

Lecture 4

Monetization

Source for Today's Talk

- Skaff Elias and Richard Garfield
 - *Lessons from CCGs*
 - At GDC 2011 and presented two 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

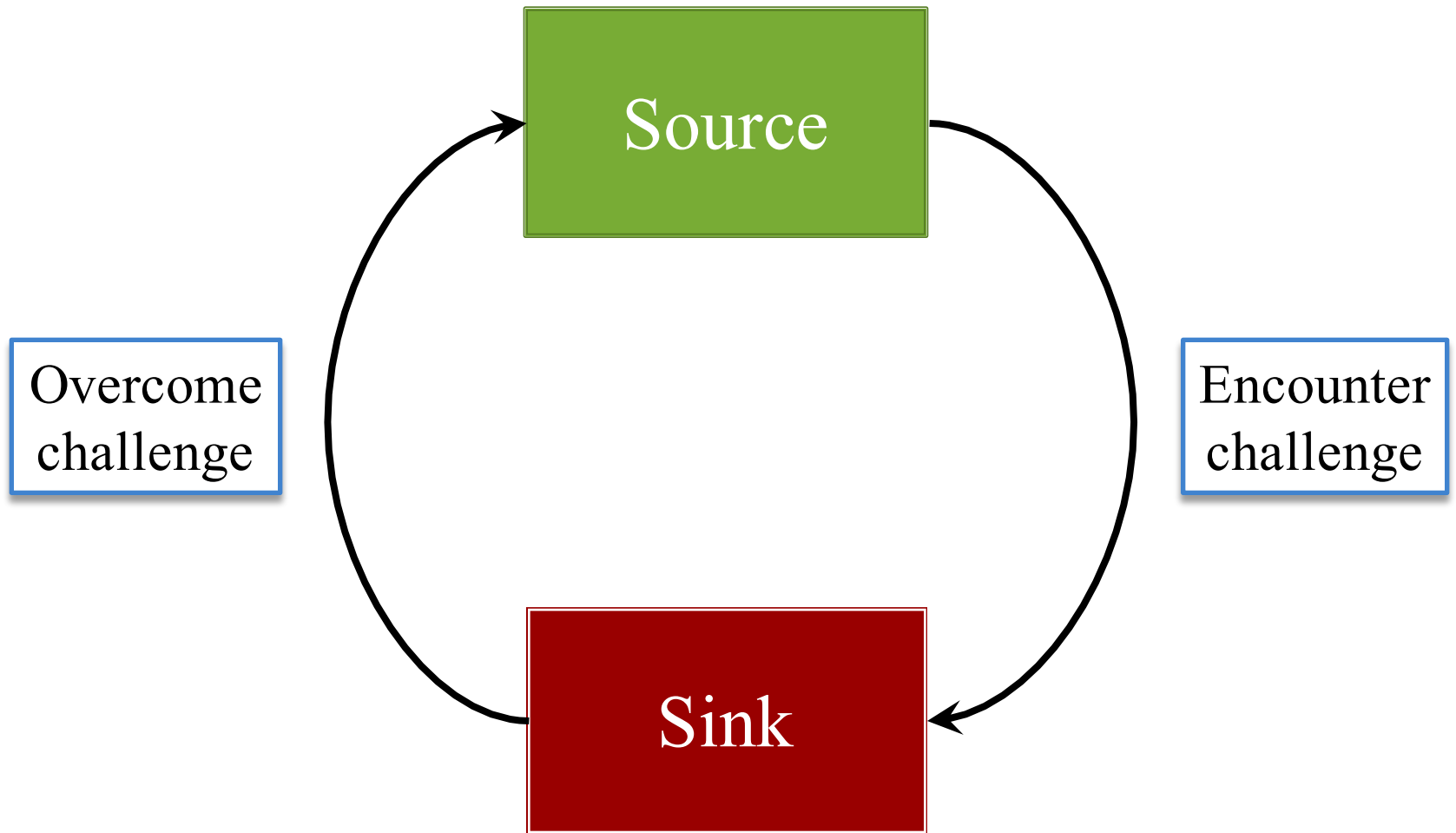
- **Sources**: How a resource can increase
 - **Examples**: ammunition clips, health packs
- **Drains**: How a resource can decrease
 - **Examples**: firing weapon, player damage
- **Converters**: Changes one resource to another
 - **Example**: vendors, *Starcraft* barracks
- **Traders**: Exchange resources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

Components of a Game Economy

- **Sources:** How a resource can increase
 - **Examples:** ammunition clips, health packs
- **Drains:** How a resource can be used
 - **Examples:** firing a weapon, healing
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Used to bring money into the game economy.

