

## Lecture 3

# Monetization

# Source for Today's Talk

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- Skaff Elias and Richard Garfield
  - *Lessons from CCGs*
  - At GDC 2011 and visited here in 2014
  - Relevant to certain kinds of monetization
- Various talks at **GDC Online** (R.I.P.)
  - Nothing specific that needs a shout-out
  - Monetization is a major conference topic
  - Still not well understood...

# Monetization vs Downloadable Content

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- These two are often lumped together
  - In-game purchases that can enhance play
  - Revenue stream after game initial purchase
- But makes a big difference to the designer
  - DLC does not (typically) alter the core game
    - **Exception:** Can alter level progression in RPGs
  - Monetization is extremely distortionary
    - Must be designed from the **beginning**

# Some Words on DLC

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- Different design philosophy from monetization
  - Target audience is player **finished** with main game
  - Can break the balance of core game
  - Challenge is making sure people still playing
- Pricing is based on how much extra play added
  - **Rule:** \$5 per hour (comes from movies)
  - But historically much resistance to this pricing
  - Harder to gauge in multiplayer settings

# Episodic Content

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- Grey area between DLC and monetization
  - Designed as classic, self-contained content
  - But game is “incomplete” without it
- Business model often not very successful
  - Does not benefit from economies of scale
  - Cost to produce content >> price point of game
  - Only recoup investment after many episodes
- Need loyal audience or established franchise
  - **Example:** Telltale Games (and they *failed*)

# Modern Game Monetization

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- **Cosmetic Enhancements**
  - Visuals/items with no effect on the gameplay
  - **Example:** *Fortnite* emotes
- **Consumable Resources**
  - Items that improve gameplay performance
  - **Example:** *Battlefront* one-use power-ups
- **In-Game Items**
  - “Permanent” items that significantly alter gameplay
  - **Example:** *Battlefront* weapons

# Modern Game Monetization

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- **Cosmetic Enhancements**

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We are okay  
with this

- **Consumable Resources**

- Items that improve gameplay
- **Example:** *Battlefront* one-use weapons

But less okay  
with these two

- **In-Game Items**

- “Permanent” items that significantly alter gameplay
- **Example:** *Battlefront* weapons

# The Problem of Cosmetics

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- They reinforce the social aspects of gaming
  - Way to stand out from other players
  - Way to forge closer identity with your character
- Only make sense in certain gaming contexts
  - Multiplayer gaming
  - Twitch or game streaming
  - Long-running role playing games
- Not particularly useful in mobile

# Cosmetics in *Lara Croft Go*



# Cosmetics in *Lara Croft Go*



Abandoned in later titles  
(e.g. *Deux Ex Go*)



# Modern Game Monetization

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Can these two ever be okay?

# Monetization and Resources

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- Adding *real world currency* to game economy
  - Money becomes a game resource
  - Must be balanced like any other
- Primarily works as a resource **source**
  - Players buy game objects or other resources
  - The new “insert quarter to play”
- But it can also be a resource **drain**
  - Creators of user-created content can get paid
  - This is the appeal of NFTs and play-to-earn

# Components of a Game Economy

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- **Sources**: How a resource can increase
  - **Examples**: ammunition clips, health packs
- **Drains**: How a resource can decrease
  - **Examples**: firing weapon, player damage
- **Converters**: Changes one resource to another
  - **Example**: vendors, *Starcraft* barracks
- **Traders**: Exchange resources between entities
  - Mainly (but not always) in multiplayer games

