and left me with an unanswered question  
NatanaelL: what's up?  
BletchleyPark: what is a tab-complete ? :)  
NatanaelL: Have you used IRC?

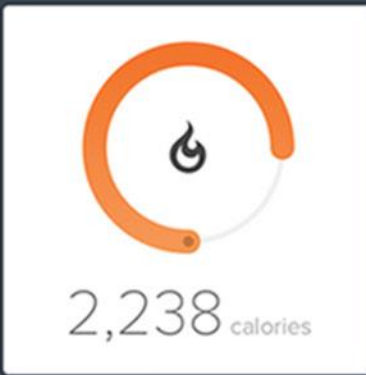
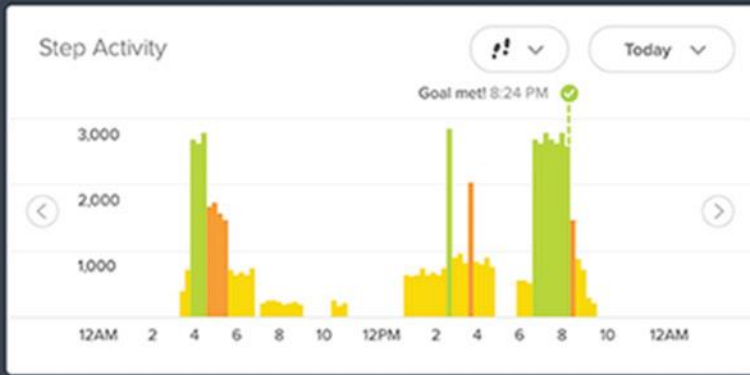
Chat - Global (auto show)  
Notifications (auto show)

# Game Thinking



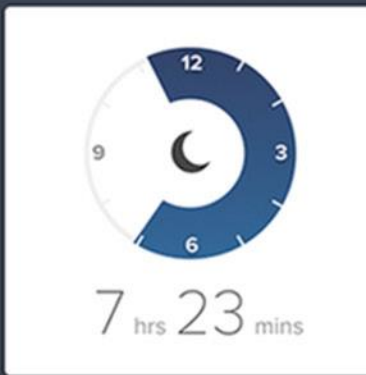
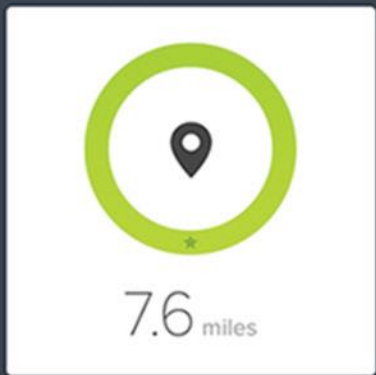






### Friends

	<b>Chris</b> 49,428	1
	<b>Jessie</b> 47,298	2
	<b>You</b> 45,298	3
	<b>Nick</b> 39,875	4
	<b>Molly</b> 39,187	5
	<b>Ash</b> 34,080	6



### Fitbit Wellness

**You've completed the program!**

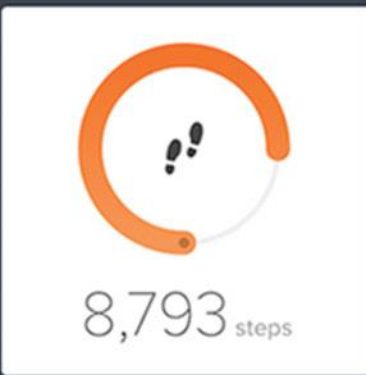
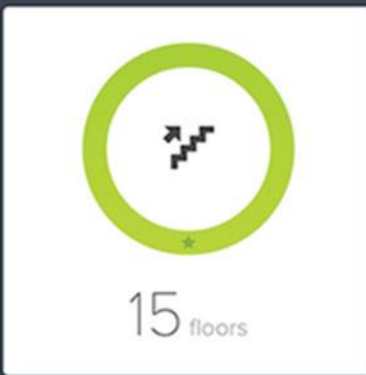
To see how you did against the program's daily goal, select previous days on the dashboard.

### Trainer

Set a plan to be more active

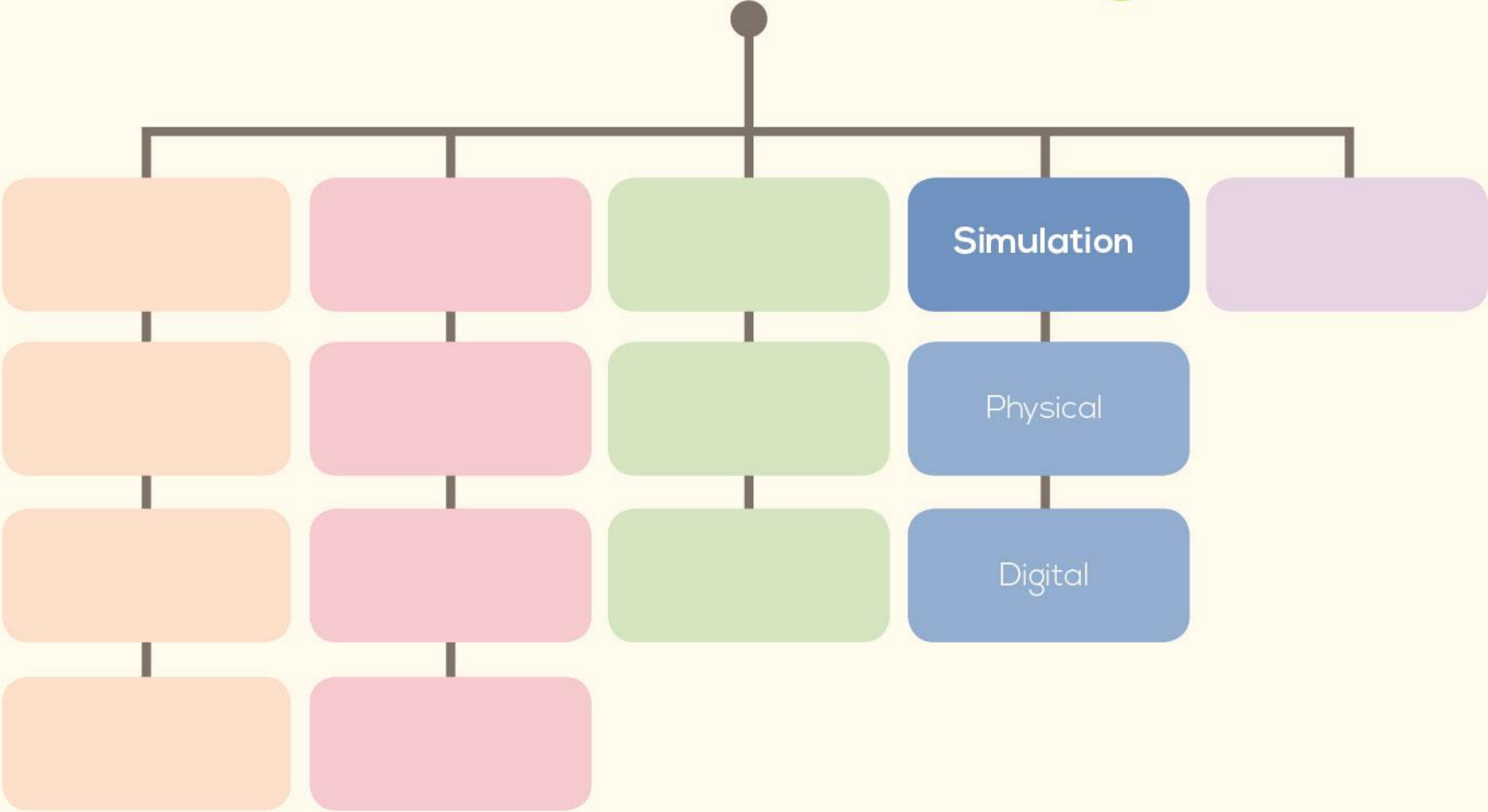
Increase your activity each day with a 12-week trainer plan designed just for you.

[No, Thanks](#) [Learn More](#)





