Lecture 4

Monetization
Source for Today’s Talk

- **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

- 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

- 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

- 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

- **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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We are okay with this

But less okay with these two
The Problem of Cosmetics

- 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*

- Classic
- Bomber Jacket
- Area 51
- Antarctica
- Wetsuit
- Catsuit
- Midas Lara

Monetization
Cosmetics in *Lara Croft Go*

Abandoned in later titles (e.g. Deux Ex Go)
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Can these two ever be okay?
Monetization and Resources

- 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
  - Only in apps with heavy user content (e.g. IMVU)
Components of a Game Economy

- **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
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Monetization
The Core Loop

Source

Sink

Overcome challenge

Encounter challenge

Monetization
Many Apps Exploit the Core Loop

Source

Sink

Money

Overcome challenge

HARD!

Encounter challenge

Monetization
But Try to Hide it With Design

Source

Level rewards

Sink

Buy resources with rewards

Use resources to play game

Money

Item Store

Monetization
Monetization in the Core Loop

- **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

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Every Zynga game ever made

Any game with upgrades

Strategy games with “units”

Monetization
Case Study: Candy Crush Saga
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Monetization
Monetization in *Candy Crush Saga*

<table>
<thead>
<tr>
<th>Gating</th>
<th>Boosting</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lives limit level retries</td>
<td>• Temporary (Boosters)</td>
</tr>
<tr>
<td>• Lost each time you fail</td>
<td>• Extra moves</td>
</tr>
<tr>
<td>• Heal every 30 minutes</td>
<td>• Special candies</td>
</tr>
<tr>
<td>• Pay for more lives now</td>
<td>• Lost when level is over</td>
</tr>
<tr>
<td>• Quests unlock levels</td>
<td>• Permanent (Charms)</td>
</tr>
<tr>
<td>• Need 3 quests to unlock</td>
<td>• Striped paint brush</td>
</tr>
<tr>
<td>• Limited to 1 per 24 hours</td>
<td>• Freeze time</td>
</tr>
<tr>
<td>• Pay to do quests sooner</td>
<td>• No longer available</td>
</tr>
</tbody>
</table>

Monetization
Monetization in *Candy Crush Saga*

- 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
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Great for investors; bad for players

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Case Study: *Plants vs. Zombies 2*
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## Monetization in *PvZ 2*

**Boosting**

- Consumable attacks
  - Pinching
  - Flicking
  - Electrocuting

- Permanent modifiers
  - # of seeds per game
  - Starting sun/plant food

**Differentiating**

- Optional plant types
  - Squash
  - Potato
  - Torchwood

- Not required to play
  - Do not add more power
  - Restored **old PvZ** style
Resource Monetization in *PvZ 2*

Coins you buy in the store will only be bought for the current profile.

- **5,000 Coins:** Coins, coins, coins! ($2.99)
- **10,000 Coins:** This'll buy me a thing or two! ($4.99)
- **20,000 Coins:** More coins, more fun! ($9.99)
- **40,000 Coins:** Coins galore! ($19.99)

**BUY T-SHIRTS, TOYS & MORE**
Item Monetization in *PvZ 2*

Plants you buy in the store will be bought for all profiles.

- **Jalapeno**: BEST DEAL
  - Ignites a whole row of zombies.
  - $2.99

- **Torchwood**
  - Ignoites peas for double damage.
  - $3.99

- **Snow Pea**
  - Shoots peas that slow zombies.
  - $3.99

- **Power Lily**
  - Creates one Plant Food.
  - $2.99

*BUY T-SHIRTS, TOYS & MORE*
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 new 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 *Plants vs. Zombies 2*

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Great for players; bad for investors
Case Study: **AC Rebellion**

Monetized Resources
Case Study: AC Rebellion

Monetization
Case Study: AC Rebellion

Boosting
Case Study: AC Rebellion

But no real resource usage mid-mission
Monetization in *AC Rebellion*

- 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 is no longer
Monetization in *AC Rebellion*

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How to Make Everyone Happy?

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How to Make Everyone Happy?

- **Cosmetic Enhancements**
  - Visual Improvements
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Monetization

- **The Patreon business model**
- **The “quarters” business model**
- **The Magic/CCG business model**
The Patreon Business Model

- 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
The “Quarters” Business Model

- 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

- Because of abuse, *regulation is coming*
The “Quarters” Business Model

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• Because of abuse, **regulation is coming**
  • Game studios have no one to blame but themselves
The Magic/CCG Model

• 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?

- 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?

- 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

Monetization
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

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*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
Did BioWare Learn from This?

ME Andromeda

Anthem
Did BioWare Learn from This?

ME Andromeda

Worse than ME3

NO

Anthem

Cosmetics Only
Summary

- 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