# Components of a Game Economy

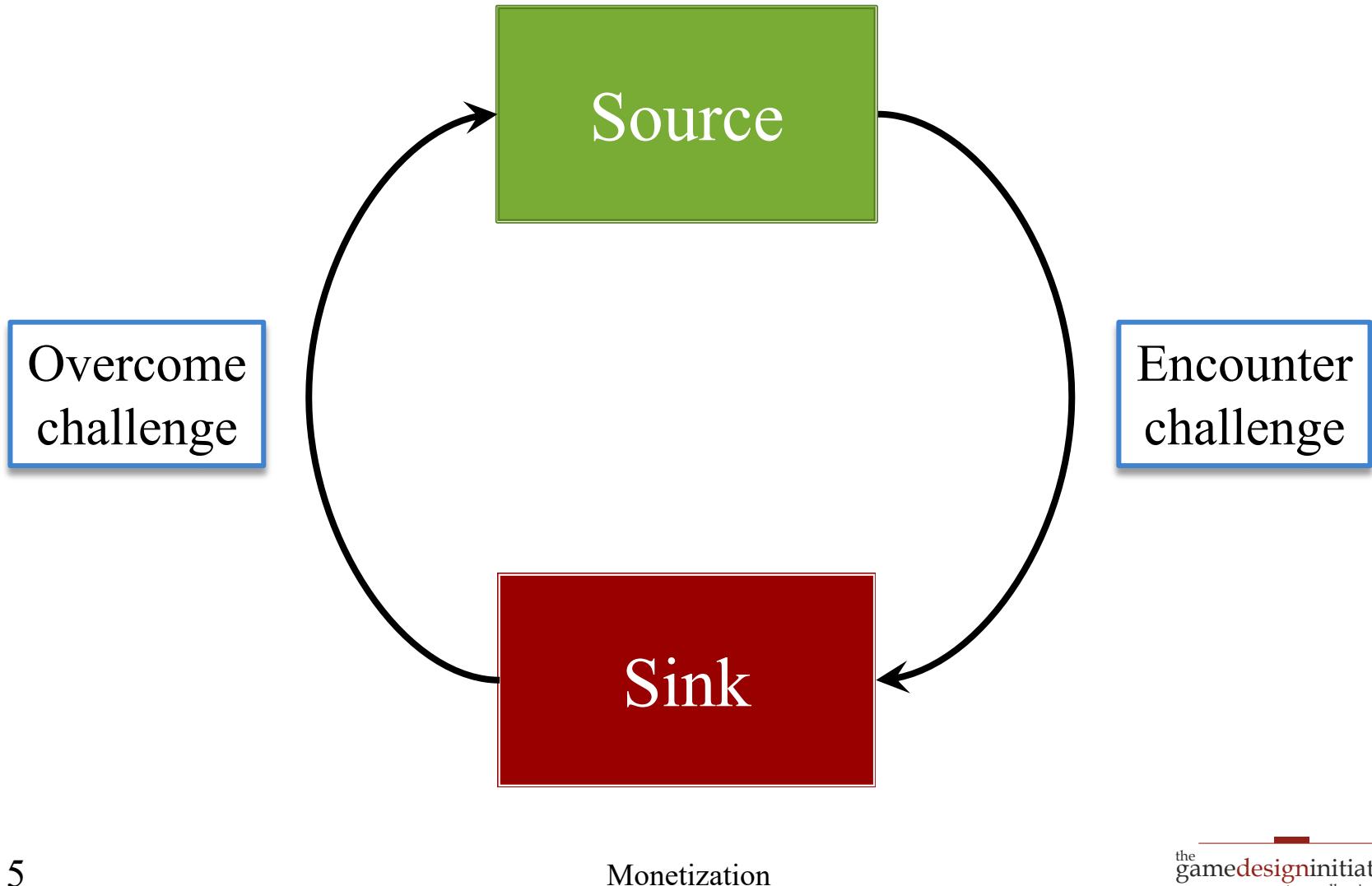
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- **Sources:** How a resource can increase
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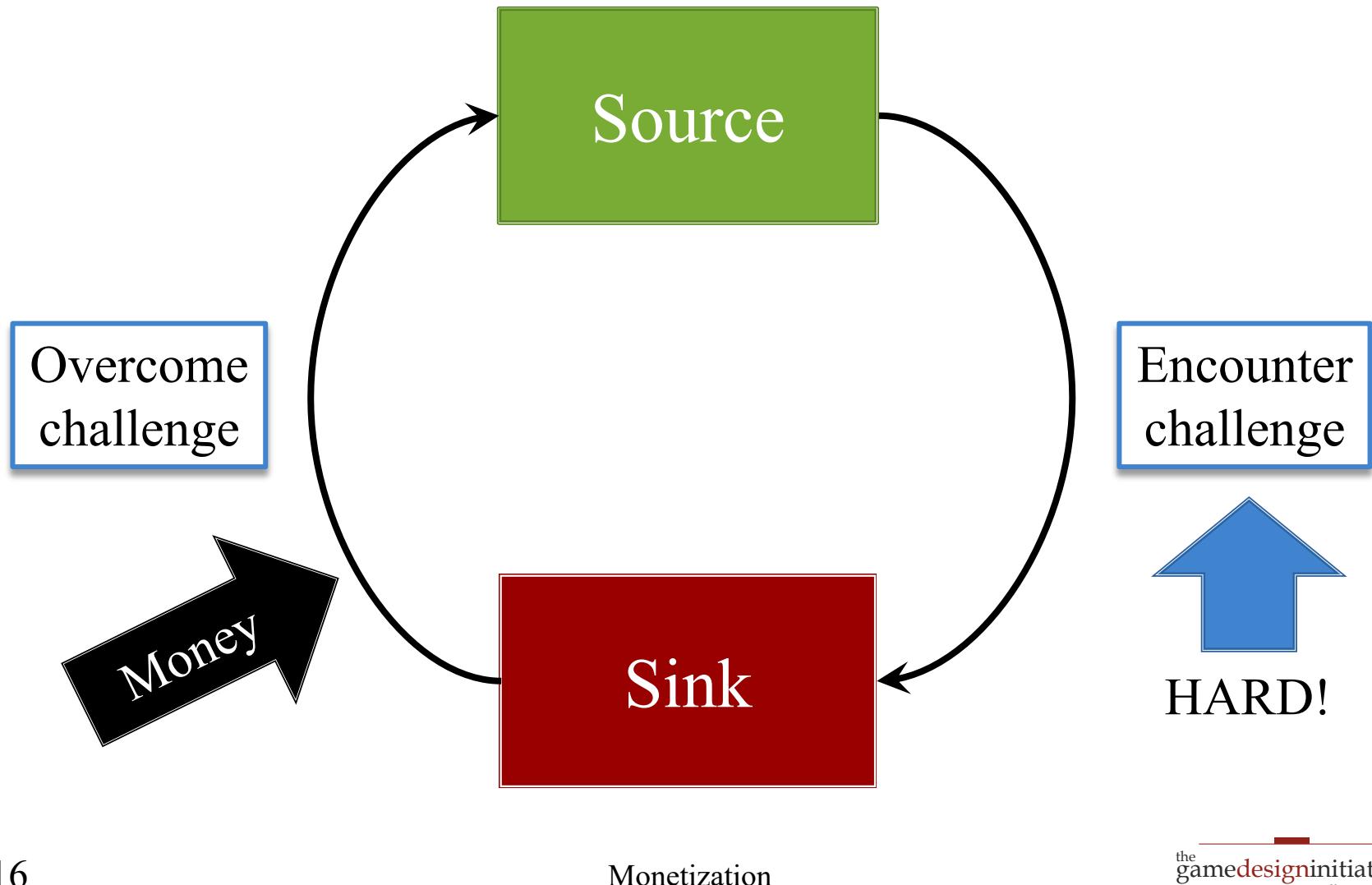
Used to bring  
money into the  
game economy.