# Game Thinking



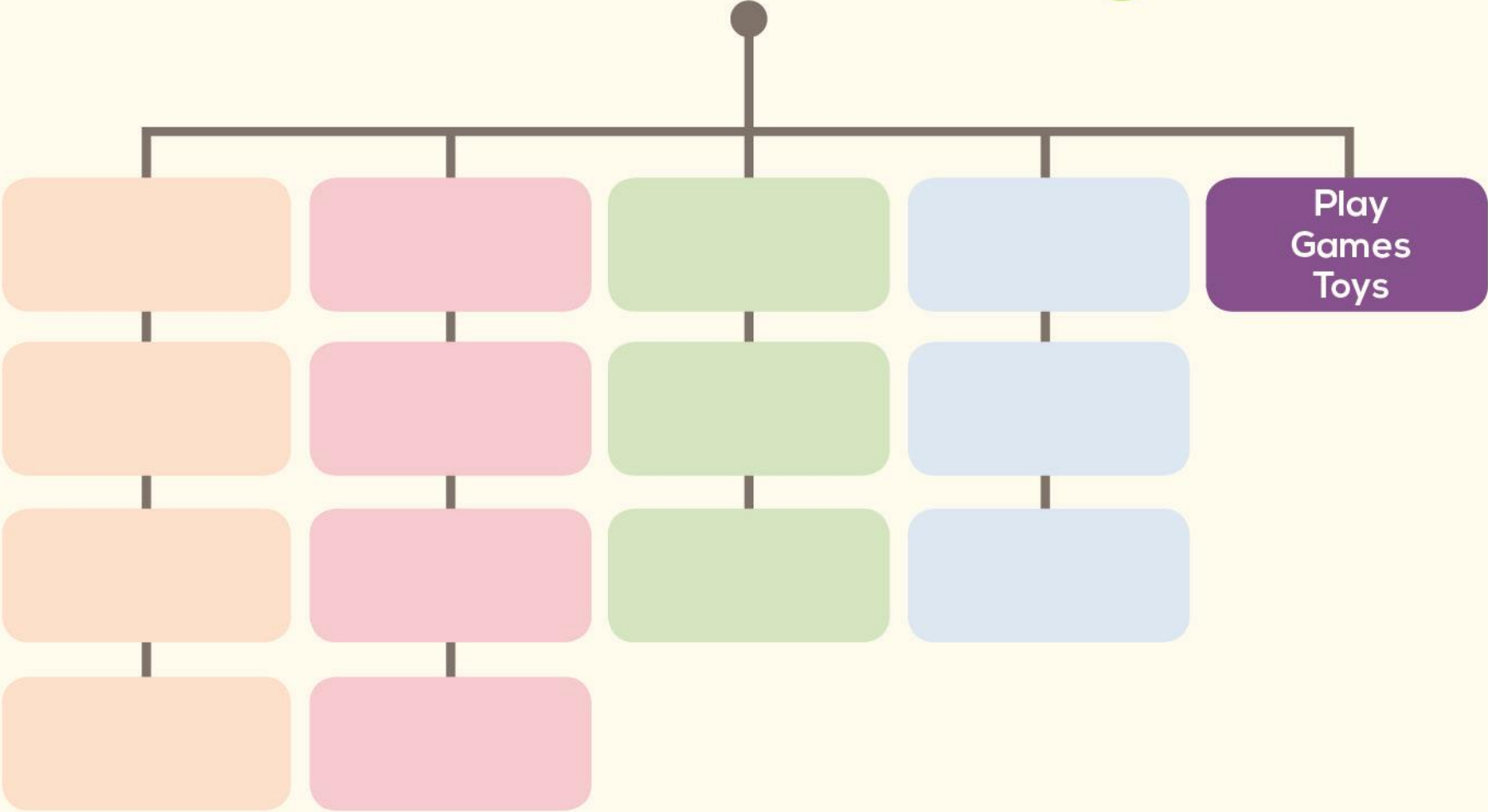
# Simulation



# Simulation



# Game Thinking



# Play



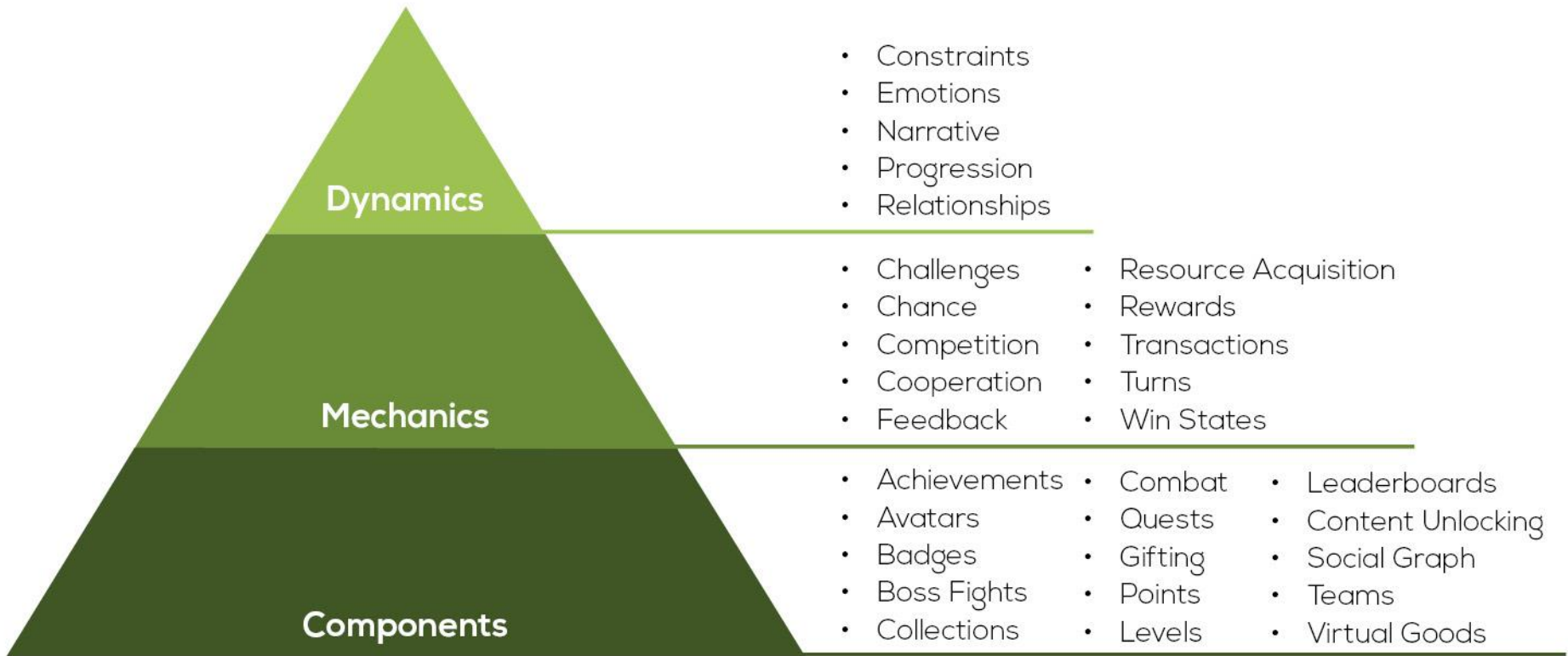
# Games



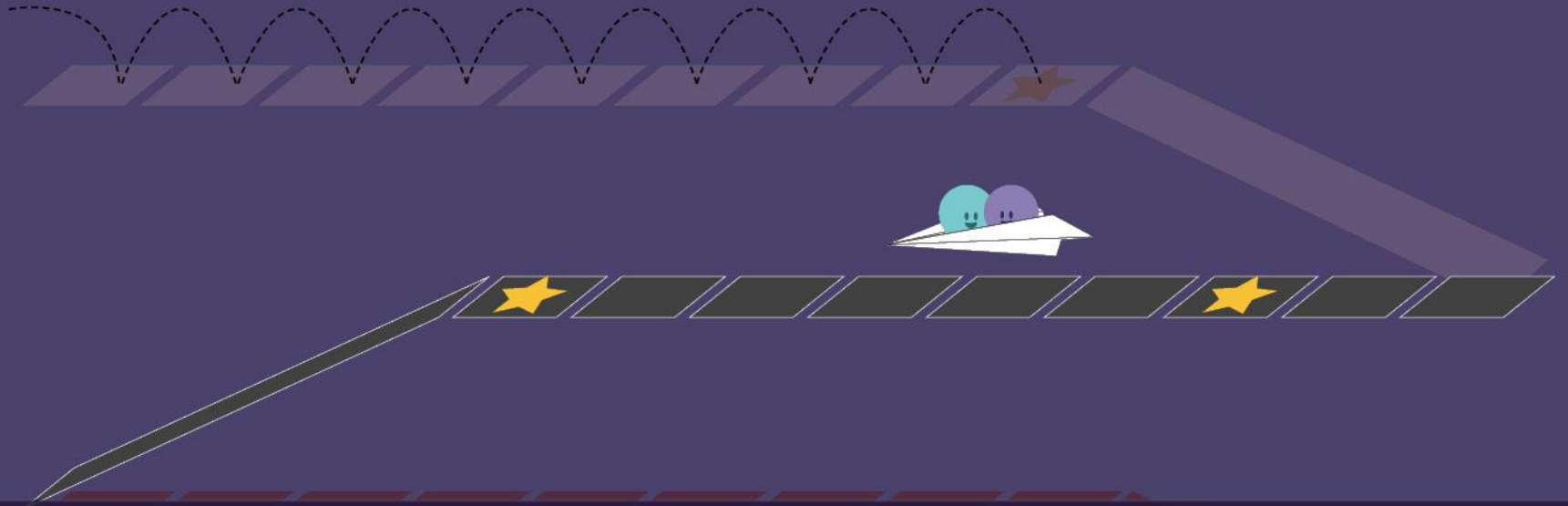
# Toys



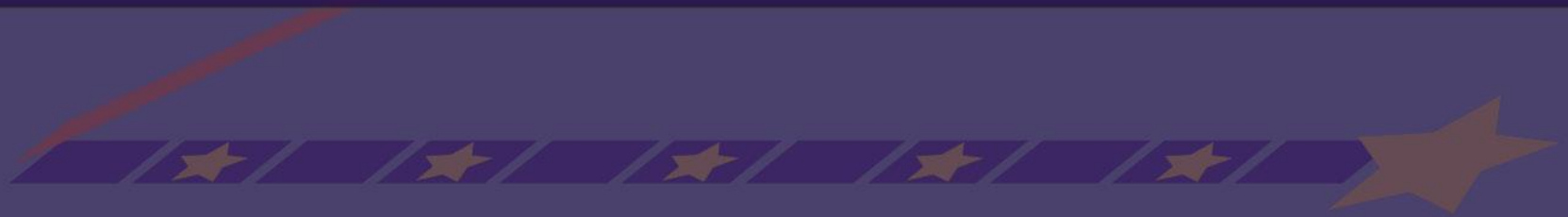
# The gamification pyramid







# Dynamics, Mechanics & Components





# 150 LIVES



150 DAYS. 150 LIVES.

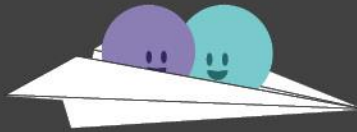
ENTER YOUR SEPSIS CASES & TRACK YOUR SUCCESS AT [BCSEPSIS.CA/150LIVES](https://bcsepsis.ca/150lives)

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EVERY 5 SEPSIS PROTOCOLS = 1 LIFE SAVED.



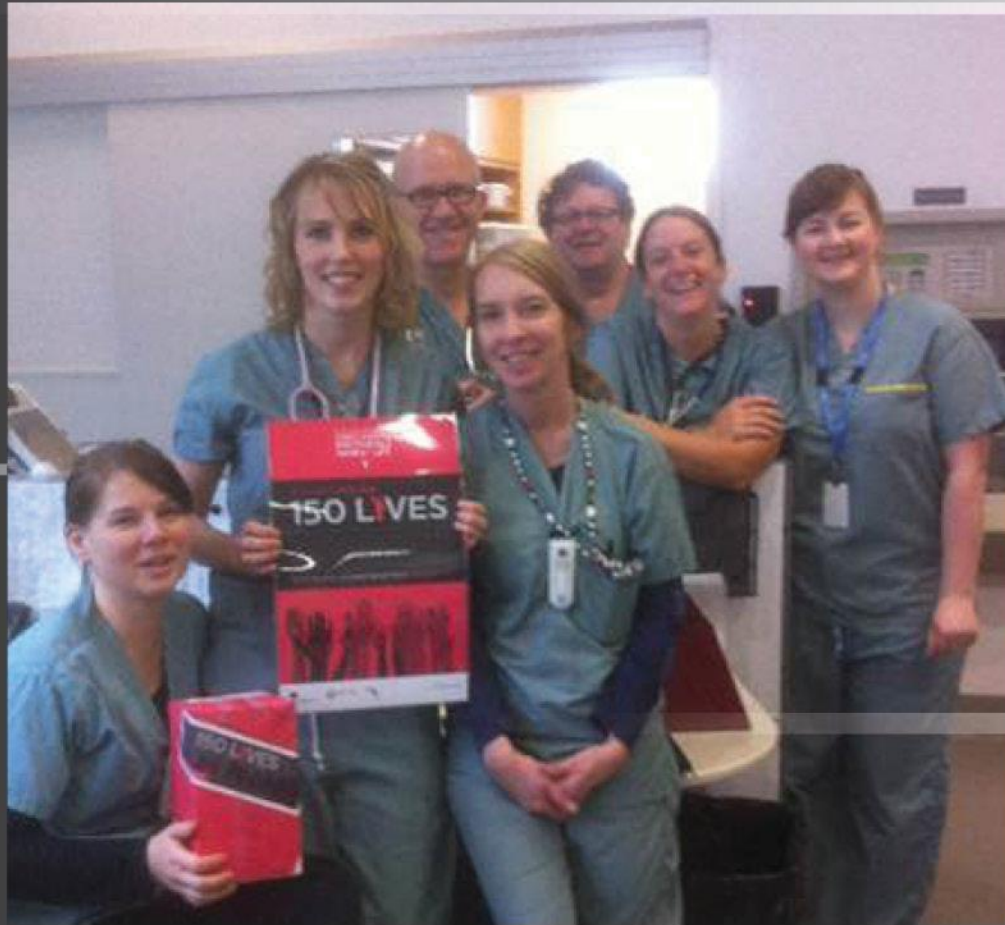


IN 150 DAYS...

### ### ### ### ### ### ### ### ### ### ###  
### ### ### ### ### ### ### ### ### ### ###  
### ### ### ### ### ### ### ### ### ### ###

SAVE 150 LIVES.





**150** ♥ **YOU'RE**  
**LIVES** **DOING**  
**GREAT**

**IN** *////////////////////////////////////*  
*WE'RE ALMOST THERE!*  
*////////////////////////////////////*

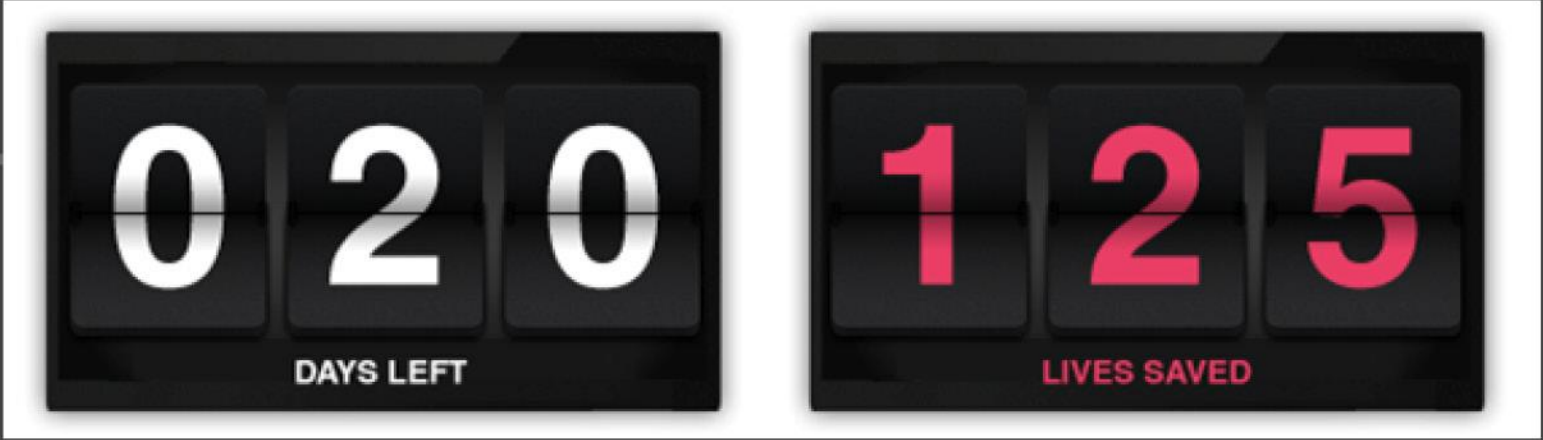
**150**  **KEEP UP**  
**DAYS** **THE GOOD**  
**WORK** ✓



WE'D **LOVE** TO  
HEAR FROM YOU



**SEND** **QUOTES**  
**US** **SOME** **PHOTOS**





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i  
help  
save  
lives.

