INSIDE THE GAME

Unlocking the consumer issues surrounding loot boxes

August 7, 2019 · Washington DC

PANEL 1
Treasure or Trifle? A Macro Look at Microtransactions

Sean F. Kane – Frankfurt Kurnit Klein & Selz

- Partner, Co-Chair of Interactive Entertainment Group
- Founding Member, Video Game Bar Association
  - Board Member & Incoming President
- Co-Author, *Video Game Law: Everything You Need to Know About Legal and Business Issues in the Game Industry*
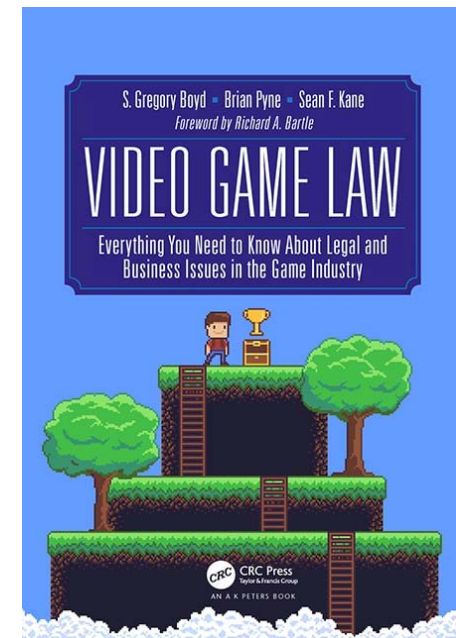
History of Game Monetization

1970s: Golden Age of the Coin-Op Arcade

- Gaming Centralized Out-of-Home
  - Dedicated Arcades
  - Arcade Cabinets Placed in Other Entertainment Venues

- Billions of Quarters Add Up
  - U.S. industry worth $3 billion by end of the decade ($9.8 billion in 2019 dollars)

1980s-1990s: Games Take the Living Room

- Gaming Shifts to the Home
  - Dedicated hardware-game phases out
  - Rise of general-purpose gaming consoles
    - Atari 2600, Nintendo Entertainment System (NES)

- Business Model Shifts to Sale of Physical Media
  - Game cartridges and discs replace pay-per-play

- 1990s – First Downloadable Games Appear
  - PC gaming market expands alongside Windows OS
  - Hobbyist developers, mods and shareware

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Early 2000s: Games Move Online

- PC Games Fully Embrace Multiplayer Support
  - LAN functionality → Internet-enabled multiplayer

- Evolution of Pure Browser-Based Games
  - Early "free to play" business models
  - Game supported by banner ad revenue

- Arrival of Pure Online Multiplayer Games
  - Retail sale of base game and expansions packs
  - Debut of monthly subscription-based model
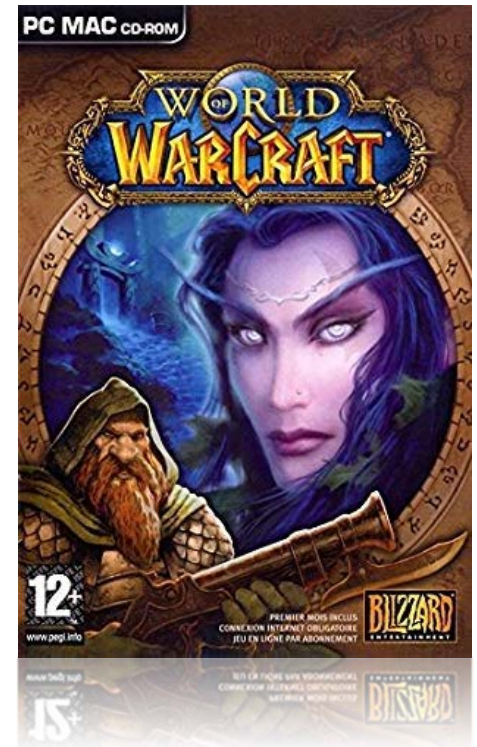
Late 2000s: Smartphone as Game Platform

- Pay-to-Download Games

- "Freemium" Games
  - Basic Free Play with Optional Paid Ad-Ons
  - In-App Microtransactions
    - Bypass cool-down timers
    - Power-ups
    - Extra lives mechanics return