The “Core Loop”



Examples of Monetization

● Resources

- Gold, Zynga 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

Types of Game Monetization

- **Gating**

- Limited
- Play immediately

Every Zynga game ever made

- **Boosting**

- Resources
- Campaign

Any game with upgrades

- **Differentiating**

- Gameplay
- Reward

True CCG-style games

Alternate play modes

Case Study: *Candy Crush Saga*



Case Study: *Candy Crush Saga*



Monetization in *Candy Crush Saga*

Gating

- 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

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

Case Study: *Plants vs. Zombies 2*



Case Study: *Plants vs. Zombies 2*



Monetization in *PvZ 2*

Boosting

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

Differentiating

- Optional plant types
 - Squash
 - Potato
 - Torchwood
- Not required to play
 - Do not add more power
 - Replaced by new plants
 - Restore **classic PvZ** style

Case Study: *Fairway Solitaire*



Case Study: *Fairway Solitaire*



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

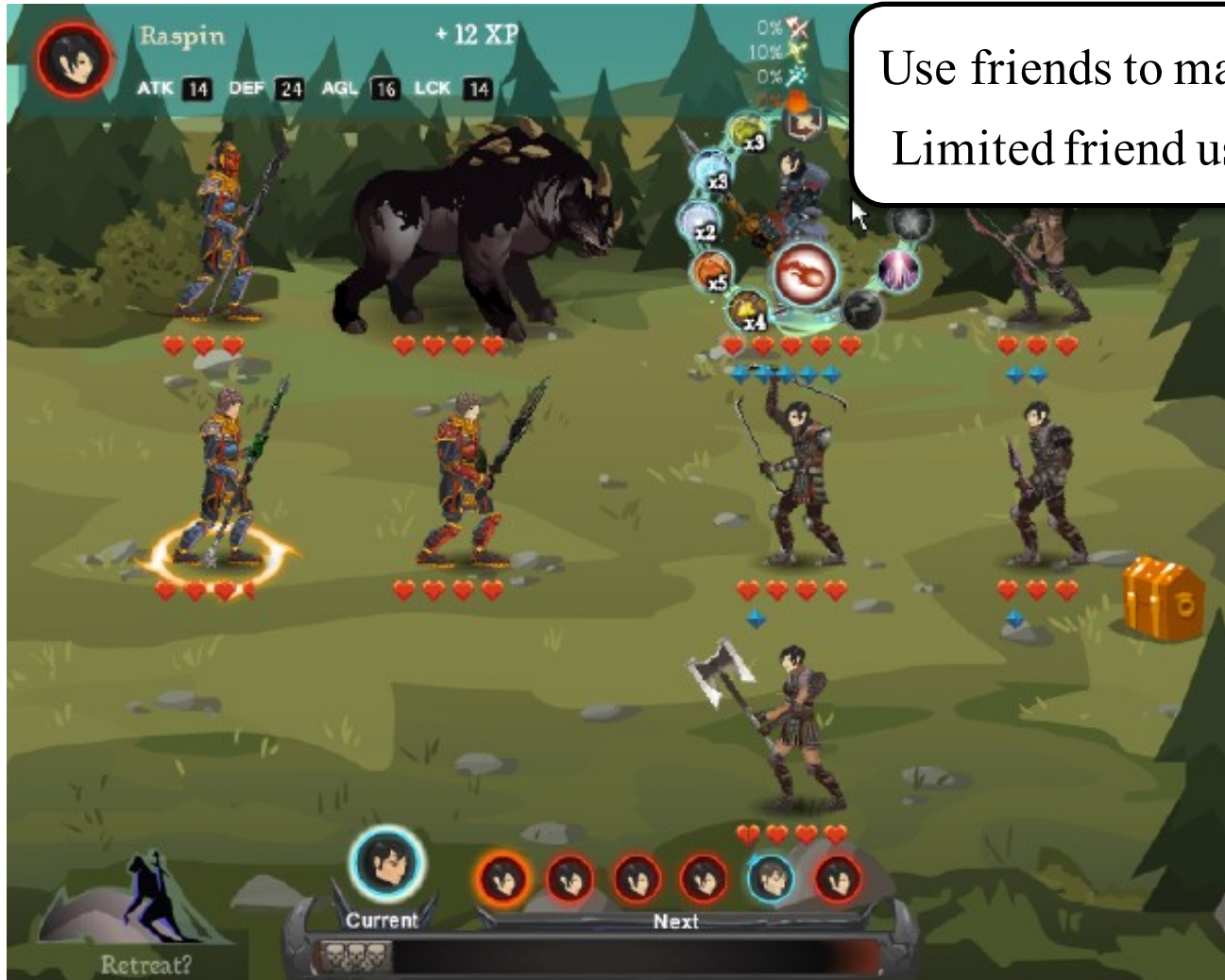
- **Boosting**

- Either resources or entities
- Either consumable or permanent

- **Differentiating**

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

Gating Entities: *DA Legends*



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

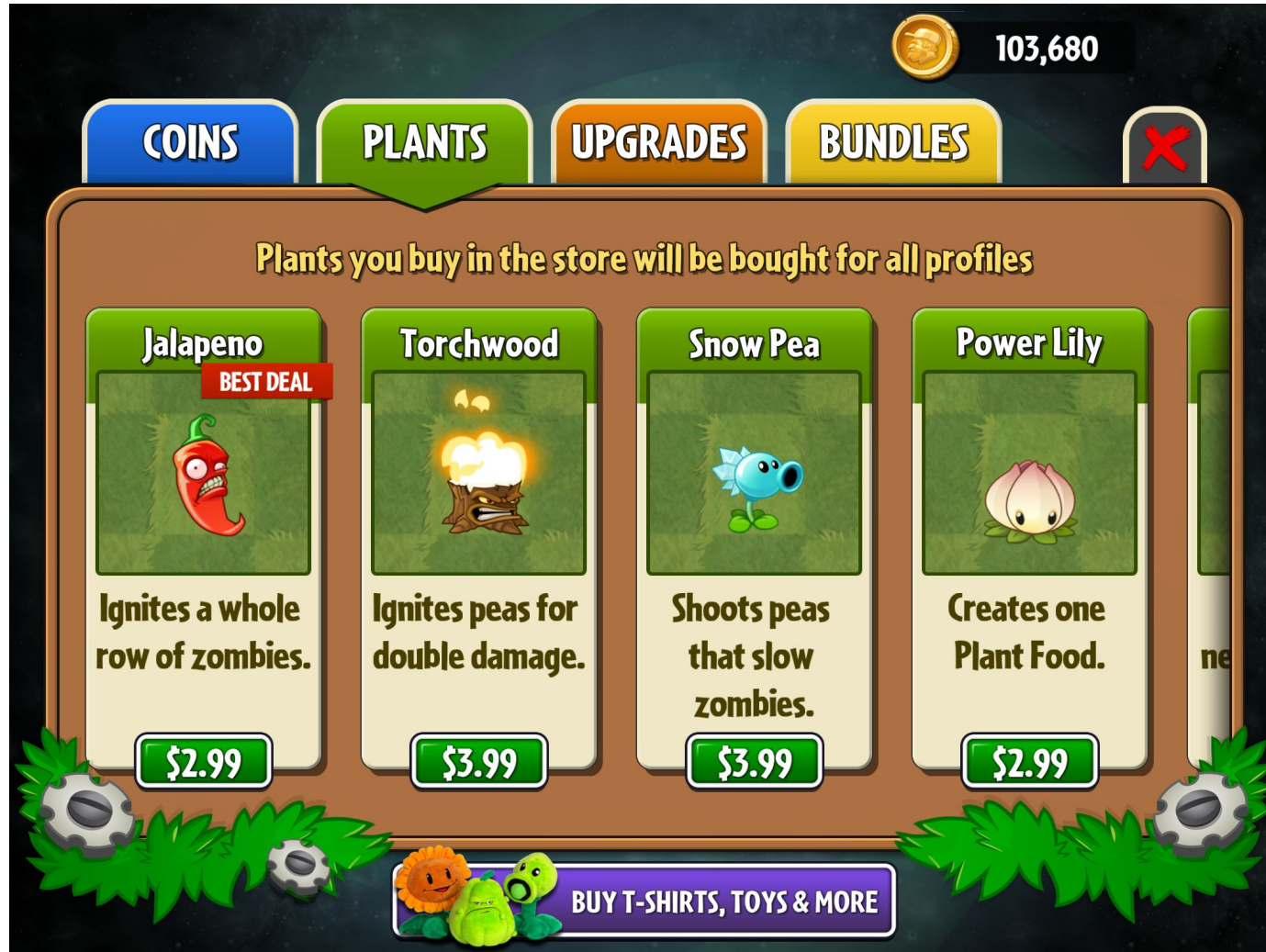
Resource Monetization in *PvZ 2*



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*



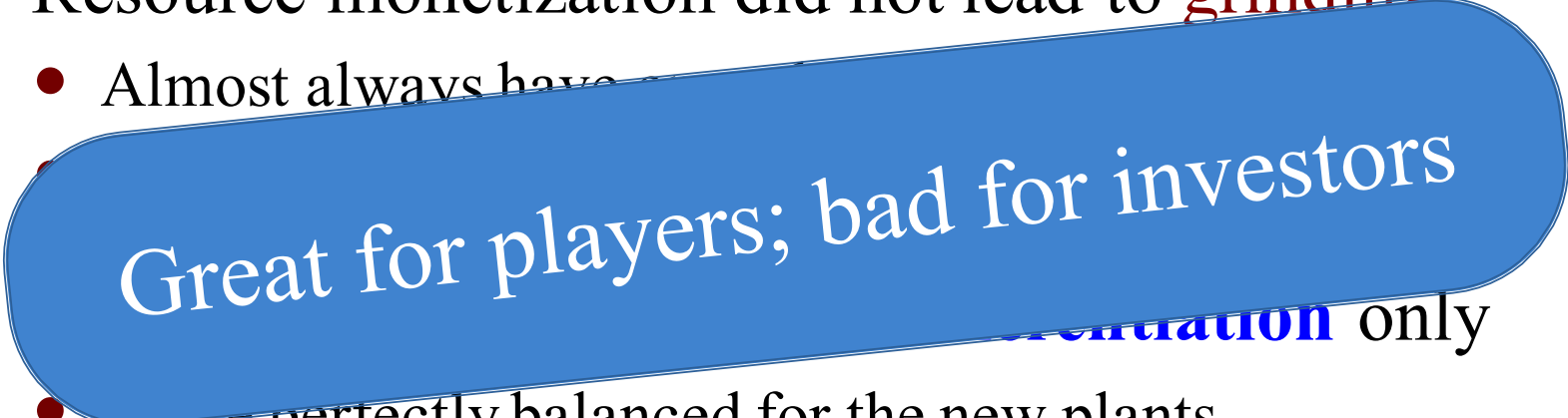
Entity Monetization in *Lara Croft Go*