# The Core Loop

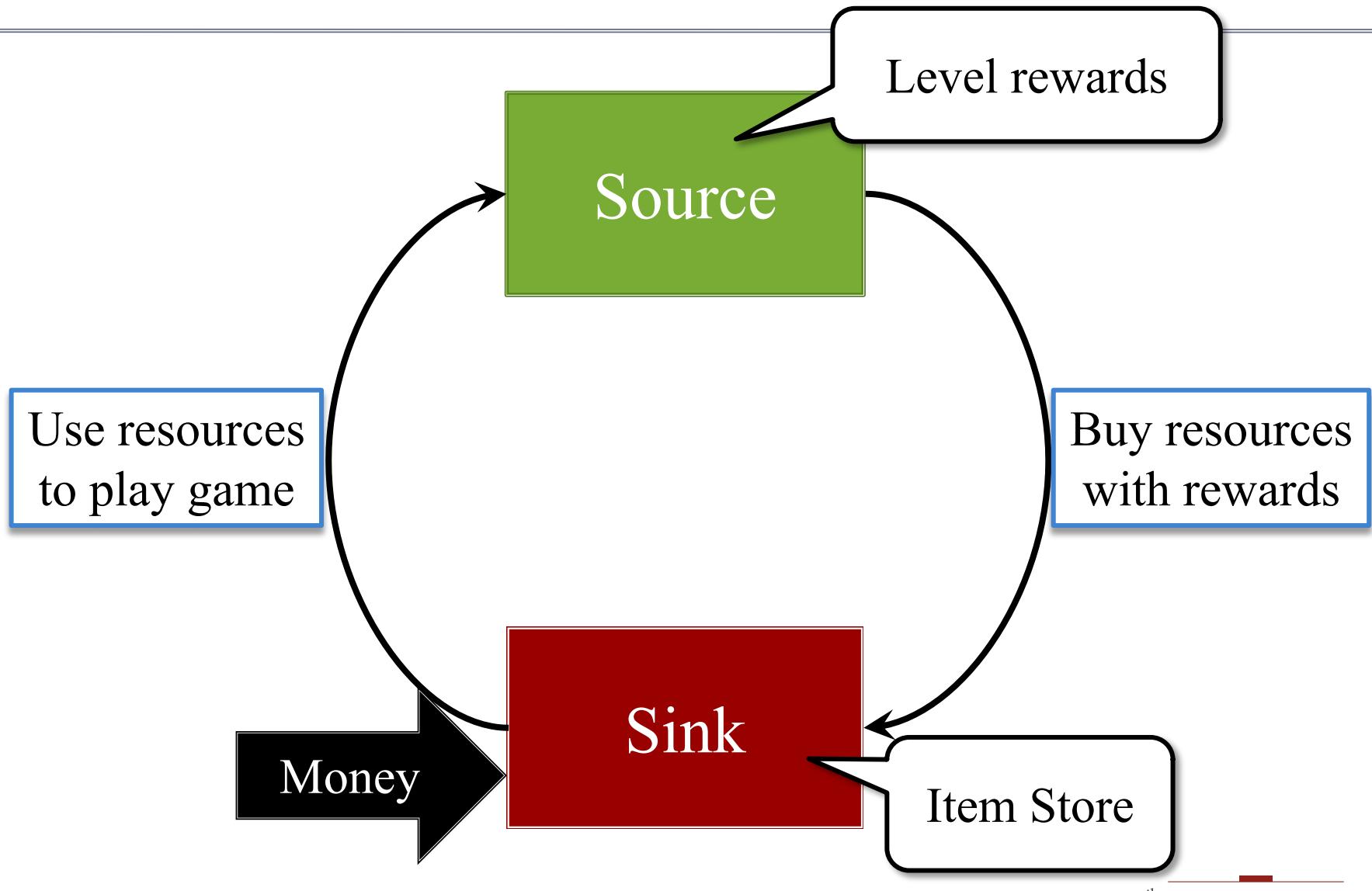
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# Many Apps Exploit the Core Loop



# But Try to Hide it With Design



# Monetization in the Core Loop

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- **Gating**

- Limit how often the game can be played
- Player can pay to play immediately

- **Boosting**

- Resources to reduce game difficulty
- Can be permanent or consumable

- **Differentiating**

- Game has multiple ways to play/succeed
- Resources unlock alternate play modes

# Monetization in the Core Loop

- **Gating**

- Limited access
- Player progression

Popularized by Facebook games

- **Boosting**

- Resources
- Caps

Any game with upgrades

- **Differentiating**

- Gated
- Reward

Strategy games with “units”

# Case Study: Candy Crush Saga



# Case Study: Candy Crush Saga



Monetization

# Monetization in *Candy Crush Saga*

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## Gating

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- Lives limit level retries
  - Lost each time you fail
  - Heal every 30 minutes
  - Pay for more lives now
- Quests unlock levels
  - Need 3 quests to unlock
  - Limited to 1 per 24 hours
  - Pay to do quests sooner

## Boosting

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- Temporary (Boosters)
  - Extra moves
  - Special candies
  - Lost when level is over
- Permanent (Charms)
  - Striped paint brush
  - Freeze time
  - No longer available