2010s: Static Product to Games as a Service

- Games Built Around Always-On Internet Access
  - Digital Assets
    - Consumable and Non-Consumable Items
  - Avatar Customization
    - Hats, skins, pets
  - Tournaments, E-Sports
- Loot Boxes
- Limited-Time Access Content
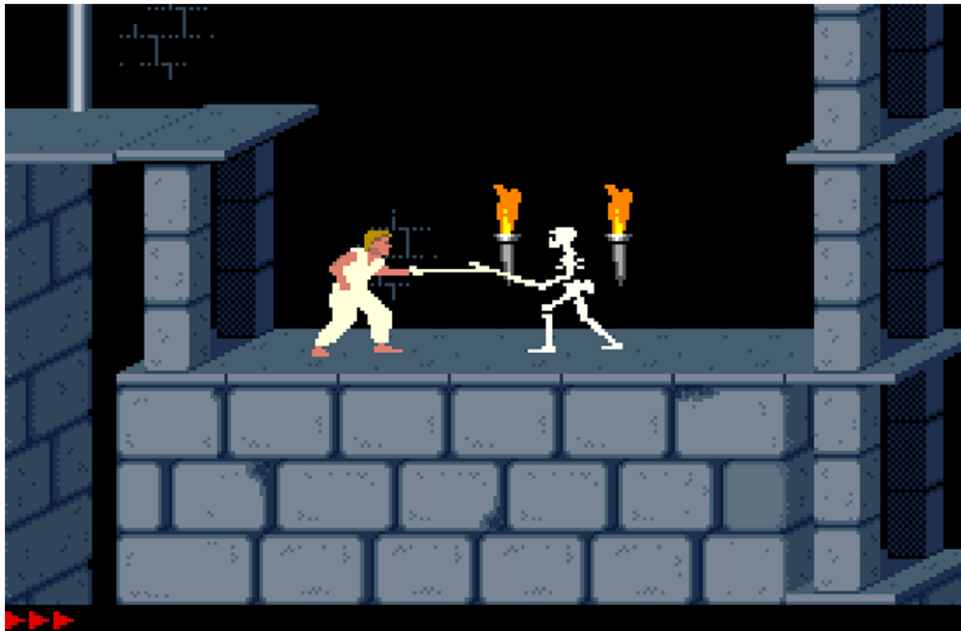 - Season Passes
  - Tiered Battle Passes

THE COMPENDIUM

CLICK FOR DETAILS

Economics of Game Development

Exponential Growth & Sophistication

- From simplistic linear to immersive, photo-realistic game worlds

- Open-world / sandbox games often feature hundreds of hours of playable content

- Online Competitive Play & E-Sports

Then & Now

Prince of Persia
(1989)

Assassin's Creed Odyssey
(2018)

Game Development Costs Are Higher than Ever. . .

- Triple-A Game Development Rival Hollywood Budgets
 - Between 2005 and 2018 Average AAA game budgets increased from $20-$30m to over $100m

Top Grossing Films Budgets 2018	Top Grossing Game Budgets 2018
1. Black Panther ($200m)	1. Red Dead Redemption 2 ($265m)
2. Avengers: Infinity War ($321m)	2. Call of Duty: Modern Warfare 2 ($250m)
3. Incredibles 2 ($200m)	3. Star Wars: The Old Republic ($200+m)

- Mobile game budgets have grown from $50k to over $20m

. . . But Consumer Prices Remain Low

Retail Price of Triple-A Titles are Decreasing In Real Terms

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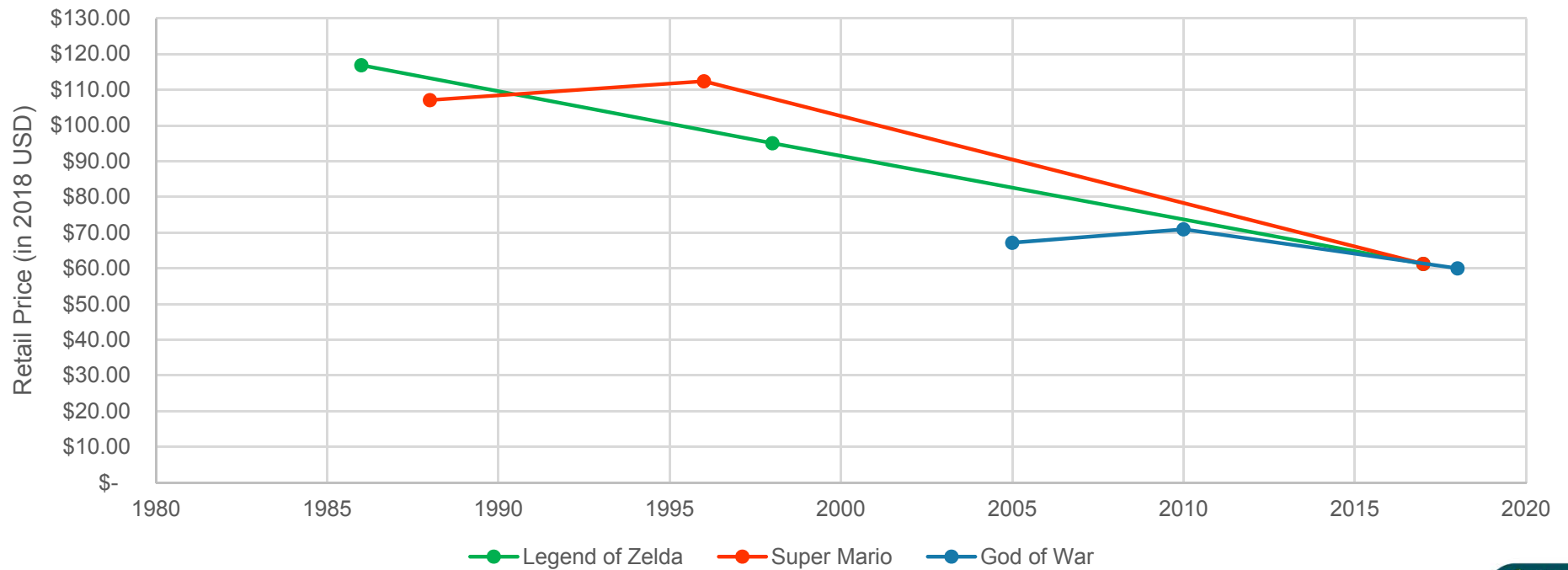
Innovative Business Models & Consumer Value