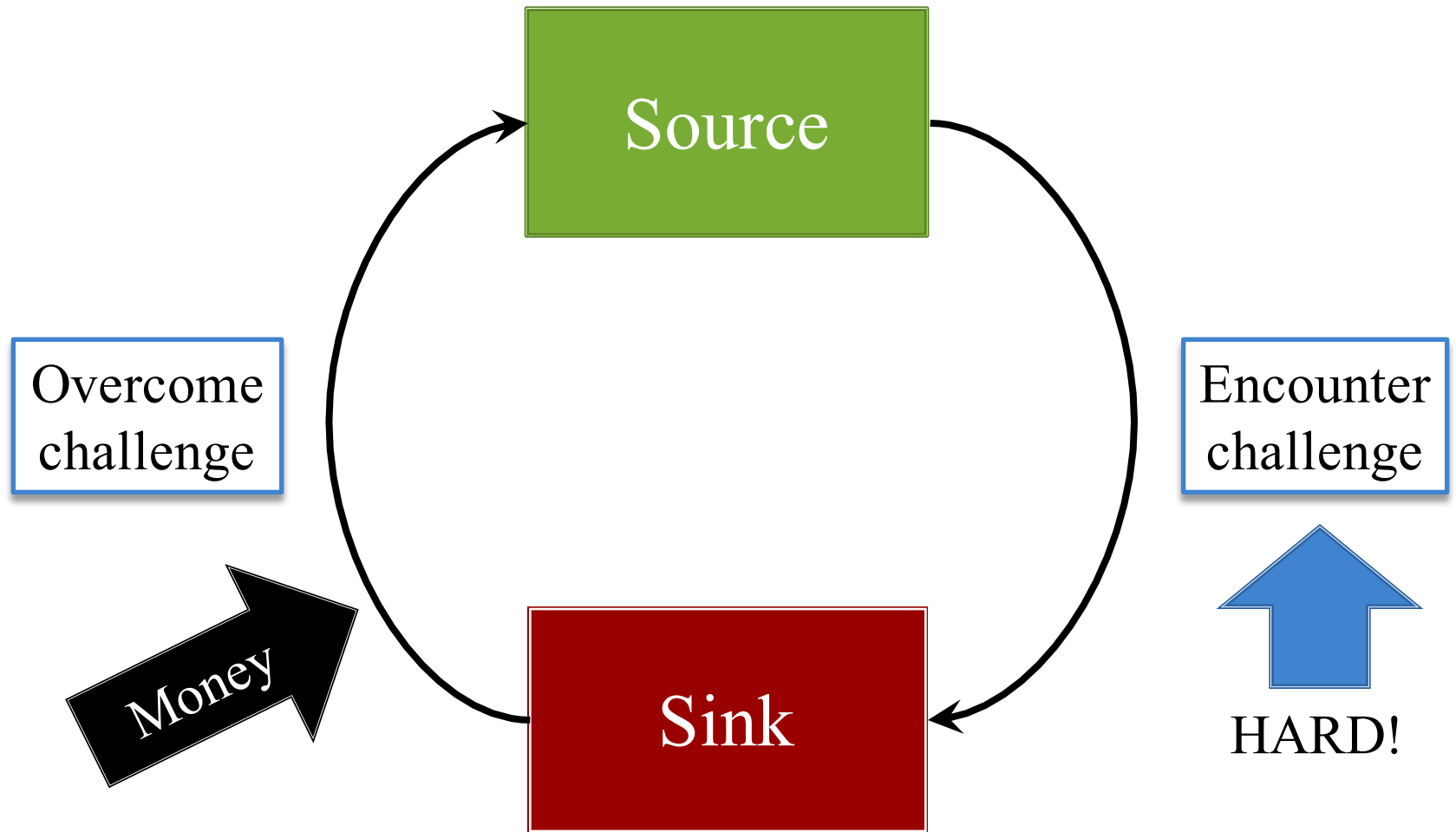
When is Monetization Successful?

- *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?

- *Plants vs. Zombies 2* got great reviews on Kotaku
- Resource monetization did not lead to **grinding**
 - Almost always have
- Great for players; bad for investors
- **Monetization** only
 - Game perfectly balanced for the new plants
- But it is a monetization **failure**
 - Good players never need to spend a dime
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Top Apps Exploit the Core Loop