# Monetization in *Candy Crush Saga*

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- Used *social manipulation* to get people playing
  - **Easy** levels to build player confidence, enjoyment
  - **Hard** levels to frustrate player and get them to seek aid
- Used the game economy to exploit all levels
  - Gating for when players were enjoying the game
  - Boosting for when players were frustrated
- Was a monetization **success**
  - Started the entire mobile gold rush
  - Has largely defined monetization to this day

# Monetization in *Candy Crush Saga*

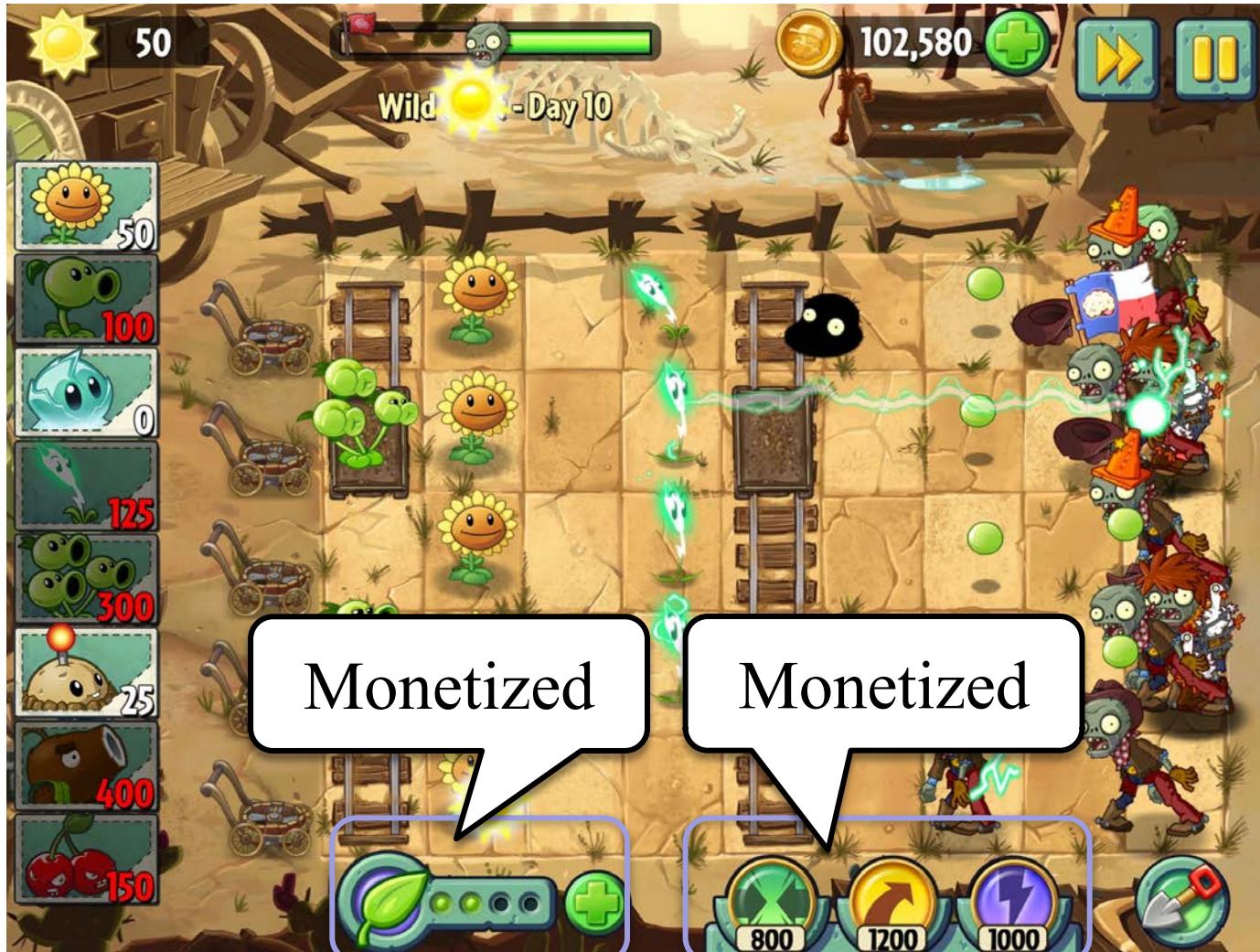
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- Used *social manipulation* to get people playing
  - **Easy** levels to build player confidence, enjoyment
  - **Hard** levels to frustrate players and aid
- Great for investors; bad for players
  - Waiting for when players were frustrated
- Was a monetization **success**
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# Case Study: *Plants vs. Zombies 2*