- Freemium games / Games as a Service has eliminated largescale software piracy

Innovative Business Models & Consumer Value

- Free To Play Games Gives Players Choice
  - Players decide when and if to spend money
  - Effectively "try before you buy" with hours of no-cost gameplay

- Microtransactions Mean Lower Marginal Costs and Broader Access To Content For Consumers

- Games as a Service Model Enables Parental Oversight
  - Account controls give parents effective tools to monitor and set limits on children's playing habits

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Jeff Haynes
Common Sense Media

UNPACKING LOOT BOXES

Unpacking Loot Boxes

- What Are Loot Boxes?
  - Containers of randomized digital content holding items with varying degrees of in-game value
  - Rewards earned for in-game play
  - Purchased with in-game currency or real money

Unpacking Loot Boxes

- How Did They Develop?
  - The concept is about 15 years old
  - Descended from Treasure Chests in RPGs
  - Online access, updates to content helped drive their expansion

Unpacking Loot Boxes

- Which Games Use Loot Boxes?
  - Can be found in almost all genres
  - Frequently found in card games, shooters, sports games, action titles, and role-playing games
  - Game industry is moving away from them; mobile industry has fully embraced them

Unpacking Loot Boxes

- Cosmetic Loot Boxes
  - Optional content
  - Allow players to customize characters
  - Some games let you redeem duplicate items for ones you don't have in your collection

Unpacking Loot Boxes

- Mode Specific Loot Boxes
  - Often tied to a specific game mode (i.e. fantasy sports team simulations)
  - Provide characters, gear, items of varying quality
  - Players can trade unwanted items via in-game auction houses for in-game credits
  - Can be paid for or earned by play, but gameplay rates can be artificially hampered by developers

Unpacking Loot Boxes

- "Pay to Loot" Loot Boxes
  - Success directly tied to paying for content
  - Some items restricted only to paid boxes
  - Higher incidents of "slot machine" mechanics where paying more "gives" more chances for rarer loot

MICROTRANSACTIONS

Unpacking Loot Boxes

- Microtransactions
  - Optional virtual goods or downloadable content (DLC)
  - Came into existence 13 years ago (Elder Scrolls IV)
  - Sometimes sold separately or in bundles
  - Also includes "Season Passes" for upcoming content at discounted prices

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Unpacking Loot Boxes

- Optional Microtransactions
  - Give users option to include or exclude content
  - Have been criticized for unlocking content that players have already paid for on discs or via download

Unpacking Loot Boxes

- Pay-to-Progress Microtransactions
  - Baked into many free-to-play games
  - Frequently impose random limits on gameplay unless players pay cash or a specific period of time passes
  - Hound players to pay for in-game items
  - Serve ads to players/collects info on game preferences

Unpacking Loot Boxes

- Pay-to-Win Microtransactions
  - Deceptively easy to learn, bait and switch gameplay
  - Skew odds unfairly
  - Success is directly tied to your wallet/willingness to pay
  - Developers often limit access to content unless gamers pay for it

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Unpacking Loot Boxes

- Protecting Consumers
  - None of these solutions are perfect or foolproof
  - Buying extra content isn't necessary for all games
  - Delete overly greedy/ad-heavy games
  - Pay for games instead of using free-to-play games
  - Use parental controls/remove payment info from devices
  - Talk to kids about in-game purchases

THANKS!