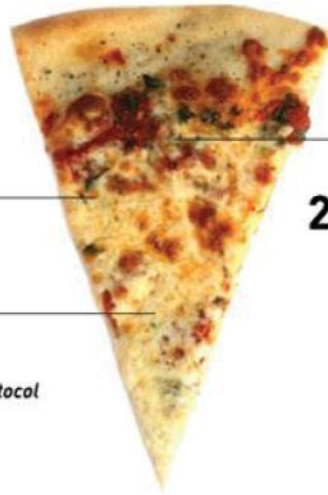
[BCSepsis.ca/150Lives](http://BCSepsis.ca/150Lives)

# 3 EASY STEPS to MAKING PIZZA

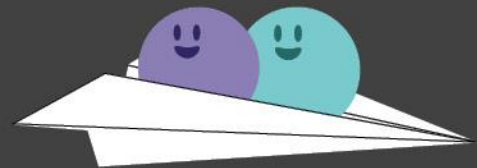
**1** check patient for  
*elevated lactate*

**2** check patient for  
*systolic blood pressure*

**3** use *sepsis protocol*



**WIN** YOUR TEAM a!  
PIZZA PARTY!





BC SepsisNetwork



WE SAVED OVER  
**150**  
LIVES  
IN   
**150** OCT 2013  
DAYS MAR 2014

**52%** growth in the  
BC Sepsis Network

... and we're still growing



join the sepsis network:

visit [BCSepsis.ca](http://BCSepsis.ca)



**1000+**

patients screened for severe  
sepsis & septic shock

**750+**

patients treated with  
sepsis protocol

WE DID IT TOGETHER!

**32**

BC Emergency  
Departments  
participated



**2659**

clinicians  
viewed sepsis  
articles on

**495**

BC clinicians  
completed

**807**

BC clinicians  
viewed

SEPSIS  
E-LEARNING  
MODULES

- + education & resources
- + increasing awareness
- + best practice guidelines

**THE BEST CARE,  
NO MATTER WHERE.**

A little boost can make a big difference.

Introducing BoosterBuddy, a free app to help young people improve their mental health.



BoosterBuddy

[viha.ca/boosterbuddy](http://viha.ca/boosterbuddy)





# Welcome!

The awesome thing is, when you help me, you will also be helping yourself!

This app will help you pay attention to your mental health and do daily tasks to stay well.



Continue



Month

Day



Tuesday  
December 15, 2015



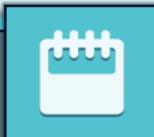
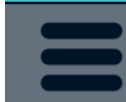
Checked In



Complete Quests



Add Event



Library

Favourites

Mine



## Depression



Depression is an Illness



Circle of Depression



Anti-Depression Activities



Make it Smaller



Don't Wait to Feel It



Chunk the Day



Budget Your Energy



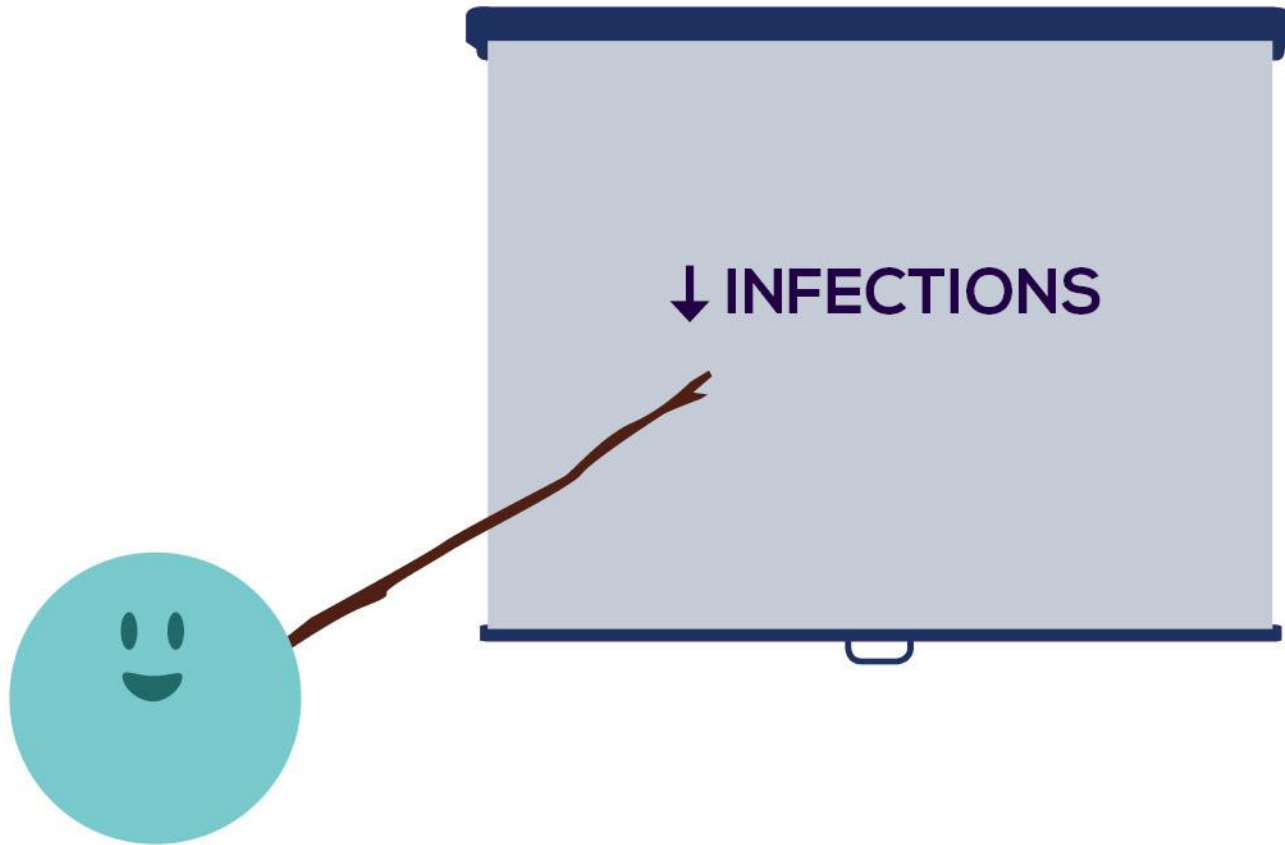
Improve the Moment





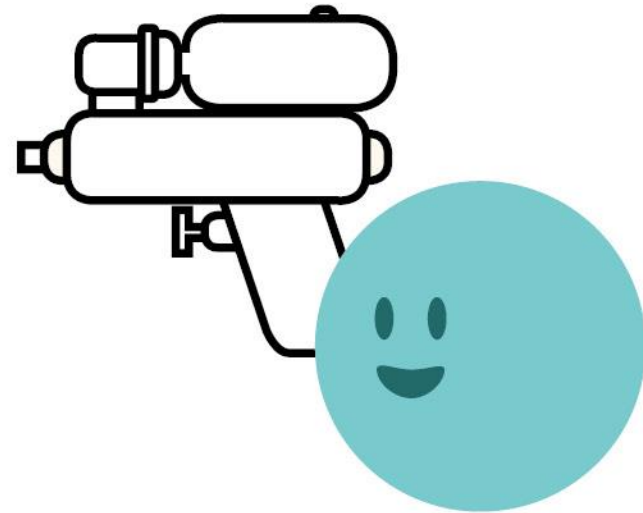


## **Step 1:** Define Your Objectives



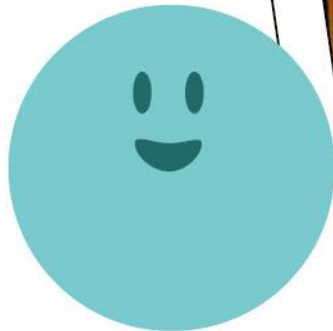


## Step 2: Define Your Behaviour Change



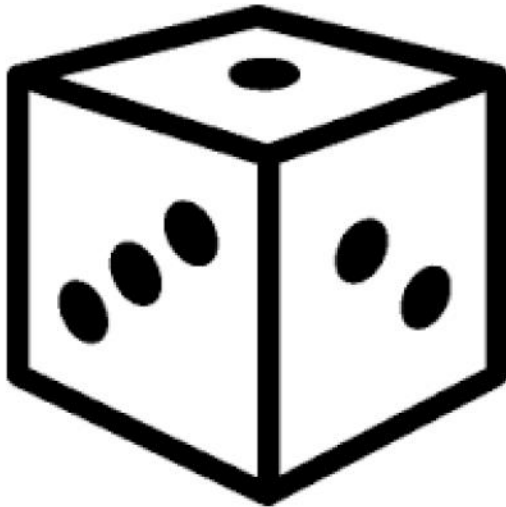


## Step 3: Create a meaningful narrative





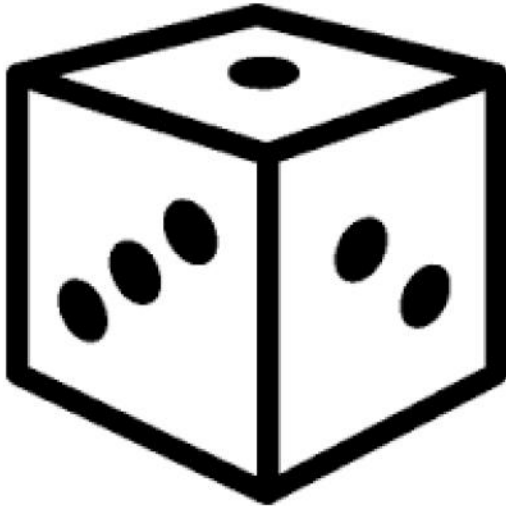
## Roll the Dice Twice: 1st ROLL!



- 1 Operating Room
- 2 Primary Care Clinic
- 3 Emergency Department
- 4 Residential Care Home
- 5 Long Term Care Facility
- 6 Surgical Ward



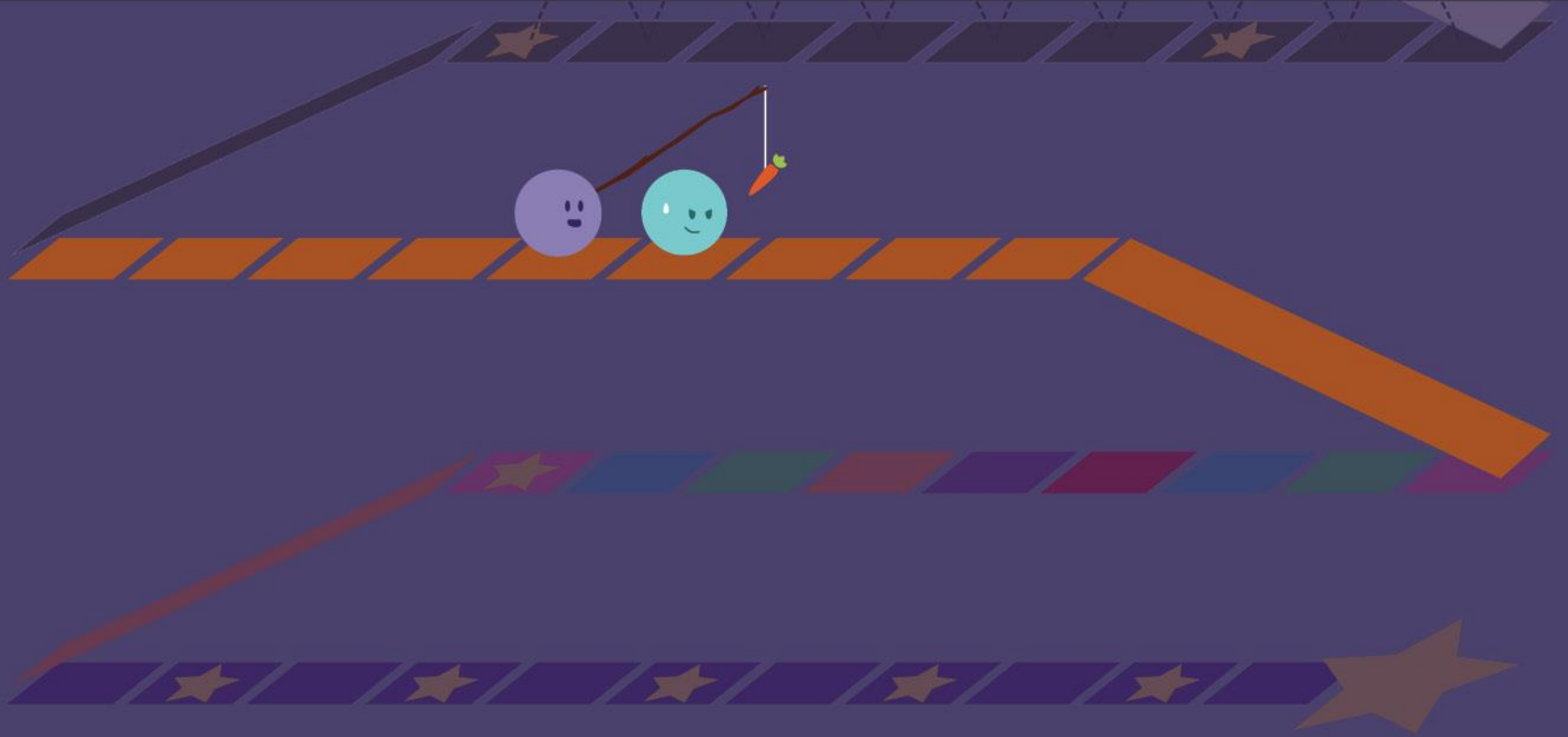
## Roll the Dice Twice: 2nd ROLL!