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**

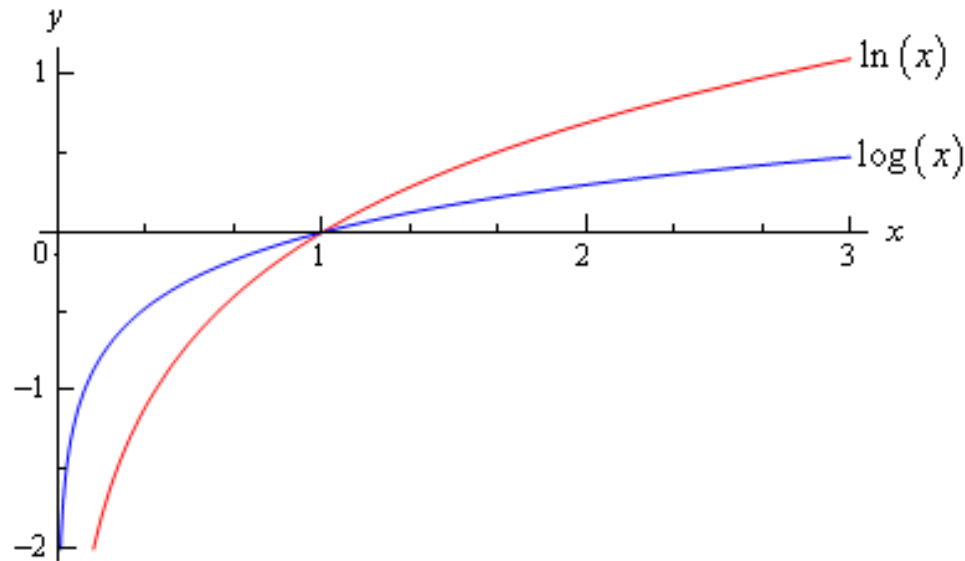
Monetizing Differentiation

- 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

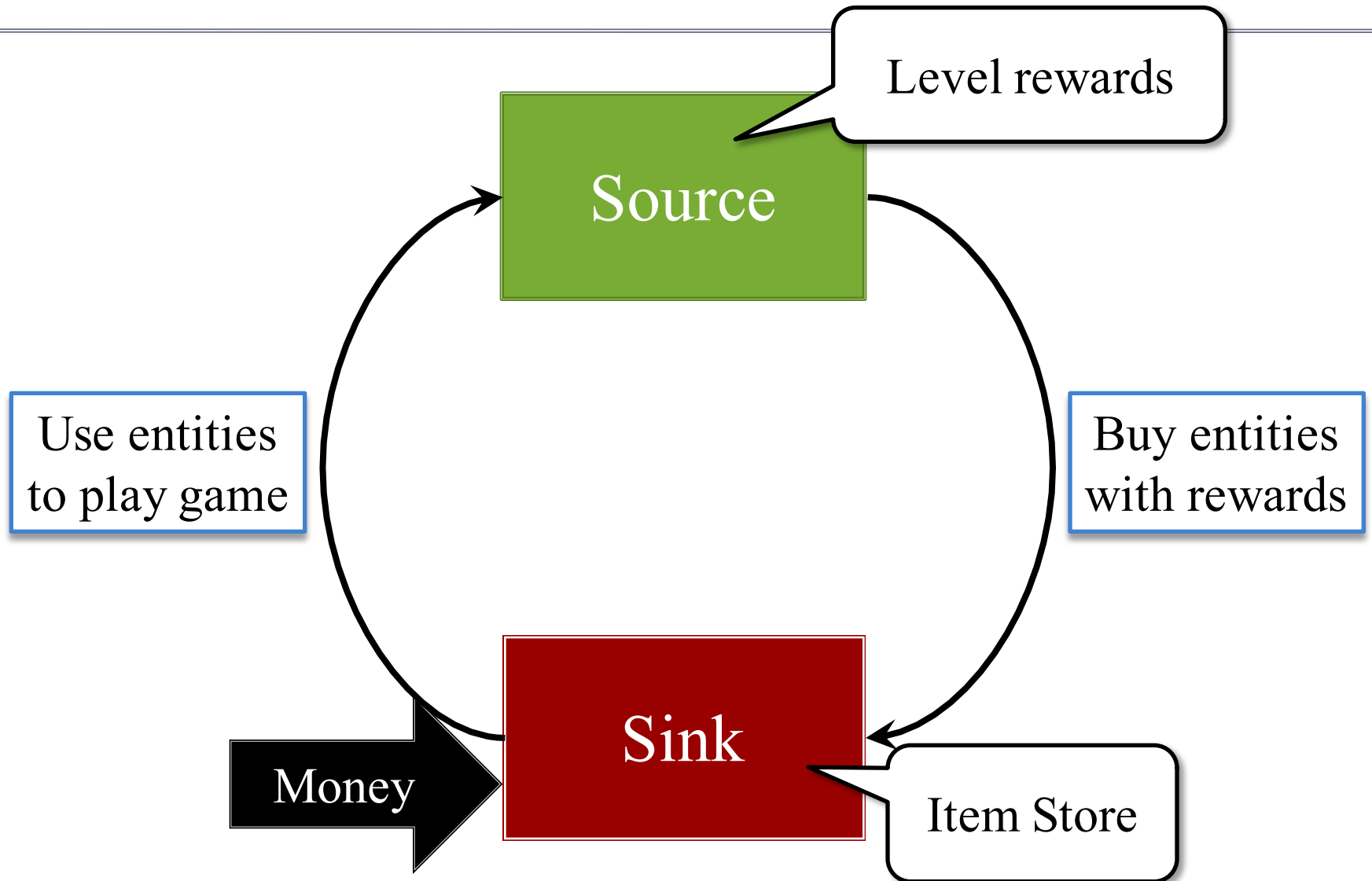


Entity Value Should Be Logarithmic

- Value is measured by % boost to player success
 - Early value to get initial purchases
 - But drop off so that money \neq success
- Leads to a new notion of “balance”



But Still Part of Core Loop



Case Study: *Mass Effect 3* Multiplayer



Case Study: *Pocket Tanks*



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...