Michael Warnecke
Entertainment Software Association

An Overview of Loot Boxes

Members of ESA
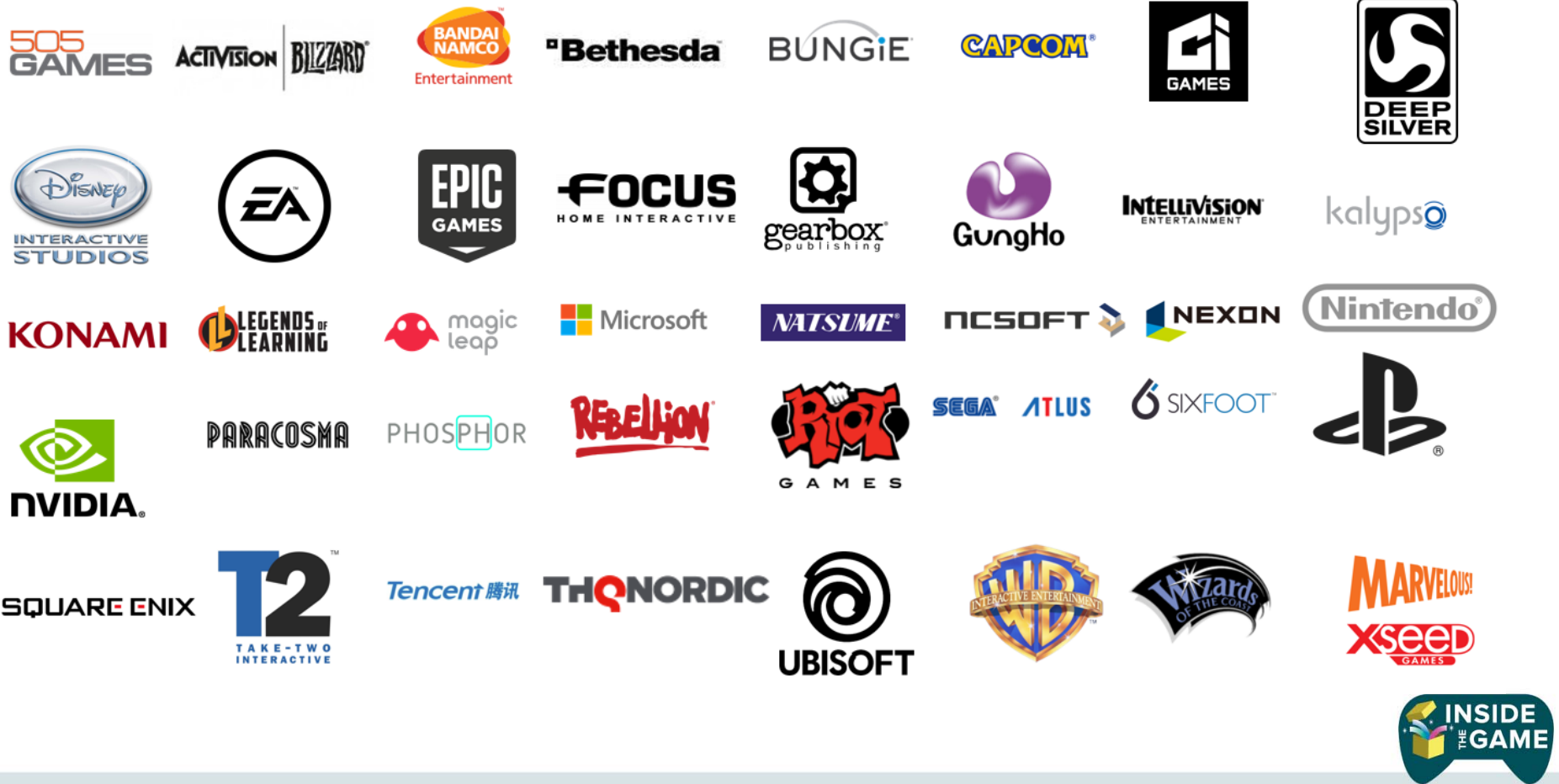
Millions of Americans Play Video Games

166+ million
Americans play video games

65% of American adults play video games

Who Plays Video Games?

Age of Gamers
Across US Households

Average age of
gamers is

33

Over 18
79%

Under 18
21%

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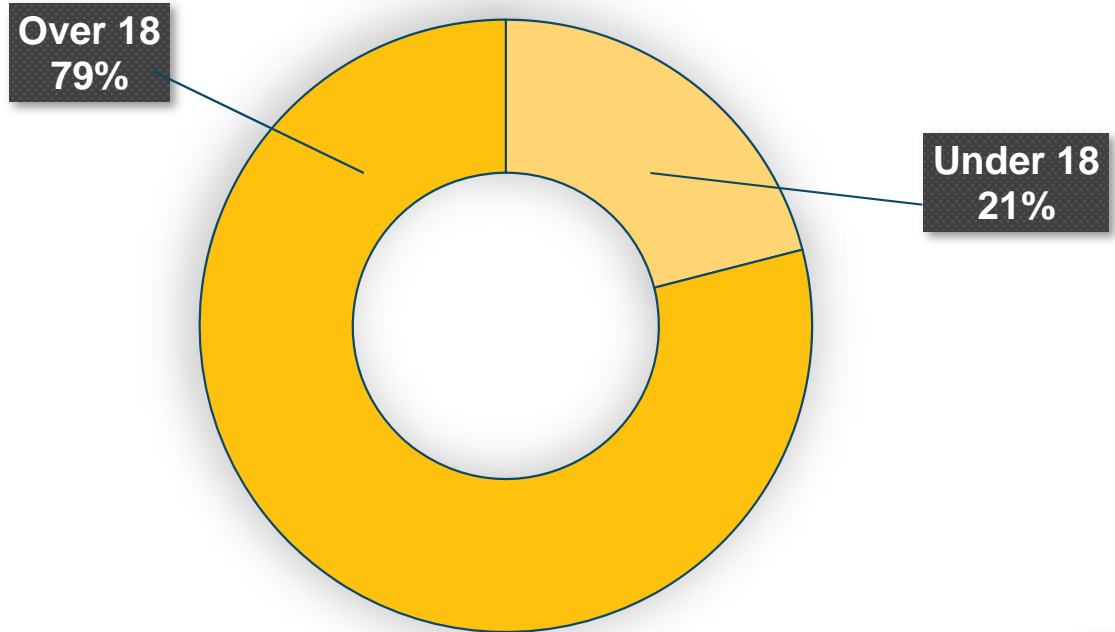
Explaining Loot Boxes

What is a Loot Box?