- 1** Improve Communication
- 2** Decrease Infections
- 3** Improve Patient Experiences
- 4** Improve Teamwork
- 5** Improve Patient Safety
- 6** Improve Access



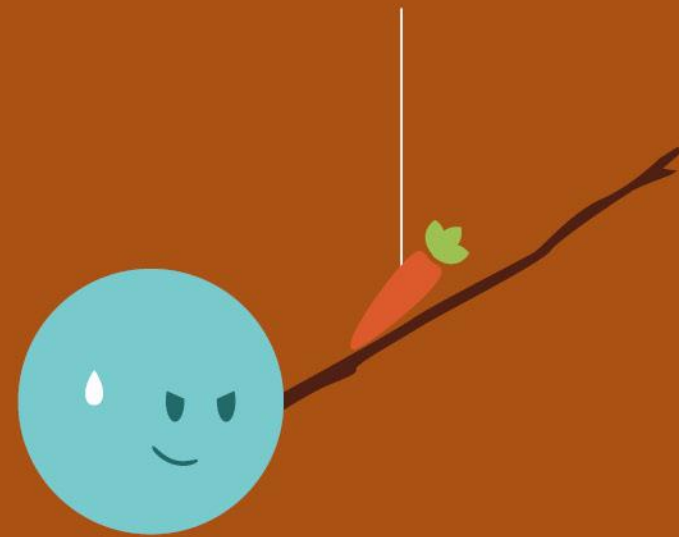
# The Theory Behind Gamification



# The Motivational Spectrum



# Behaviourism





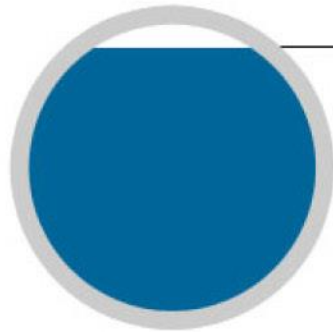
stickK



dare to change



**LinkedIn**  PROFILE STRENGTH



All-Star

# Types of Rewards

Tangible/Intangible

Expected/Unexpected

Contingent

Task

Engagement

Completion

Performance



# Reward Schedules

Continuous

Fixed Ratio/Interval

Variable

Competitive/Non competitive

Certain/Uncertain



# Cautions with Rewards

- Potential for abuse/manipulation
- Over-justification effect
- Overemphasis



# Shifting Behaviours

Intrinsic motivation and self-determination in human behaviour*	Drive: The surprising truth about what motivates us**
Competence	Mastery
Autonomy	Autonomy
Relatedness	Purpose

\*Deci E, Ryan R. Intrinsic Motivation and self-determination in human behaviour. In: Aronson E, ed. Perspectives in Social Psychology. New York, NY; 1985.

\*\* Pink D. Drive: The surprising truth about what motivates us. Riverhead Hardcover; New York, NY; 2009.