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Monetization

# Monetization in *PvZ 2*

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## Boosting

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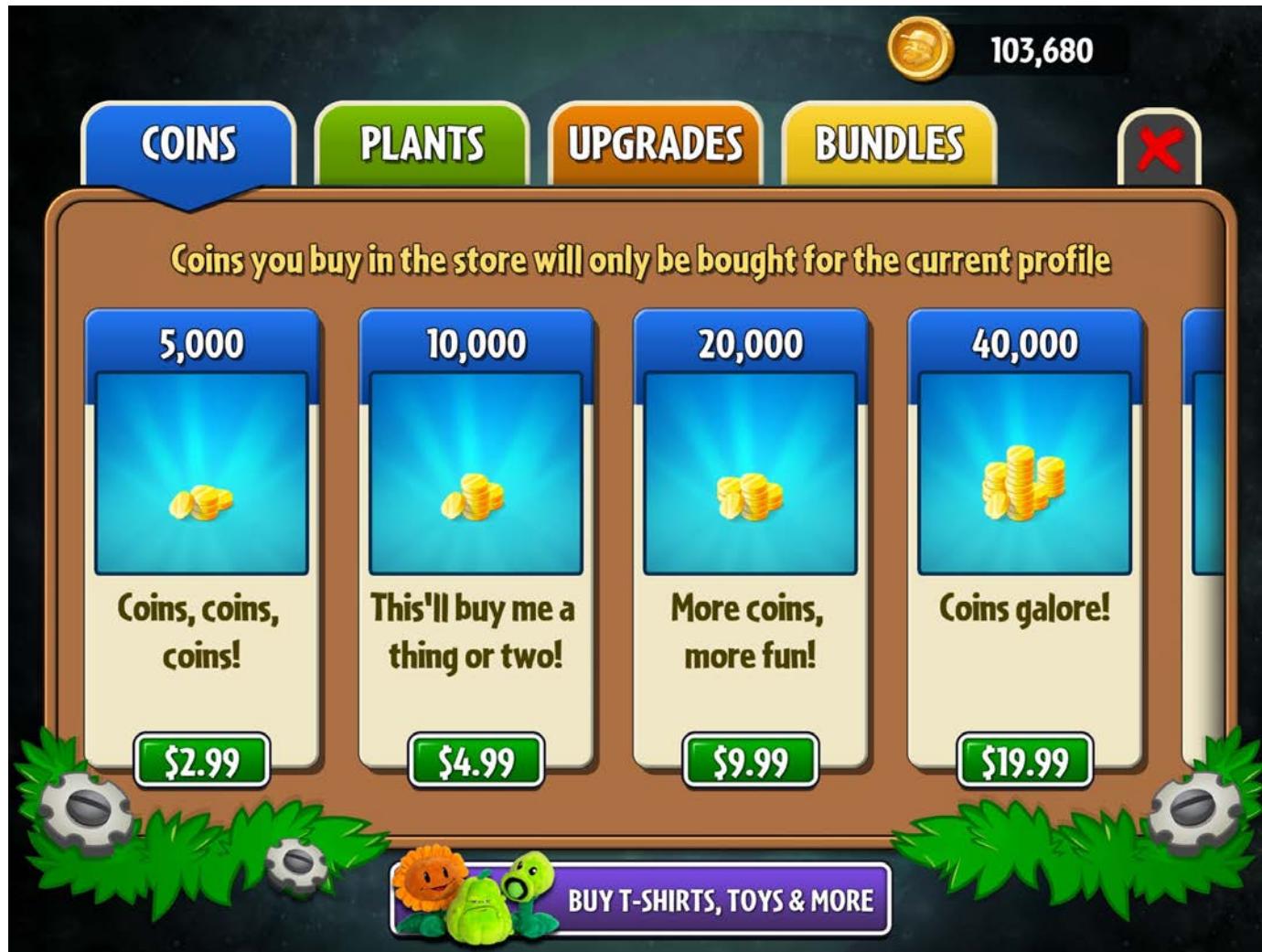
- Consumable attacks
  - Pinching
  - Flicking
  - Electrocuting
- Permanent modifiers
  - # of seeds per game
  - Starting sun/plant food

## Differentiating

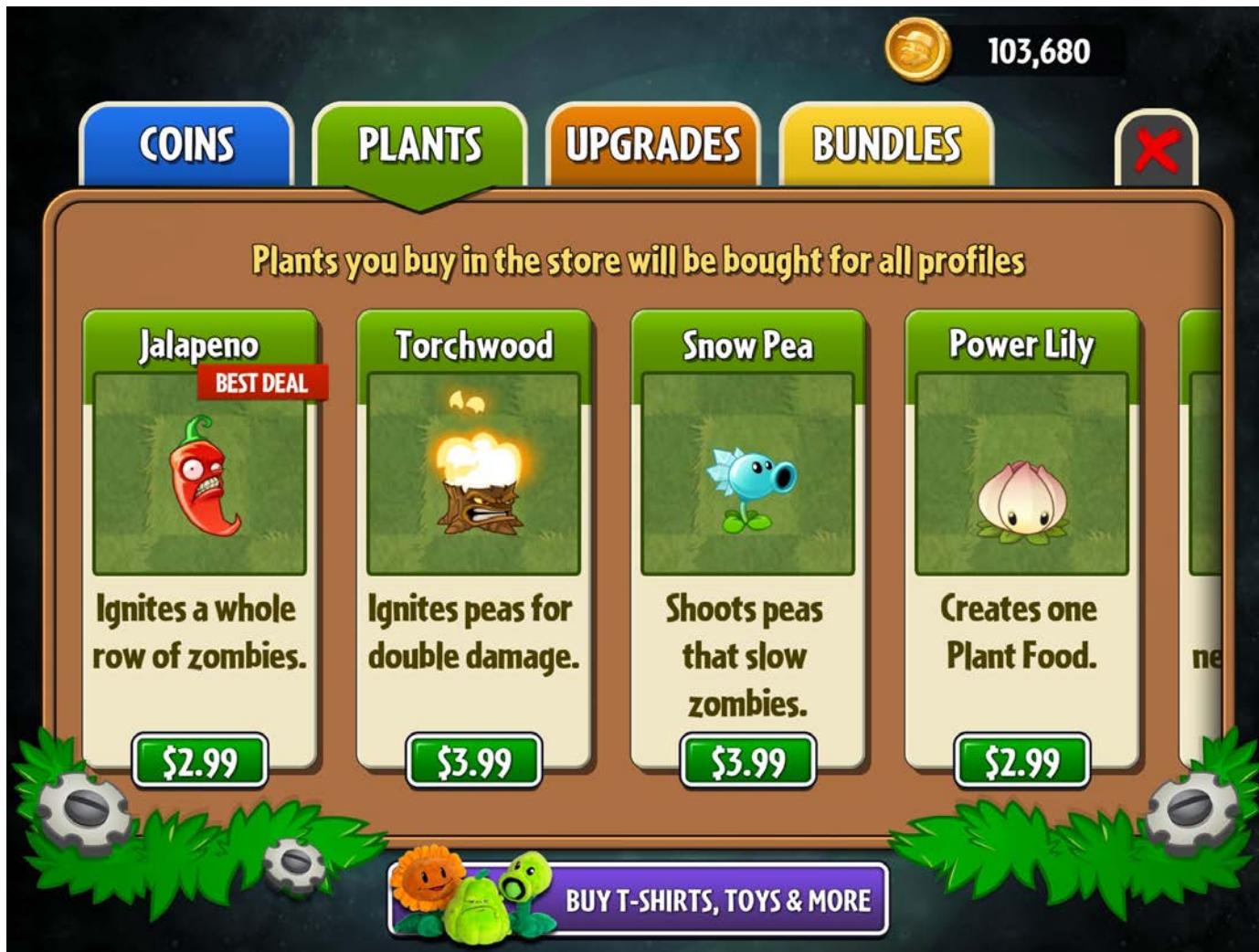
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- Optional plant types
  - Squash
  - Potato
  - Torchwood
- Not required to play
  - Do not add more power
  - Restored **old PvZ** style