- Game mechanic where players can obtain various virtual items for use within the game.

- Players generally know the type but not the specific items until they open the box.

This Feature Is Not New

Why Loot Boxes & In-Game Purchases?

- Consumers want continually refreshed content, which adds texture and variability to the game experience

- Loot boxes and in-game purchases enable the development of engaging, dynamic, and expansive worlds

- Loot boxes and in-game purchases help make possible free-to-play games

Common Misconceptions About Loot Boxes

MYTH	REALITY
❌ Players must buy loot boxes to play	✓ Paid loot boxes are **optional**
❌ All in-game purchases are loot boxes	✓ Loot boxes are **one type** of in-game purchase
❌ Loot boxes are unique to the video game industry	✓ Surprise elements are **common** in toys and games (e.g., baseball cards)

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Common Examples of Acquiring Loot Boxes in Games

With money:

- Purchase loot box with USD
- Platform or app store bills your account

With in-game currency:

- Acquire loot box within game with in-game currency
- Preserves narrative integrity

Loot Box Examples

Example – MLB: The Show

Example – MLB: The Show

Example – MLB: The Show

Example – MLB: The Show

Example – MLB: The Show

Example - Forza Street

Example - The Sims Mobile

Example - The Sims Mobile

Example - The Sims Mobile

Example - The Sims Mobile

Transparency & Control

- ESRB "in-game purchases" label
- Spending controls (platform-level)
- New industry initiatives

Closing Thoughts

- Most Americans play video games
- Paid loot boxes are one way of getting content
- Paid loot boxes and in-game transactions help make more expansive virtual worlds possible
- Industry has taken steps on improved transparency and control over purchases

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Making Money From GaaS:
Consumer Protection in
an Evolving Video Game Industry

John Breyault
Vice President, Public Policy,
Telecommunications, and Fraud
National Consumers League

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The National Consumers League is the nation's pioneering consumer organization. Founded in 1899, our non-profit mission is to advocate for social and economic justice for consumers and workers in the United States and abroad

<u>Agenda</u>

➢ What are GaaS?

➢ Scale of Microtransactions

➢ When Does Monetization Become Predatory?

➢ Concerns Around In-Game Currency

➢ eSports, Streamers & FTC Endorsement Guide

➢ 5 Key Questions for FTC

What are Games as a Service (GaaS)?

	PAST		TODAY	
GAME	HIT DRIVEN AND CYCLICAL BUSINESS	→	RECURRING REVENUE BUSINESS	**LIVE SERVICES**
	LOW USER ENGAGEMENT	→	HIGH USER ENGAGEMENT	
	CONSOLE FOCUS	→	MULTI-PLATFORM BUSINESS	
	DEVELOPER CENTRIC	→	PLAYER CENTRIC	
	GAME EXPERIENCE	→	PLATFORM EXPERIENCE	
	NUMBER OF UNITS	→	LIFETIME VALUE	