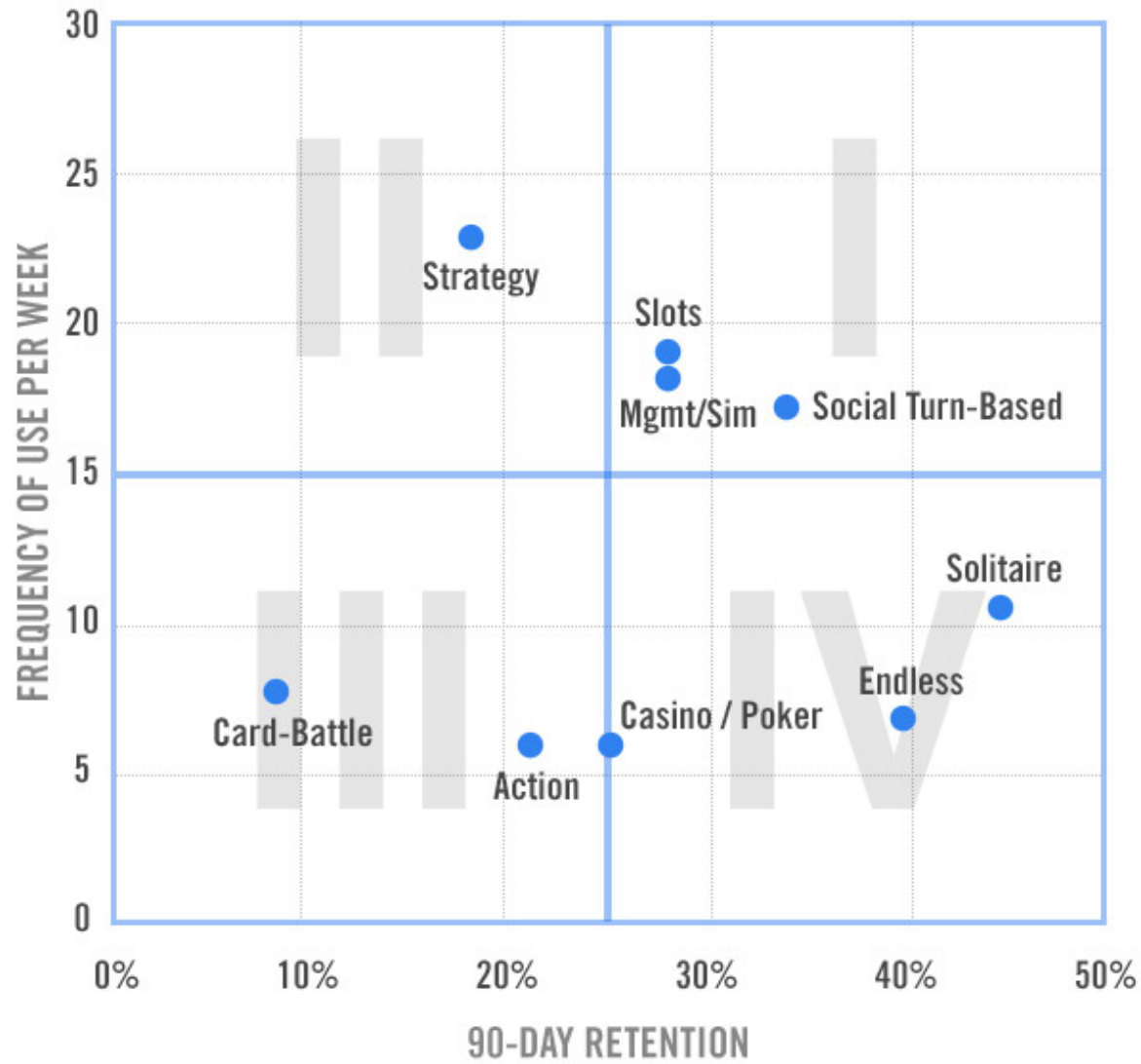
Other Lessons from CCGs

- 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