# Resource Monetization in PvZ 2



# Item Monetization in PvZ 2



# Monetization in *PvZ 2*

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- *Plants vs. Zombies 2* got great reviews
  - Game was perfectly balanced for the new plants
  - Never needed to buy any of the old plants
- The core economic loop was not abused
  - Almost always have enough coins for boosts
  - Only a problem with heavy, heavy boost usage
- Was a monetization **failure**
  - Good players never need to spend a dime
  - Never cracked revenue top 10; fell out of top 40

# Monetization in *PvZ 2*

- *Plants vs. Zombies 2* got great reviews
  - Game was perfectly balanced for the new plants
  - Never needed to buy any of the old 1.1 plants
- The game was great for players but bad for investors
  - Problem with heavy, heavy boost usage
- Was a monetization **failure**
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# Case Study: AC Rebellion

Monetized Resources



# Case Study: AC Rebellion



# Case Study: AC Rebellion



# Case Study: AC Rebellion



# Monetization in *AC Rebellion*

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- The boosting features are largely **irrelevant**
  - Weapons become obsolete as rise in levels
  - Can finish game with starter heroes 15 levels “early”
- The gating model completely **breaks the game**
  - Events are competitive with rewards for ranking
  - But ranking depends on resources, not skill
- Monetization success is ***unknown***
  - Built by same people who did *Fallout Shelter*
  - But started add-free and then stopped

# Monetization in *AC Rebellion*

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- The boosting features are largely **irrelevant**
  - Weapons become obsolete as rise in levels
  - Can finish game with starter honks
- Ranking
  - Not sure who this is for
  - Ranking depends on resources, not skill
- Monetization success is **unknown**
  - Built by same people who did *Fallout Shelter*
  - But started add-free and then stopped

# How to Make Everyone Happy?

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# How to Make Everyone Happy?