Source: Ubisoft Q3 FY18 Earnings Slideshow

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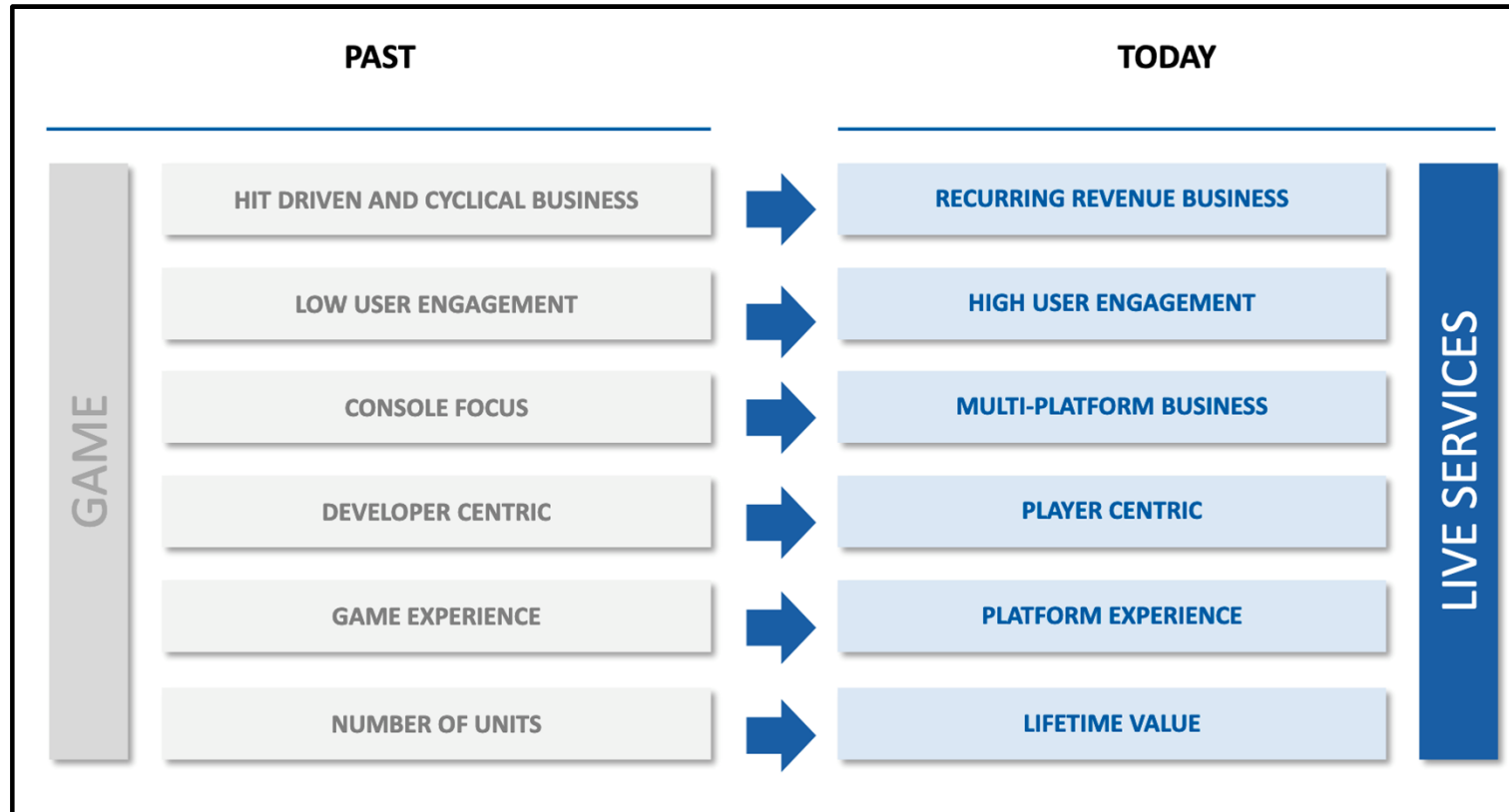
Scale of Microtransactions: In-Game Content Purchases Fuel a Multi-Billion Dollar Market

Total spend on loot boxes and skin gambling forecast to rise to $50B by 2022, up from $30B in 2018

Source: Juniper Research. In-Game Gambling – The Next Cash Cow for Publishers. April 2018

PLAYER RECURRING INVESTMENT AS % OF TOTAL SALES

UBISOFT — FY17 — 18%

EA — FY17 — 39%

ACTIVISION BLIZZARD ** — FY17 — 38%

■ Player recurring investment (PRI)* (excluding Mobile)
■ Digital & physical distribution

* Player Recurring Investment which includes ingame items, DLCs/season pass, subscription & advertising
** Excluding WoW subscriptions
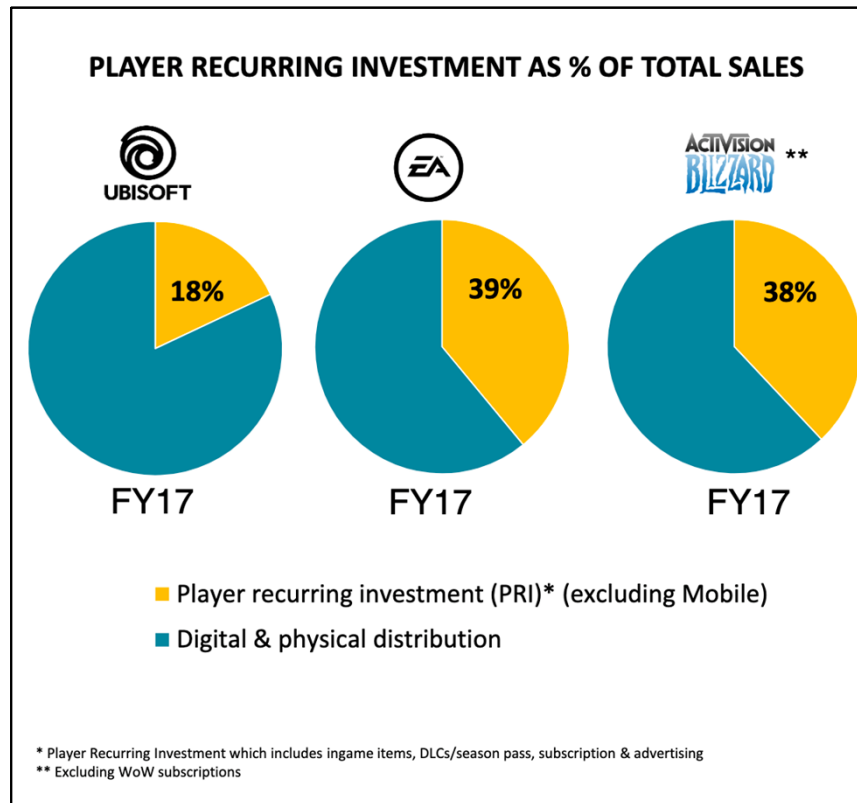
Source: Ubisoft Q3 FY18 Earnings Slideshow