# The Intrinsic Motivation

Relatedness

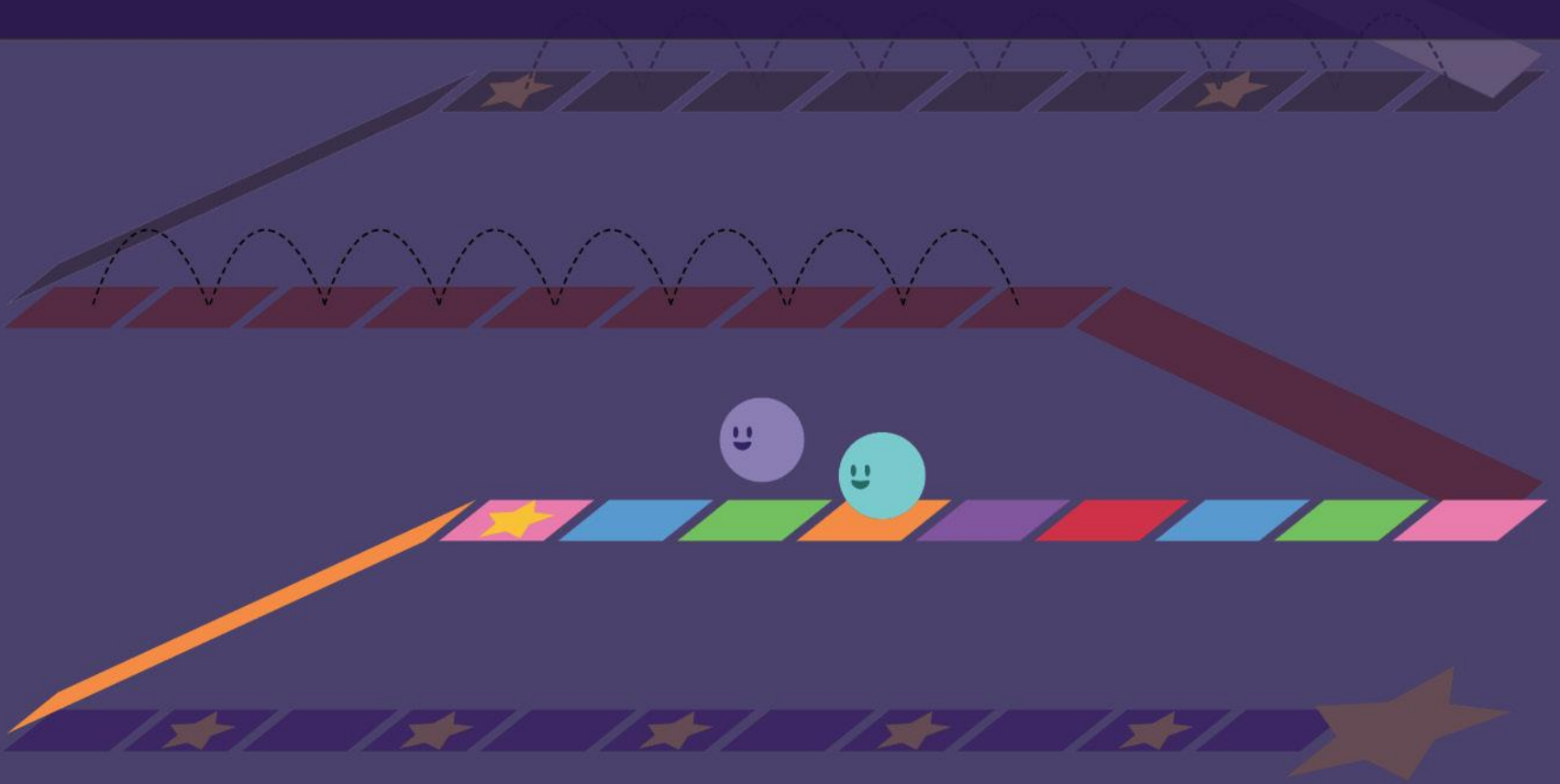
Autonomy

Mastery

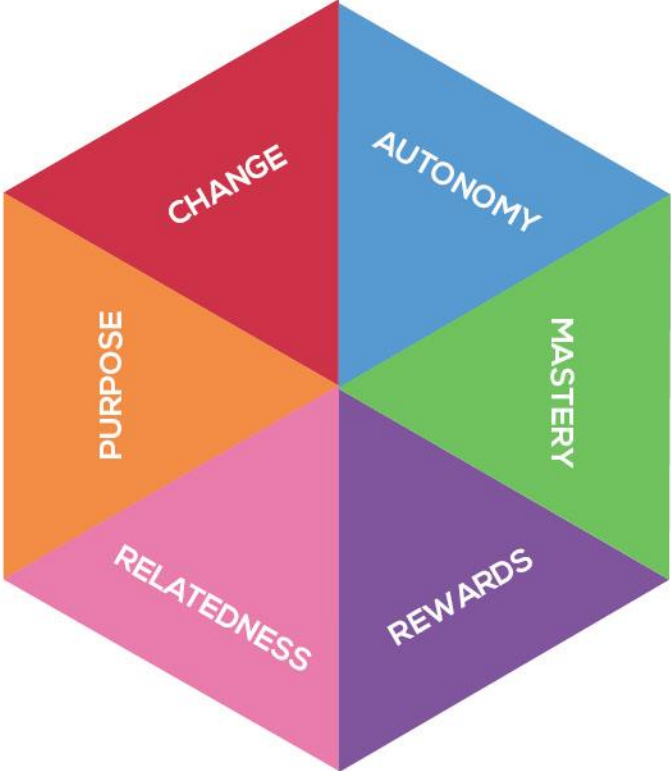
Purpose



# User Types and Components



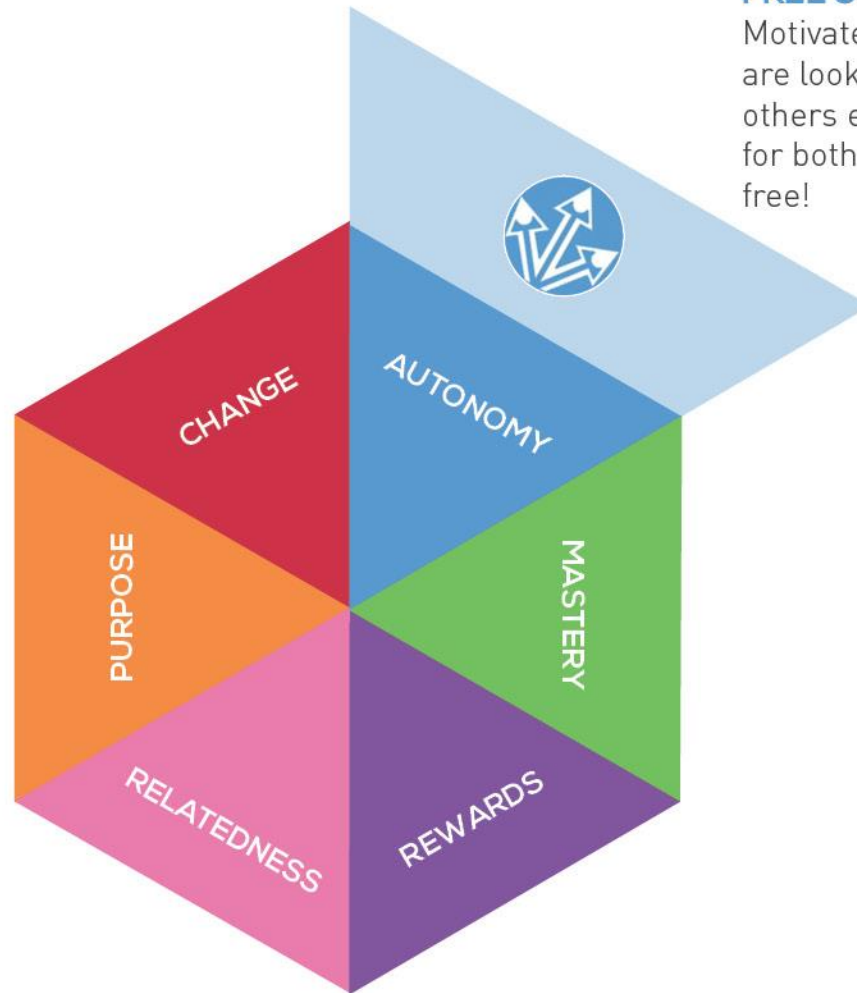






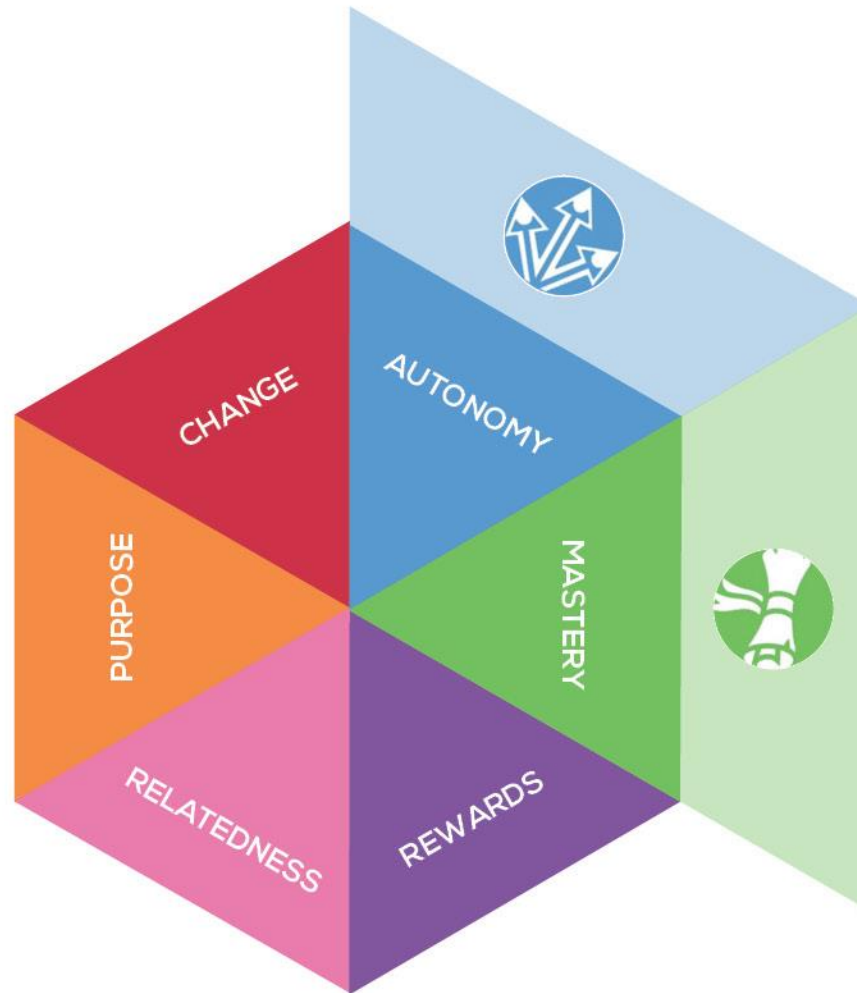
# **Marczewski's User Type Test**

<http://bit.do/user-type-test>

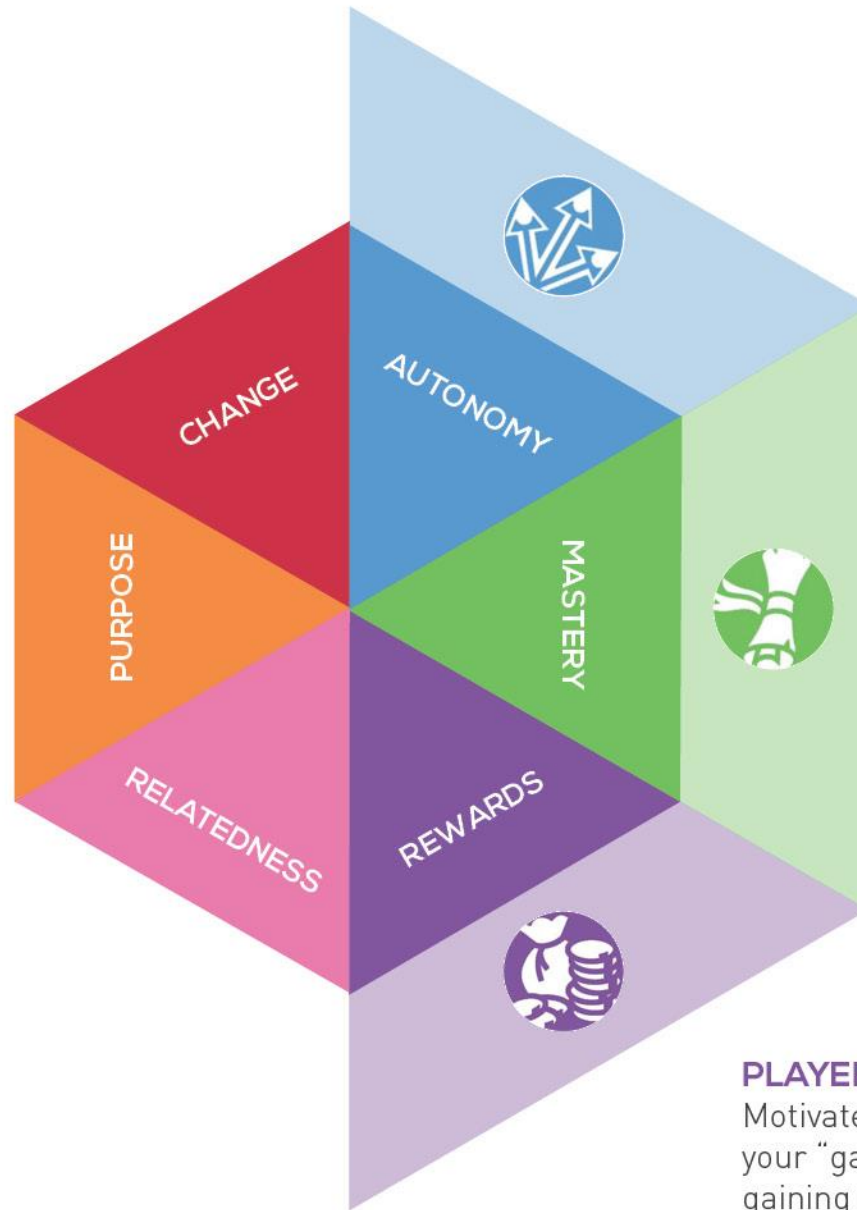


## FREE SPIRIT

Motivated by Autonomy. Some are looking to be creators, others explorers. Try to cater for both if you can. All like to be free!

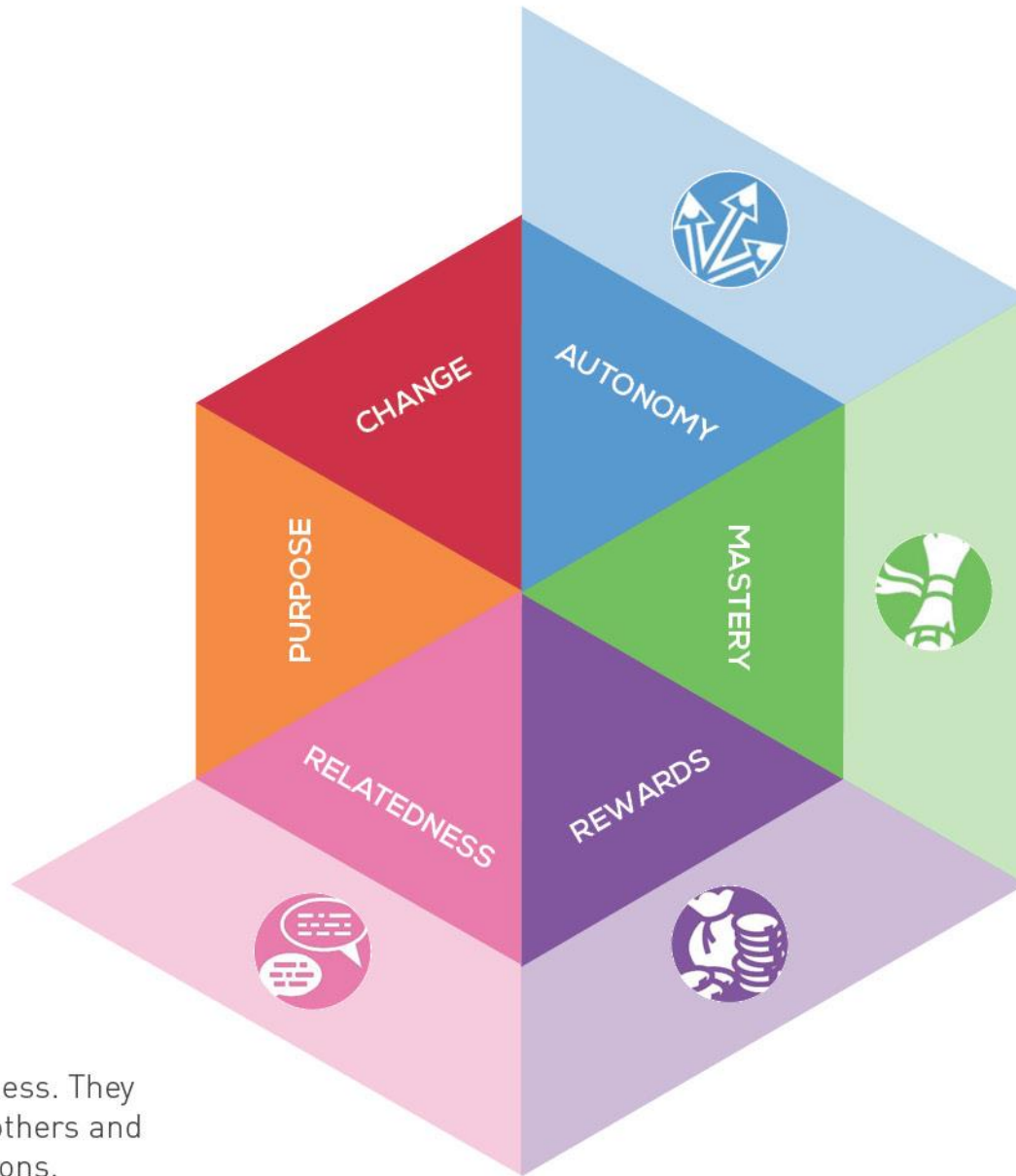


**ACHIEVER**  
Motivated by Mastery. They are looking to learn new things and improve themselves. They want challenges to overcome.



**PLAYER**

Motivated by Rewards. Will play your "game" for the purpose of gaining rewards.

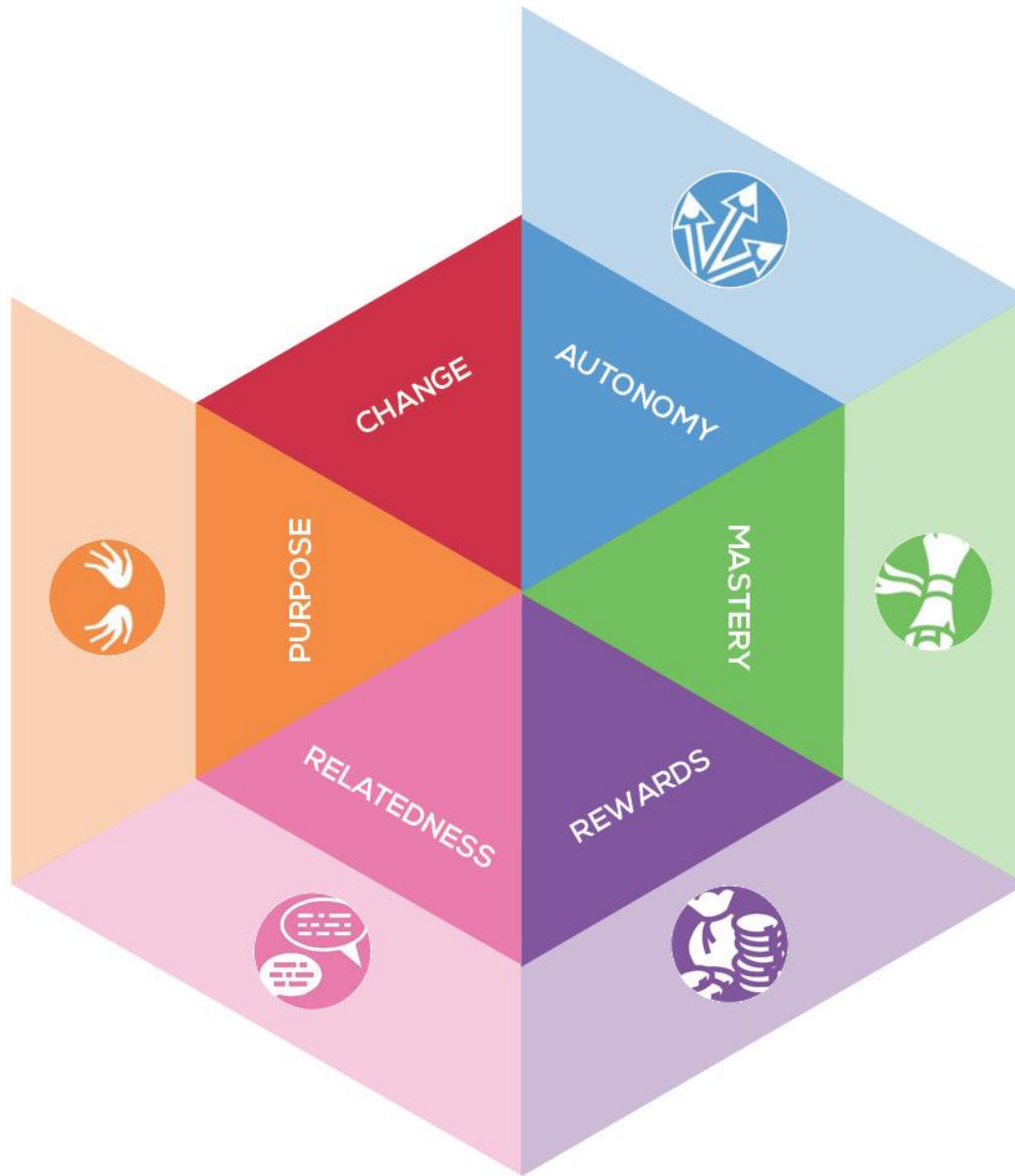


## **SOCIALIZER**

Motivated by Relatedness. They want to interact with others and create social connections.