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- **Cosmetic Enhancements**

- Visually enhance the game
- Example: The Patreon business model

- **Consumable Resources**

- Itemize the game
- Example: The “quarters” business model

- **In-Game Items**

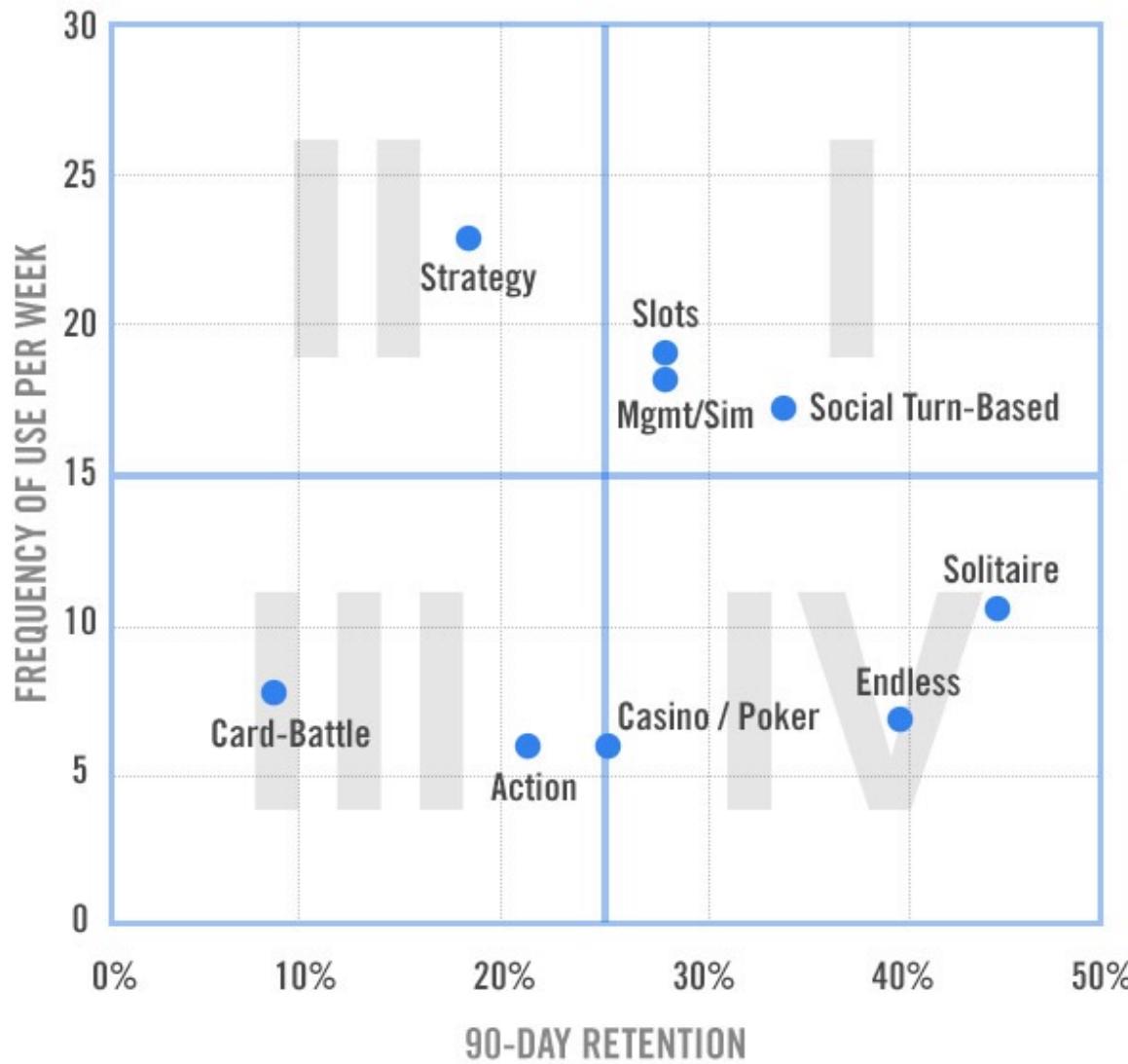
- “Poke a hole in the gameplay”
- Example: The Magic/CCG business model

# The Patreon Business Model

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- Give the players a fun basic game experience
  - Treat the players well and respect their time
  - *Some* players will eventually want to support you
- Provide players with a high-visible social outlet
  - Need a way for them to *brag* about their support
  - Easy in multiplayer; hard elsewhere
- This is a **very high risk** approach
  - Needs games with long-running engagement
  - Unclear it will pay off at all

# Mobile Game Loyalty Matrix



Source: [blog.flurry.com](http://blog.flurry.com)