Consistent Across Major Developers
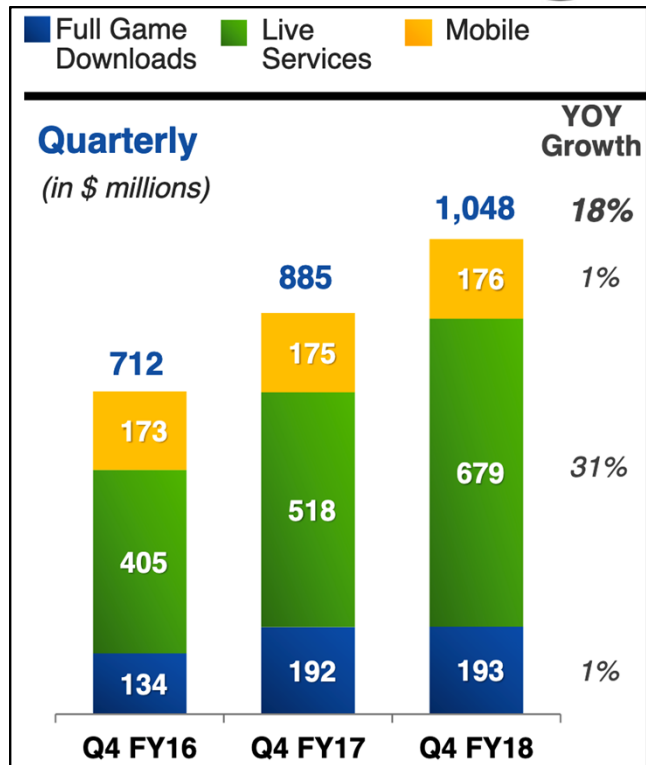
Source: EA Q4 2019 Earnings Slides
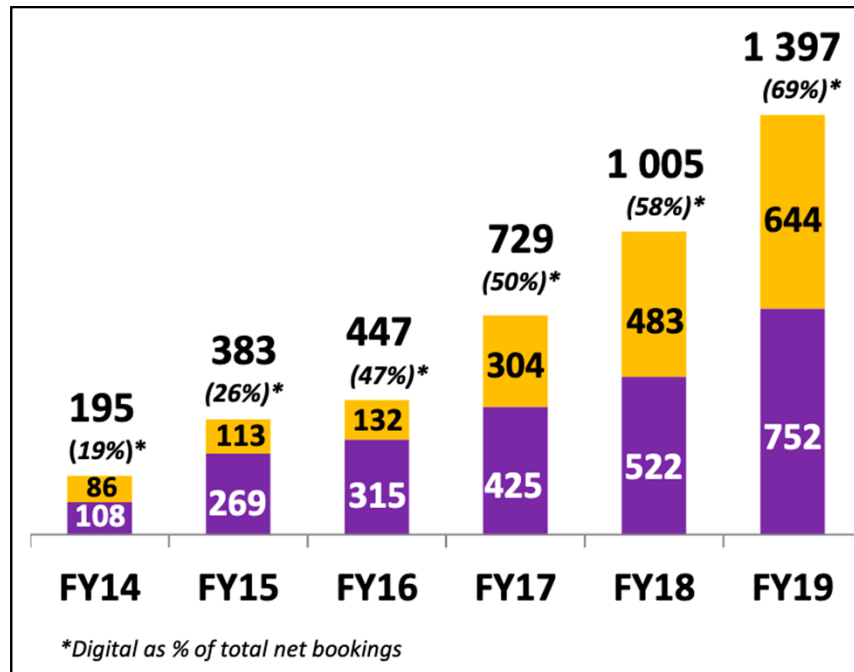
Source: Ubisoft 2018-19 Earnings Slideshow

GaaS Has Been Great for Business

AVERAGE PROFITABILITY OF UBISOFT, EA, TTWO & ACTIVISION
(% EBIT margin)