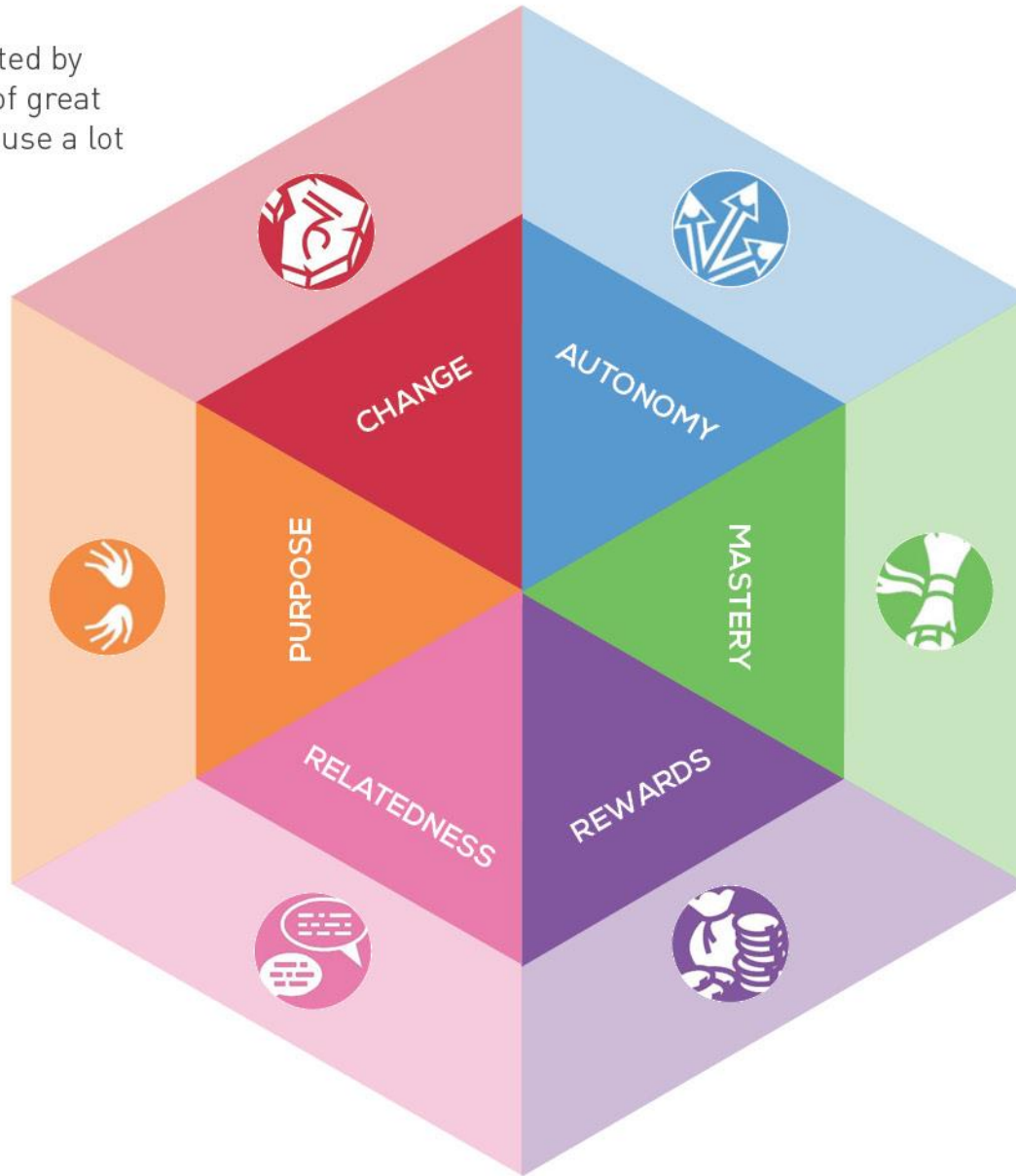
## PHILANTHROPIST

Motivated by Purpose. This group are altruistic, wanting to give back to other people and enrich the lives of others in some way.



## DISRUPTOR

Disruptors are motivated by Change. They can be of great assistance, but can cause a lot of trouble as well.





## DISRUPTOR

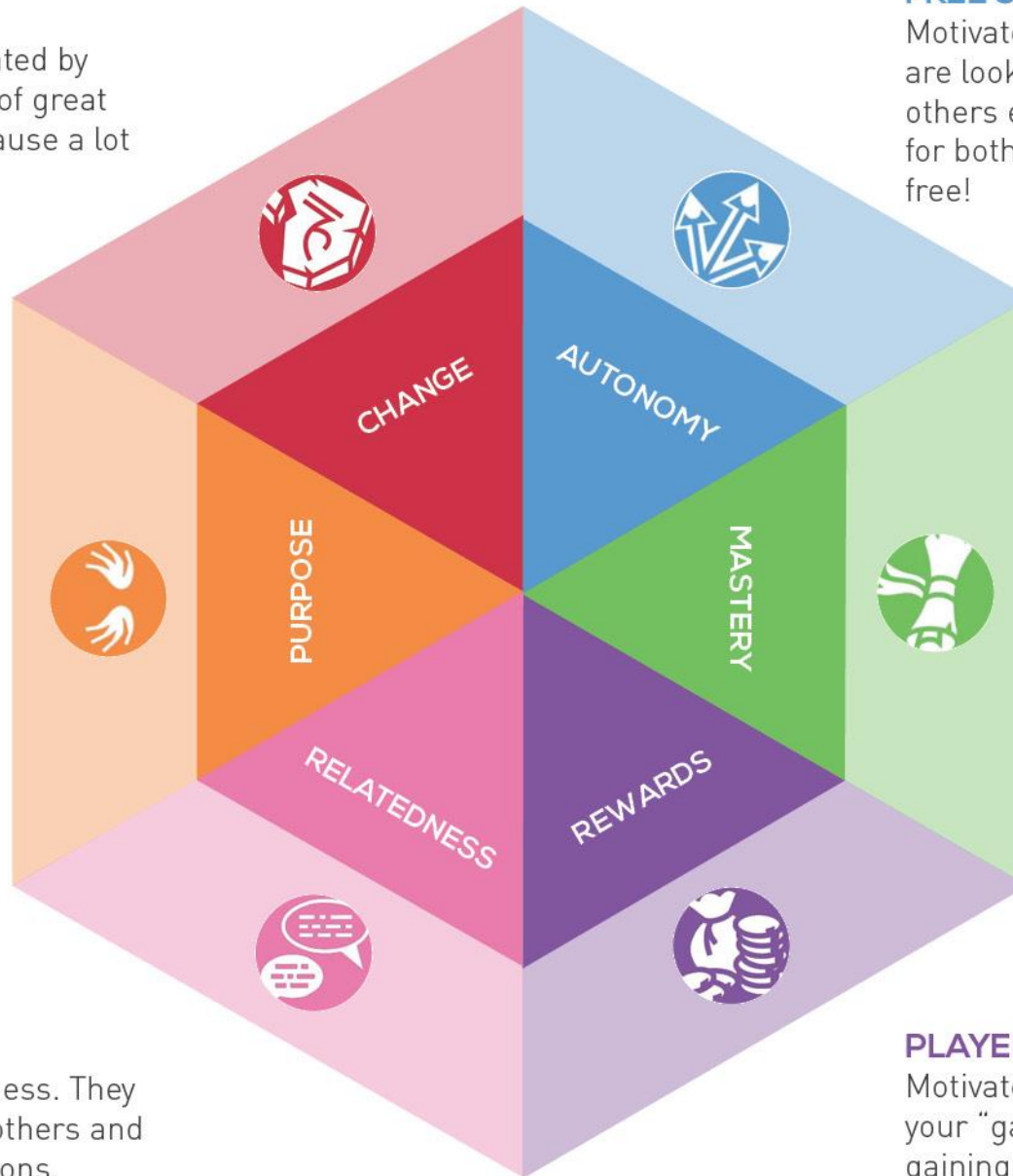
Disruptors are motivated by Change. They can be of great assistance, but can cause a lot of trouble as well.

## PHILANTHROPIST

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## FREE SPIRIT

Motivated by Autonomy. Some are looking to be creators, others explorers. Try to cater for both if you can. All like to be free!

## ACHIEVER

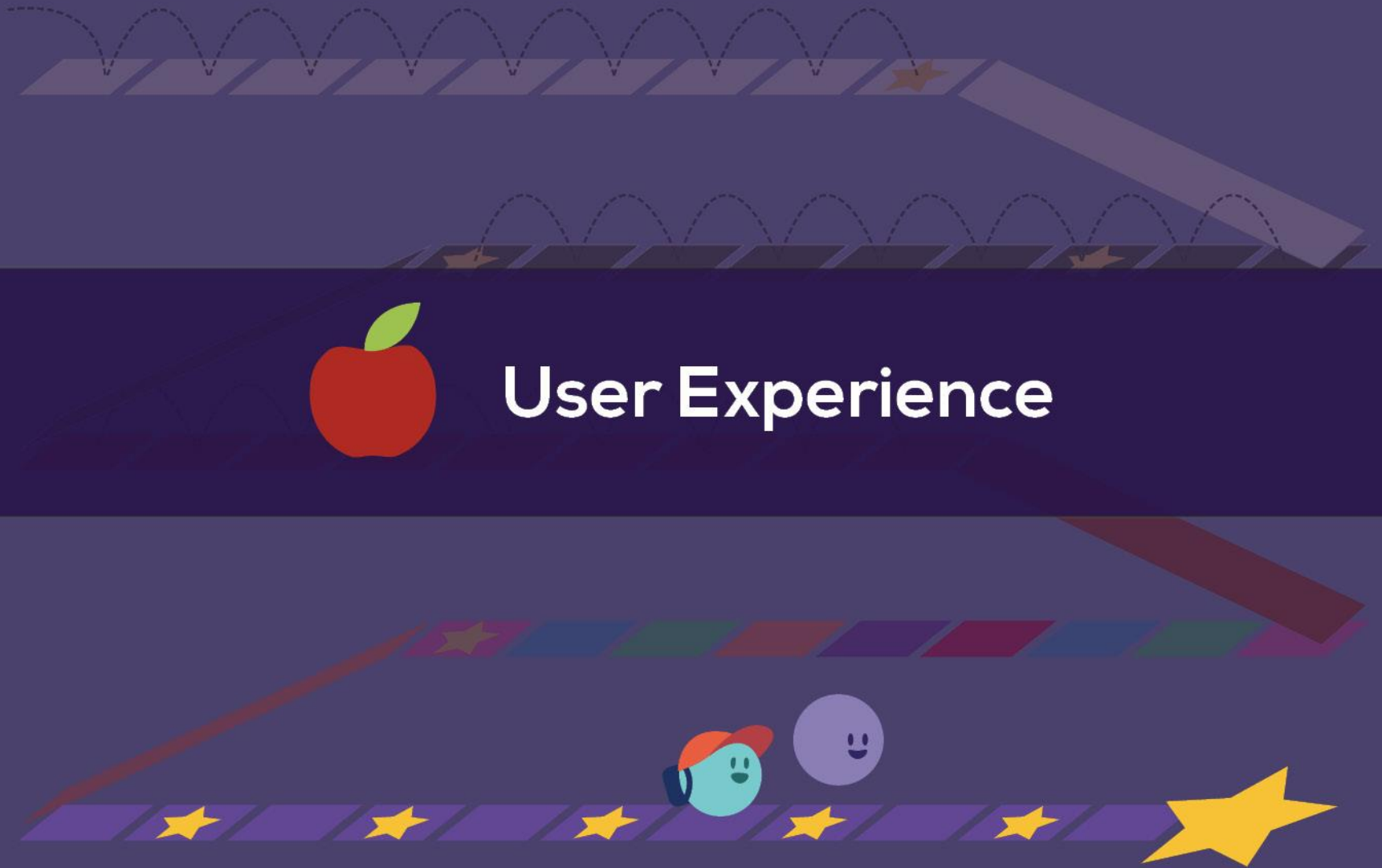
Motivated by Mastery. They are looking to learn new things and improve themselves. They want challenges to overcome.

## PLAYER

Motivated by Rewards. Will play your "game" for the purpose of gaining rewards.