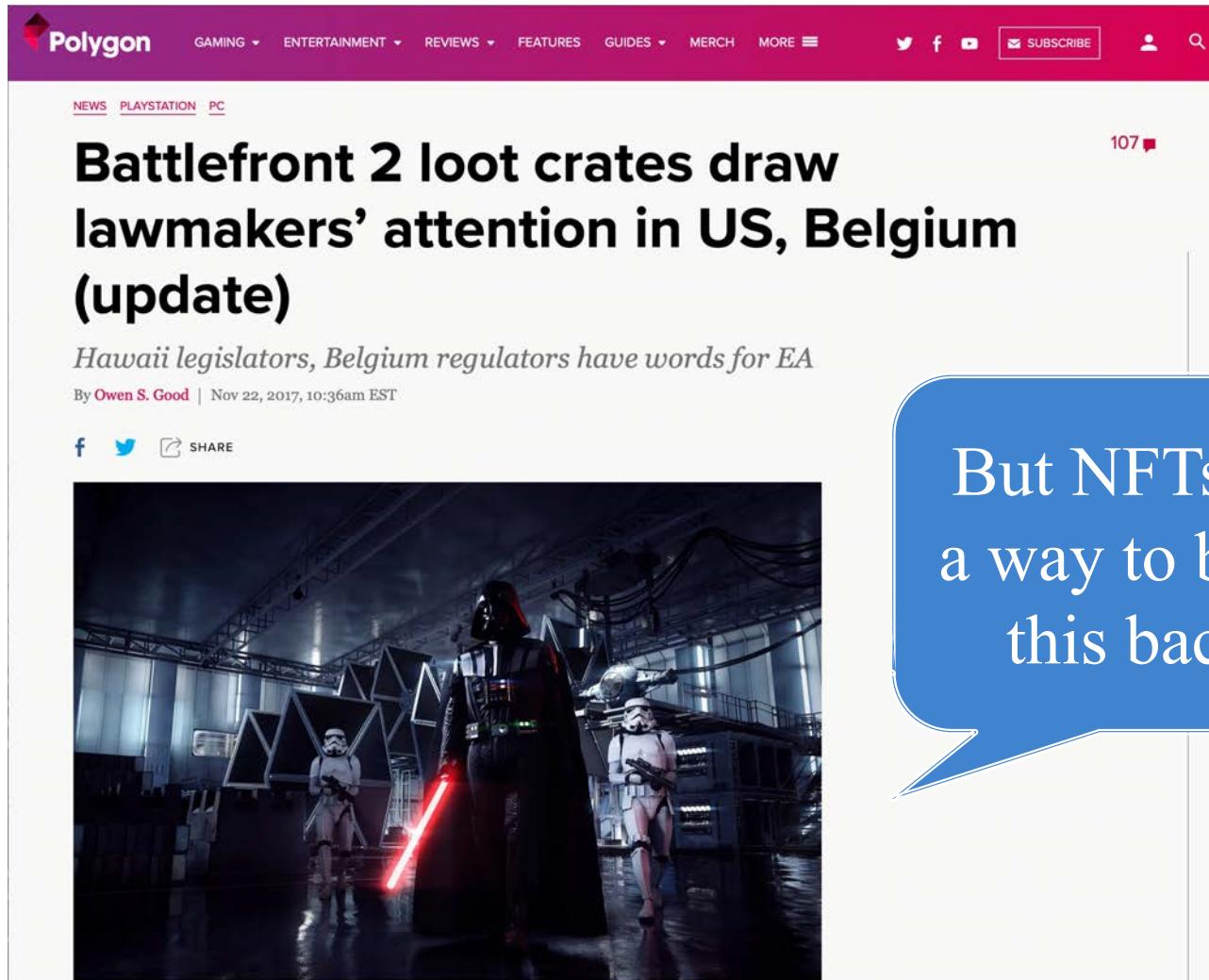
Monetization

# The “Quarters” Business Model

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- Give the players **value for money**
  - Outright buying the game (or similar) is expensive
  - Economy is a way for the player to *rent* game
  - Only committed players ever reach “purchase” price
- Really only makes sense in poorer countries
  - Monetization is at very low price points
  - Gulf between that and purchase price is large
- **Congress got close to shutting this down!**

# The Breakdown of this Model?



The screenshot shows a news article on the Polygon website. The title is "Battlefront 2 loot crates draw lawmakers' attention in US, Belgium (update)". The subtext reads "Hawaii legislators, Belgium regulators have words for EA". The author is Owen S. Good, and the date is Nov 22, 2017, 10:36am EST. There are social sharing icons for Facebook, Twitter, and a "SHARE" button. Below the article is a Star Wars: Battlefront 2 screenshot showing Darth Vader and Stormtroopers in a dark, industrial setting. A blue speech bubble on the right contains the text: "But NFTs are a way to bring this back."

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**Battlefront 2 loot crates draw lawmakers' attention in US, Belgium (update)**

*Hawaii legislators, Belgium regulators have words for EA*

By Owen S. Good | Nov 22, 2017, 10:36am EST

f t SHARE



But NFTs are a way to bring this back.

# What Is The Problem?

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- Implementations are often **predatory**
  - Only a small percentage of user base pays
  - This small percentage subsidizes game for others
  - Business must maximize revenue from small base
  - Leads to a “whale economy”, not unlike casinos
- Radically distorts the **game economy**
  - Whales need to see value for money
  - In game earning must be difficult/time-intensive
  - This is what did in *Star Wars Battlefront 2*

# Very Bad When Children Involved

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## \$99 Smurfberrries? Apple closes iOS loophole under pressure from Washington AG

BY **TODD BISHOP** on March 11, 2011 at 9:15 am



Sorry, kids, no more spending your college fund in Smurfs' Village.

Apple this week sent word to Washington state's Attorney General that its new iOS 4.3 update for iPhone, iPad and iPod touch will require a password every time someone makes a purchase inside an app — closing a loophole that had resulted in some children unwittingly spending large sums to buy virtual items in games.

# The Magic/CCG Model

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- Provide a good value at a **fixed initial cost**
  - The base game is designed to be fun by itself
  - Should engender loyalty, as in Patreon model
- Purchases should not be an **arms race**
  - Players do not need to spend money to excel
  - Sell different items/experiences, not better
  - What power gains exist should be limited
- This works and people are (mostly) happy.

# Why Does the CCG Model Work?

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- Any power gain is **logarithmic**
  - Big early value to justify initial purchases
  - But eventually drops off so that money  $\neq$  success
- New items are introduced **rarely and in bulk**
  - Typically on an annual release schedule
  - Similar to the “seasons” seen in MOBA market
  - Enforce by the tournament circuit in *Magic*
- **Result:** *Capped expenditure* per season

# Why Does the CCG Model Work?

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- Real power comes from **item combinations**
  - Items are flexible and combine in many ways
  - Individual power is flat with minimal upgrades
- **Reconfiguration** encourages different styles
  - Game has limited number of items at a time
  - Large part of gameplay is choosing which items
  - Strategy discussion keep your community lively
- Way to sell more items *without power gain*

# Case Study: *Bioware Multiplayers*

## Mass Effect 3



## Dragon Age Inquisition



# Case Study: *Bioware Multiplayers*

- **Shallow** power structure
  - Limited item upgrades
  - Max level (20) was fast
  - Reconfiguration very easy
- **Fair** player rewards
  - Minimal consumable use
  - Wide, interesting variety
  - Bulk updates/expansions
- Hit all of the CCG lessons
- Extremely successful

## Mass Effect 3



# Case Study: *Bioware Multiplayers*

- Deep power structure
  - Items heavily upgradable
  - Even classes need crafting
  - Rewarded narrow styles
- Heavy **consumable** use
  - Were bulk of loot drops
  - Getting permanents harder
  - Loot was extremely *grindy*
- Violated the CCG lessons
- Not that successful

## Dragon Age Inquisition



# Summary

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- Monetization is distinct from downloadable content
  - DLC is for after player has completed main game
  - Monetization is integrated into the “core loop”
- Monetization must be **designed early**
  - Can distort economy and threaten balance
  - Need to ensure player has proper incentives
- Can be done without **exploiting the player**
  - Right approach depends on the business model
  - The CCG market has the best lessons here