Lecture 4

Monetization
Source for Today’s Talk

- Skaff Elias and Richard Garfield
  - Lessons from CCGs
  - At GDC 2011 and presented three years ago
  - 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
Modern Game Monetization

- 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
Examples of Monetization

• **Resources**
  • Gold, coins, just about any currency
  • Energy bars (to perform activities)
  • Time limits (insert quarter to continue)

• **Entities**
  • **Examples**: weapons, armor, cool hats
  • This requires a complete in-game store
  • Designing and balancing this is *very* difficult
Types of Game Monetization

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

• **Boosting**
  - Resources/entities to reduce game difficulty
  - Can be permanent or consumable

• **Differentiating**
  - Game has multiple ways to play/succeed
  - Resources/entities unlock alternate play modes
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- Every Zynga game ever made
- Any game with upgrades
- True CCG-style games

Monetization
Case Study: Candy Crush Saga
Case Study: Candy Crush Saga

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

<table>
<thead>
<tr>
<th><strong>Boosting</strong></th>
<th><strong>Differentiating</strong></th>
</tr>
</thead>
</table>
| - Consumable attacks  
  - Pinching  
  - Flicking  
  - Electrocuting  
| - Optional plant types  
  - Squash  
  - Potato  
  - Torchwood  |
| - Permanent modifiers  
  - # of seeds per game  
  - Starting sun/plant food  
| - Not required to play  
  - Do not add more power  
  - Replaced by new plants  
  - Restore *classic PvZ* style  |
| - New plant types  |
Case Study: Fairway Solitaire
Case Study: *Fairway Solitaire*

Monetization
## Monetization in *Fairway Solitaire*

### Boosting
- Consumable abilities
  - Golf club irons
  - Extra moves
  - Minigame cheats
- Permanent modifiers
  - Remove cards at start
  - See cards remaining
  - Peak at next card

### Downloadable Content
- Extra golf courses
  - Three courses per day
  - Permanent courses
  - Both free & purchasable
- Cosmetic packs
  - New card backs
  - New card fronts
  - New backgrounds
Some Common Patterns

- **Gating**
  - Almost always resources, not entities
  - Resource must have time-based recharge

- **Boosting**
  - Either resources or entities
  - Either consumable or permanent

- **Differentiating**
  - Always entities, but might purchase with resource
  - Close in spirit/design to DLC

Monetization
Gating Entities: *DA Legends*

Use friends to make a party
Limited friend use per day
Resource Monetization

- Entities are typically not bought directly
  - Money buys the **resource**, not the entities

- Resource monetization can lead to *grinding*
  - User can get the resource, but it takes (much) time
  - User is paying money to get back their free time
  - **Goal**: Get to the good bits of gameplay

- *Gating* is an extreme version of grinding
  - Pay to not have to wait for the delay
Resource Monetization in *PvZ 2*
Entity Monetization

- Money buys entity directly (not resources)
  - Feels a lot more like traditional DLC

- Excludes gameplay from non-paying players
  - Cannot grind for entity with in-game resource
  - Ideal for differentiating gameplay

- Classic variation: **randomization**
  - Player buys a “box”; opens it to get entities
  - Virtual version of the CCG business model
Entity 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.
  - Price: $2.99

- **Torchwood**
  - Ignites peas for double damage.
  - Price: $3.99

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

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

**BUY T-SHIRTS, TOYS & MORE**
Entity Monetization in *Lara Croft Go*
When is Monetization Successful?

- *Plants vs. Zombies 2* got great reviews on Kotaku

- Resource monetization did not lead to *grinding*
  - Almost always have enough coins for boosts
  - Only a problem with heavy, heavy boost usage

- Entity monetization was for *differentiation* only
  - Game perfectly balanced for the new plants

- But it is a monetization *failure*
  - Good players never need to spend a dime
  - Never cracked revenue top 10; fell out of top 40
When is Monetization Successful?