# User Experience

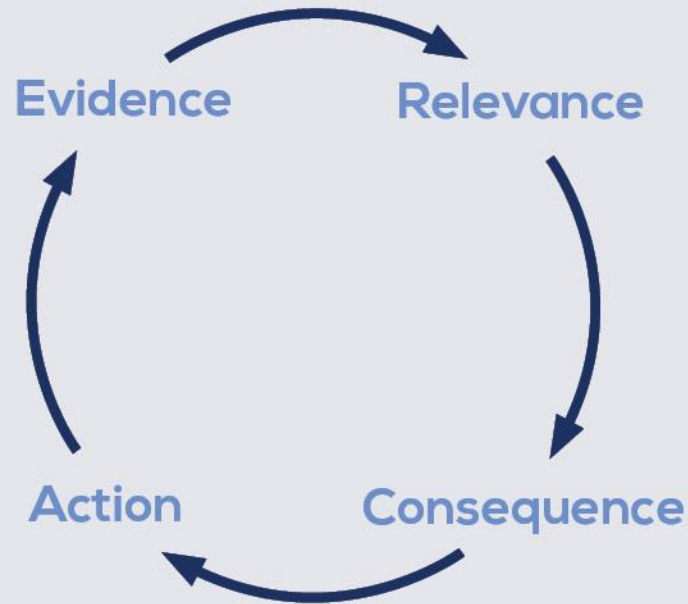




## Step 4: Identify Your Users



# Feedback Loops



# Onboarding





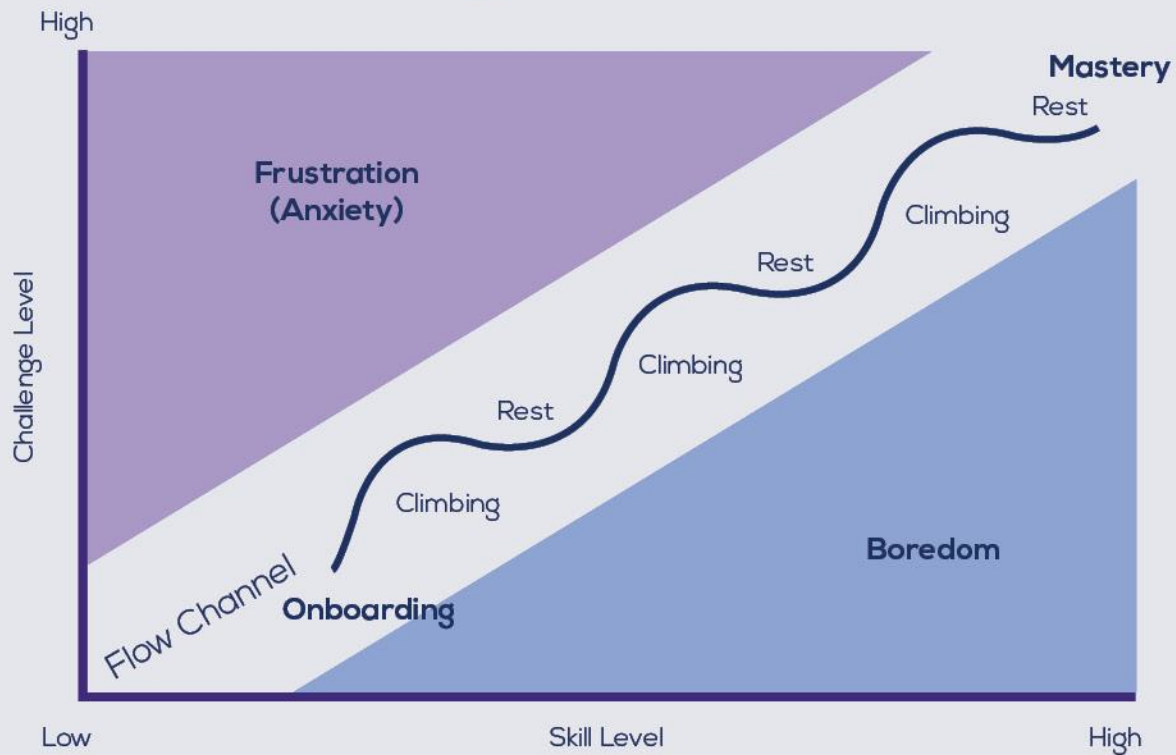


# Pathways to Mastery





# Progression



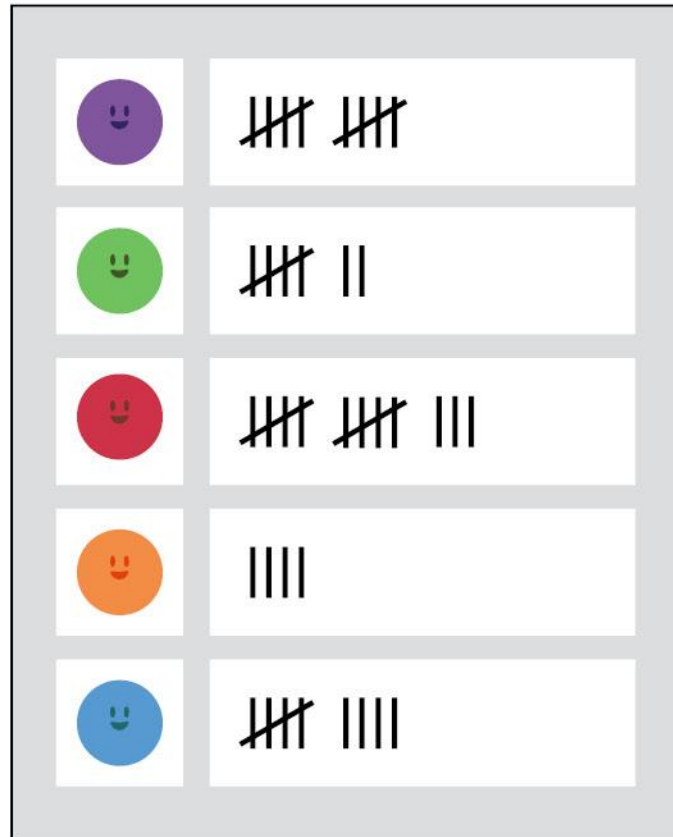
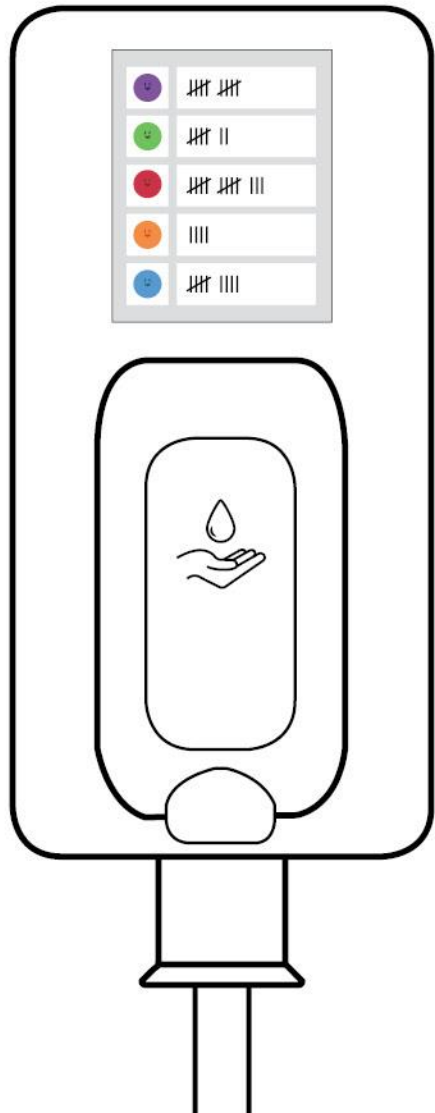
# Creating a balance







# Step 5: Incorporate Feedback Loops

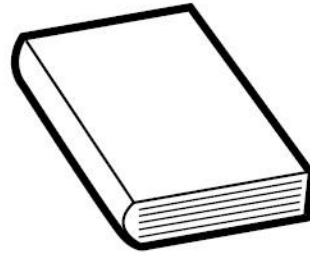




## **Step 6:** Steps For Onboarding



**+1 point**



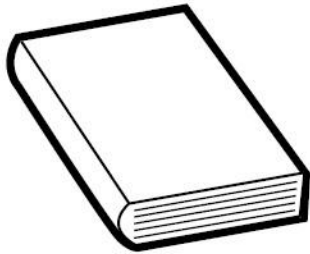
**+ 2 points**



**+ 3 points**



## Step 7: Design Pathways to Mastery



**+ 3 points**



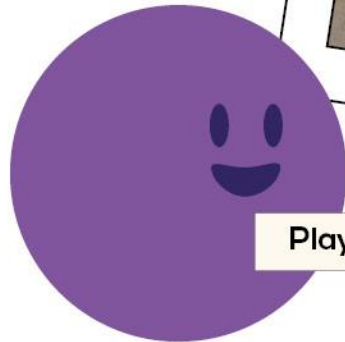
**+ 5 points**



**+ 7 points**



## Step 8: Add Your Gaming Components



Player



## Step 8: Add Your Gaming Components



Achiever





## Step 8: Add Your Gaming Components



Philanthropist



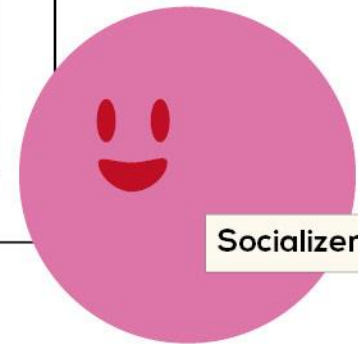
# Step 8: Add Your Gaming Components



Socializer



Socializer



Socializer



## Step 8: Add Your Gaming Components



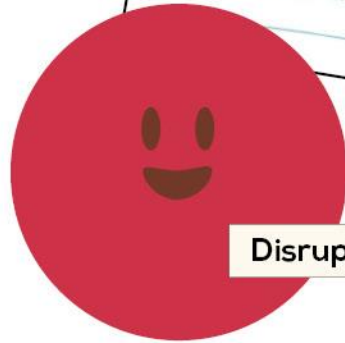
Free Spirit



## Step 8: Add Your Gaming Components



Hand Hygiene – at work & at play



Disruptor

# Finding the Fun



Winning Problem Solving Collecting  
Teamwork Triumphant Role Playing  
Sharing Imagination Chilling  
Surprise Goofing Off Exploring  
Customization Recognition






## Step 9: Finding The Fun

	Player	Score	Unit
1		300 pts	Unit 1
2		200 pts	Unit 2
3		100 pts	Unit 3



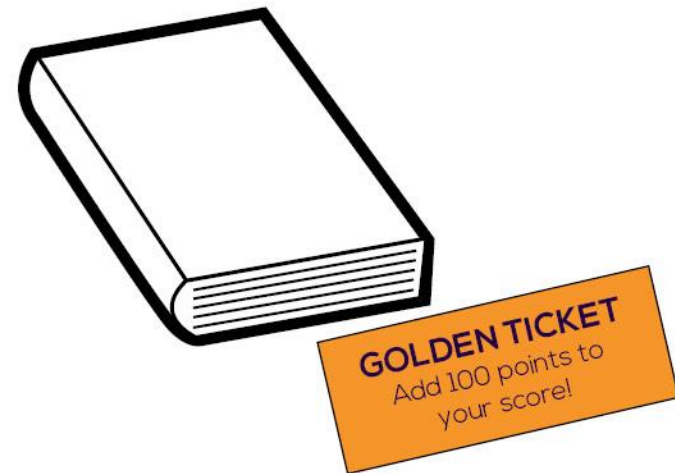
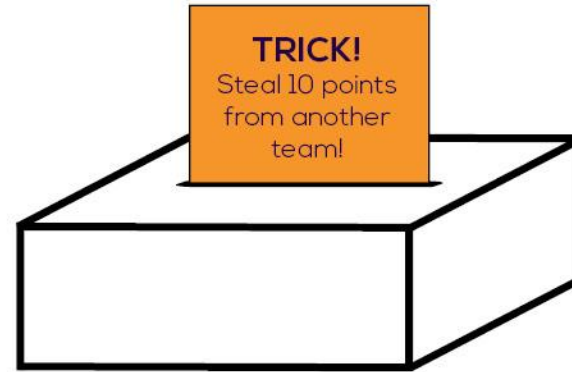
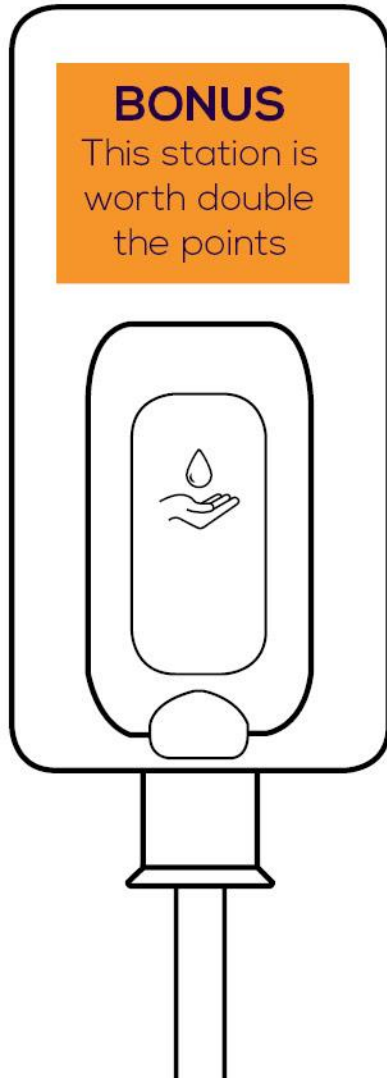
## Step 9: Finding The Fun

	Team		Score	Unit
1	Crusaders		300 pts	Unit 1
2	Storm Troopers		200 pts	Unit 2
3	Avengers		100 pts	Unit 3