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Great for players; bad for investors
Top Apps Exploit the Core Loop

Source

Sink

Money

Overcome challenge

Encounter challenge

HARD!
The Monetization Holy Grail

- Want to please gamers, but also make money
  - Players should *want* to give you money
  - But should not feel like they *have* to give money

- Requires monetization outside of the core loop
  - PvZ 2: monetized core loop, but loop was too easy

- Successful business model: *Magic CCG*
  - Need a small amount of cash to get started
  - Everything spent after that is for *differentiation*
Monetizing Differentiation

- Purchases should not be an **arms race**
  - Players should not have to spend money to excel
  - Want different items, not better
  - *Randomness* helps a lot here

- **Reconfiguration** is important
  - Limit number of items at a time
  - Large part of gameplay is choosing which items
  - “Strategy” discussion keep your community lively
Entity Value Should Be Logarithmic

- Value is measured by % boost to player success
  - Early value to get initial purchases
  - But drop off so that money ≠ success

- Leads to a new notion of “balance”
But Still Part of Core Loop

Source

Level rewards

Sink

Buy entities with rewards

Use entities to play game

Money

Item Store
Case Study: *Mass Effect 3* Multiplayer

**Recruit Pack**

- 5000 Credits (Not Enough Credits)
- A great way to upgrade and unlock your basic weapons, mods and characters.
- Includes 5 random items or characters, with a small chance for an Uncommon.
Case Study: *Pocket Tanks*

Monetization
Designing for Differentiation

• Repeat purchase revenue model
  • Huge benefit to not have to purchase all at once
  • Robust enough for long-term involvement
  • But this is difficult for players and designers

• Designing for the long-term
  • Helps to rotate items (not just out, but in and out)
  • Avoid *complexity creep*; keep core mechanics small
  • Items should just be exploration of *possibility space*
Importance of Rotating Out

- **Power creep** is a danger
  - Want players to buy new items
  - Easy way is to make an item “better” than existing items
  - But value of the old items is shot

- Rotation allows **alternatives**
  - New item is “like” previous item
  - But item is different enough to encourage experimentation
Virtual Property vs. Experiences

- How do you rotate items out?
  - Is it enough not to offer it for sale?
  - Can you actually revoke the items?

- Is revoking a “violation of contract”?
  - Is player paying to have the item forever?
  - Or just paying to have it right now?

- In *Magic*, enforced by **tournaments**
  - What is analogue for computer games?
  - Does this only work with multiplayer?

Item degradation is undesirable...
Other Lessons from CCGs

- How should items be purchased?
  - **Individually** at different prices?
  - **Randomized packs** of different rarity?
  - Combination of the two?

- What about **player trading**?
  - Particularly valuable if using randomized packs
  - Might get a rare item that does not fit your style
  - Can players “cash out” when they leave?

No one Agrees
Difficulties of the Freemium Model

- **Freemium**: free except for item purchases
  - Will have a lot of players that spend nothing!
  - Purchases will be by a small number of players
  - …and good content is expensive to make

- **Rule**: first purchase is the hardest
  - Once player buys, later purchases are easier
  - So goal is often to encourage just one purchase

- Also, try to minimize player *turnover*
  - Longer they play, more likely to buy
Mobile Game Loyalty Matrix

Source: blog.flurry.com

Monetization
Final Words: Is Freemium a Bubble?

- Freemium games depend heavily on **whales**
  - Gambling term: players that pay a lot
  - Whales subsidize game for everyone else

- Recruiting whales is becoming harder and harder
  - Person can only be a whale of one game at a time
  - Early freemium games had no competition at all
  - Cost to recruit is now twice the revenue of the whale

- **Bad News**: Freemium is not viable for everyone

- **Good News**: Paid apps can succeed in some markets
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The most important reason for your competitive analysis
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 integrated into design early
  - Can distort economy and threaten balance
  - Need to ensure player has proper incentives

- **Differentiation** is the most interesting variation
  - Player is paying for new play styles
  - Essentially a digital form of the CCG market