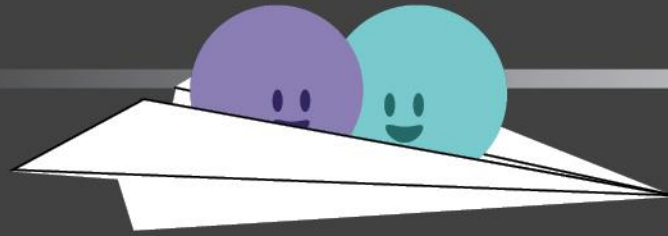
## Step 9: Finding The Fun





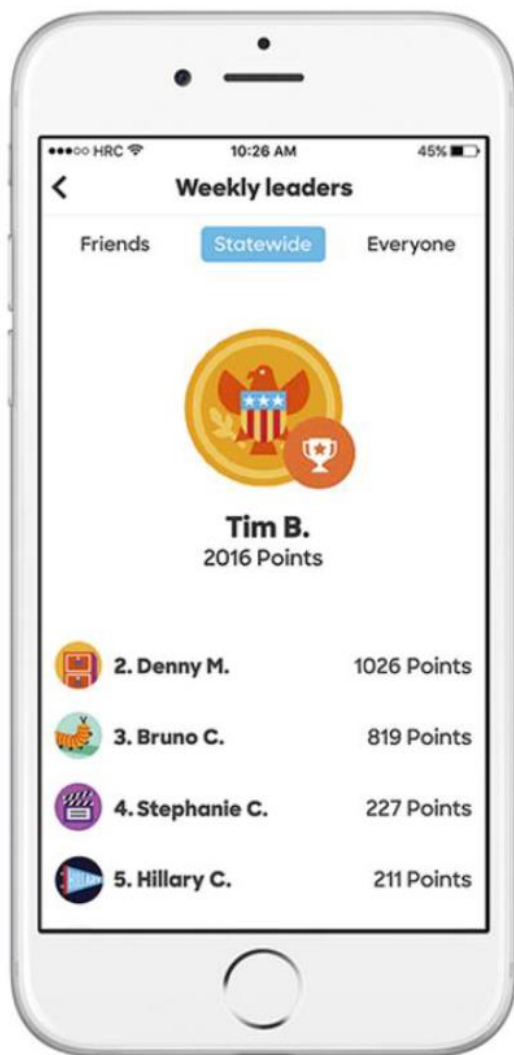
## Step 10: Testing



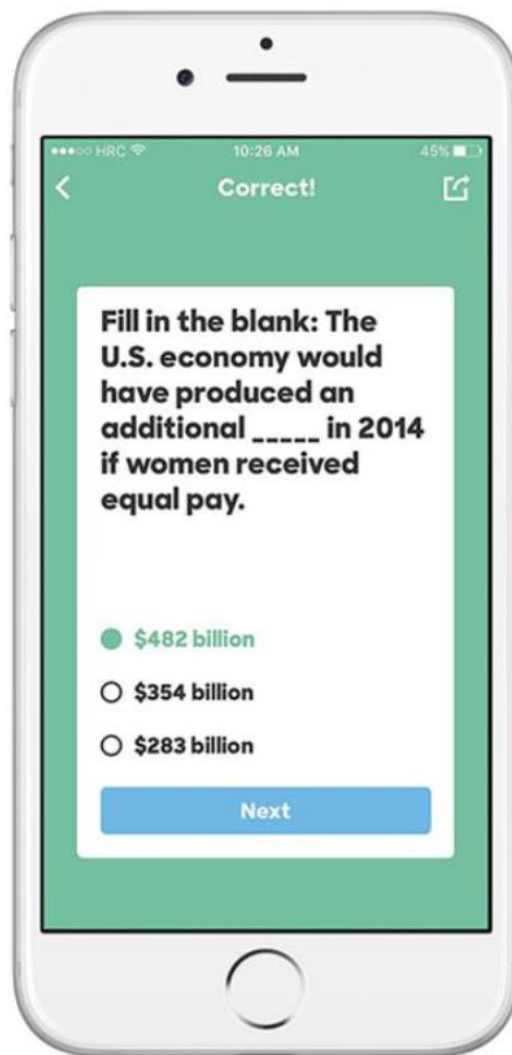


**LET'S REVIEW...**

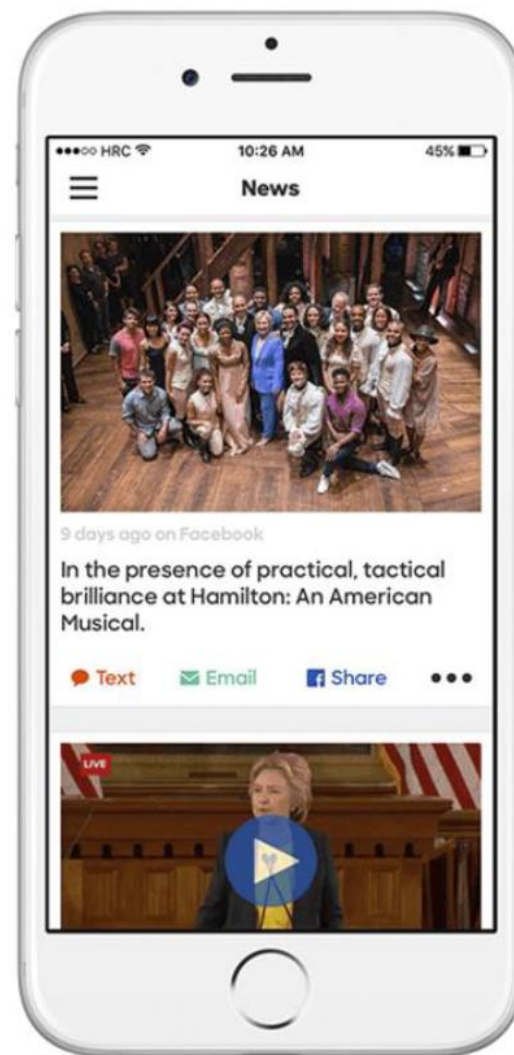
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**Compete against your friends and other supporters**



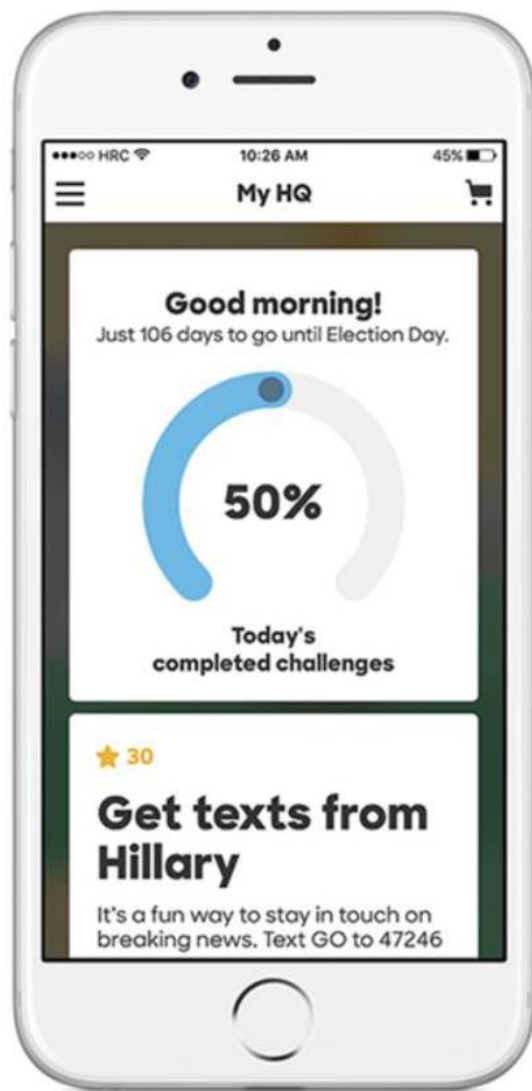
**Test your knowledge and become an expert on the issues**



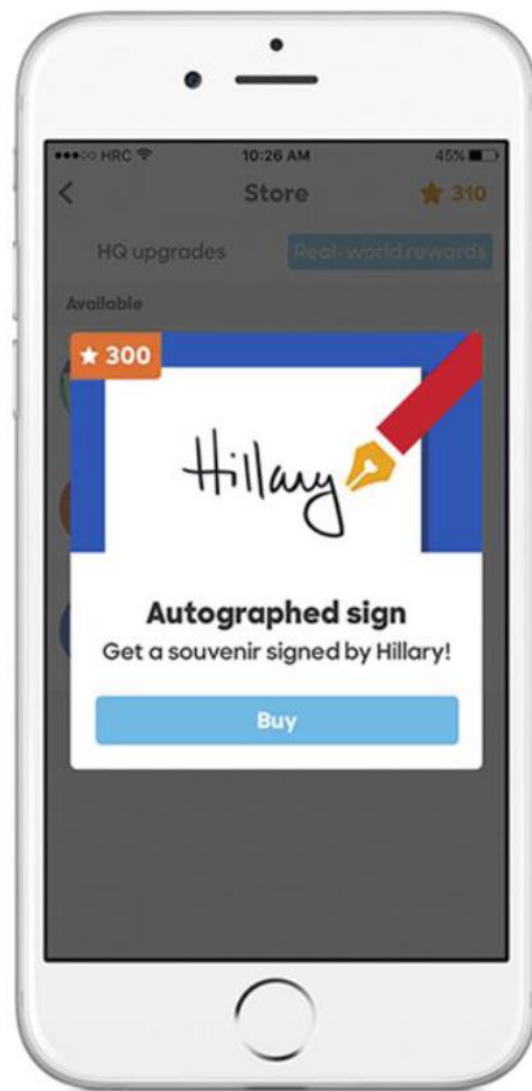
**Share news and information (and even do some good old-fashioned organizing)**



**Design your own campaign HQ**

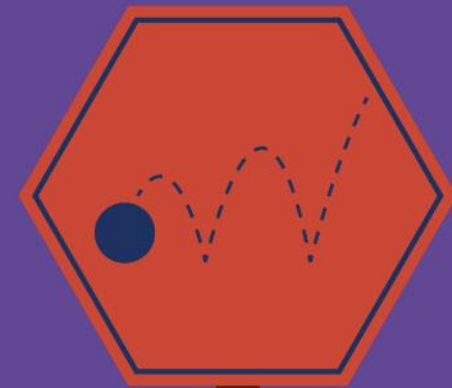


**Complete daily challenges to help elect Hillary Clinton**

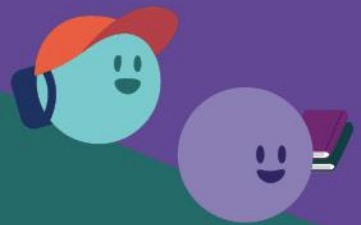


**Get rewards (digital and real-life ones!)**

# Cautions



- The elements are not the game



- The elements are not the game
- Avoid a cookie cutter approach





- The elements are not the game
- Avoid a cookie cutter approach
- Use the right element to fit your purpose



- The elements are not the game
- Avoid a cookie cutter approach
- Use the right element to fit your purpose
- You don't have to use everything!



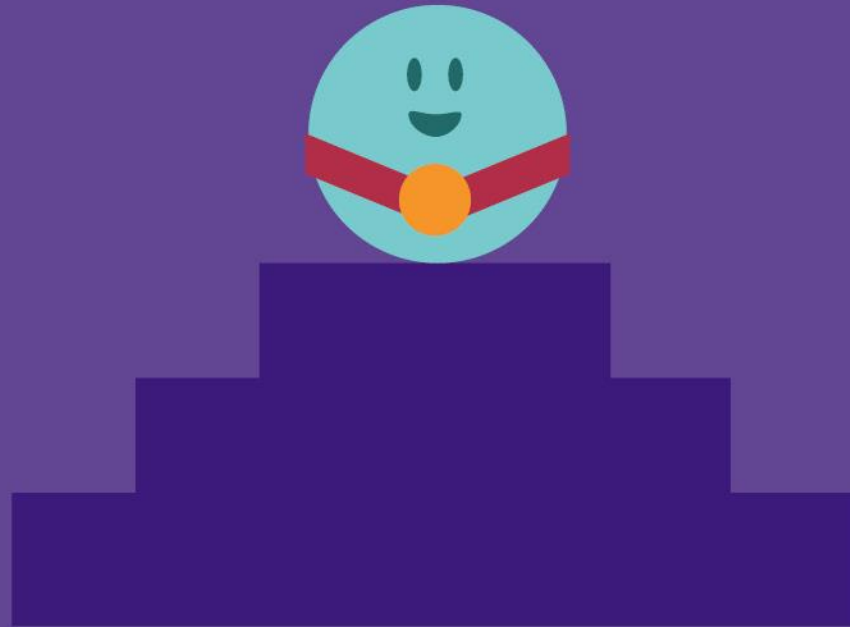
- The elements are not the game
- Avoid a cookie cutter approach
- Use the right element to fit your purpose
- You don't have to use everything!
- When you have a new hammer, everything looks like a nail



- The elements are not the game
- Avoid a cookie cutter approach
- Use the right element to fit your purpose
- You don't have to use everything!
- When you have a new hammer, everything looks like a nail
- Is gamification right for your context?



“Successful design interventions require a deep understanding of and continued engagement with the actual people, sites, and systems they target.”





# GAMIFICATION

The word 'GAMIFICATION' is rendered in a colorful, multi-colored font. Each letter is filled with a different color and has a slight 3D effect. Two large, semi-transparent smiley faces are positioned behind the letters: a teal one behind the 'A' and a purple one behind the 'I'.

PLAY AGAIN?



**BC PATIENT SAFETY  
& QUALITY COUNCIL**  
Working Together. Accelerating Improvement.