Source: Based on Ubisoft consensus and Bloomberg

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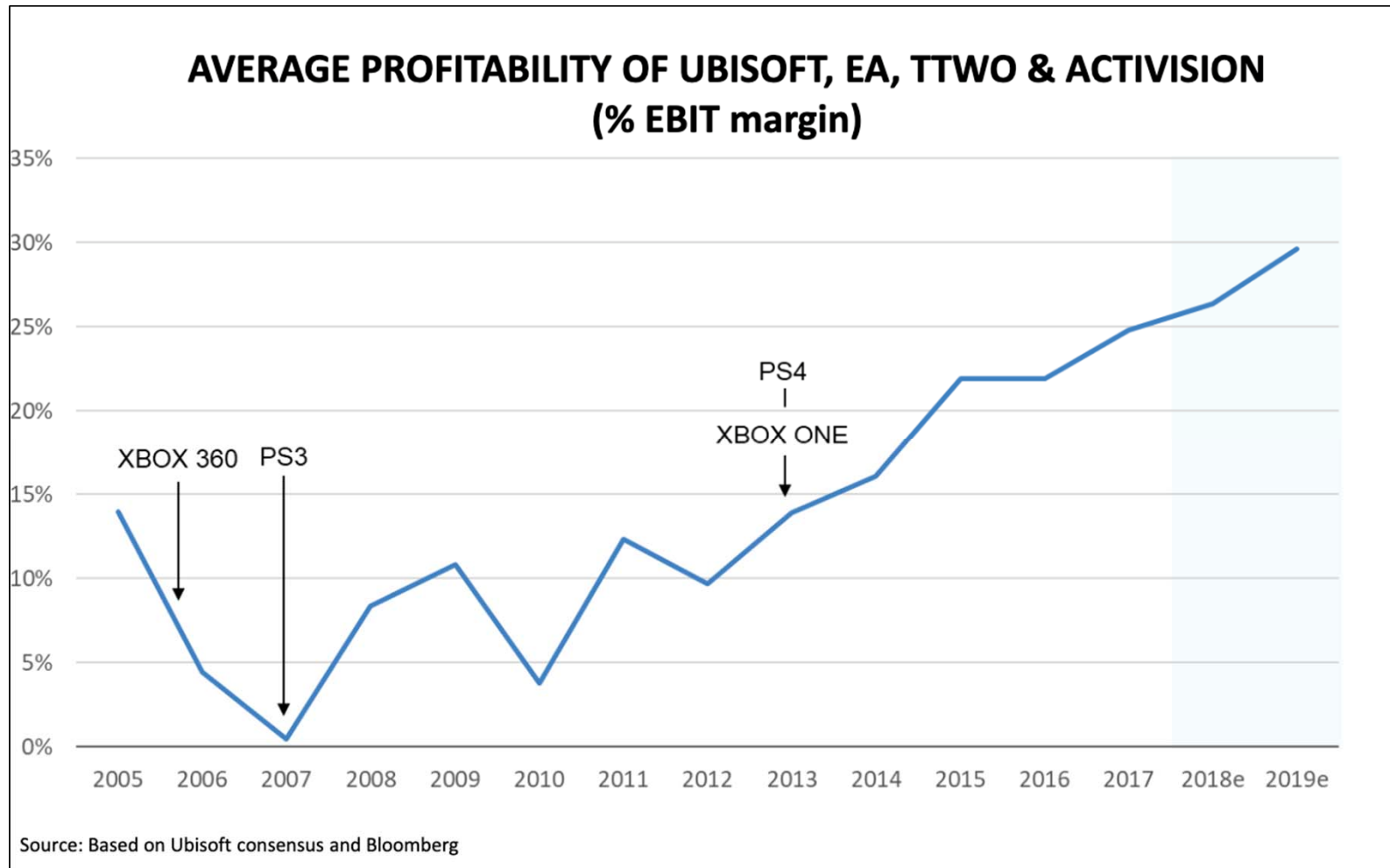
When Does Monetization Become Predatory?

"Game monetization schemes have become increasingly sophisticated and have been featured more prominently within popular on-line games. ==   == Such schemes are designed to encourage repeated player spending using tactics or elements that may involve, either singularly or in combination, limited disclosure of the product; intrusive and unavoidable solicitations; and systems that manipulate reward outcomes to reinforce purchasing behaviors over skillful or strategic play.

of the player's game-related preferences, available funds and/or playing and spending habits, to present offers predetermined to maximize the likelihood of eliciting player

Source: King, Daniel and Delfabbro, Paul. "Predatory monetization schemes in video games (e.g. 'loot boxes') and internet gaming disorder," *Addiction*. 2018.

When Does Monetization Become Predatory?

SSA SOCIETY FOR THE STUDY OF ADDICTION

"Another noteworthy aspect of predatory monetization is the collection and use of individual player data to manipulate the nature and presentation of purchasing offers in ways that ... Some schemes may exploit an information asymmetry (i.e. the game system knows more about the player than the player can know about the game) to adjust the prices of virtual items for players depending on their playing and spending habits in the game. Players may not be aware or informed of the odds of receiving desired items from microtransactions, and the game may use pressuring tactics to incentivize purchases (e.g. so-called 'limited time' offers). These schemes may entice some players with access to credit cards to spend more money than they can afford.

Source: King, Daniel and Delfabbro, Paul. "Predatory monetization schemes in video games (e.g. 'loot boxes') and internet gaming disorder," *Addiction*. 2018.

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So Why Does This Matter?

"The more money that older adolescents spent on loot boxes, the greater their problem gambling severity. Older adolescents who spent money on loot boxes displayed more than twice as high measurements of problem gambling than those who did not. Adolescent problem gamblers spent more than five times as much money on loot boxes than those who did not have a problem. … There is one clear conclusion that can be drawn from these results: when video game companies allow adolescents to buy loot boxes, they are potentially exposing them to negative consequences."

Source: Zendle, David, Meyer, Rachel, Over, Harriet. "Adolescents and loot boxes: links with problem gambling and motivations for purchase," *Royal Society Open Science.* June 2019.

In-Game Currency Proliferates in Top Games

Concerns Around In-Game Currency

- Currencies obtained via gameplay or purchase may obscure the true cost of purchasing in-game content.

- Advertised "discounts" or "bonuses" may further obscure the true cost

eSports, Streamers and the FTC's Endorsement Guides

eSports market revenue worldwide from 2012 to 2022 (in million U.S. dollars)
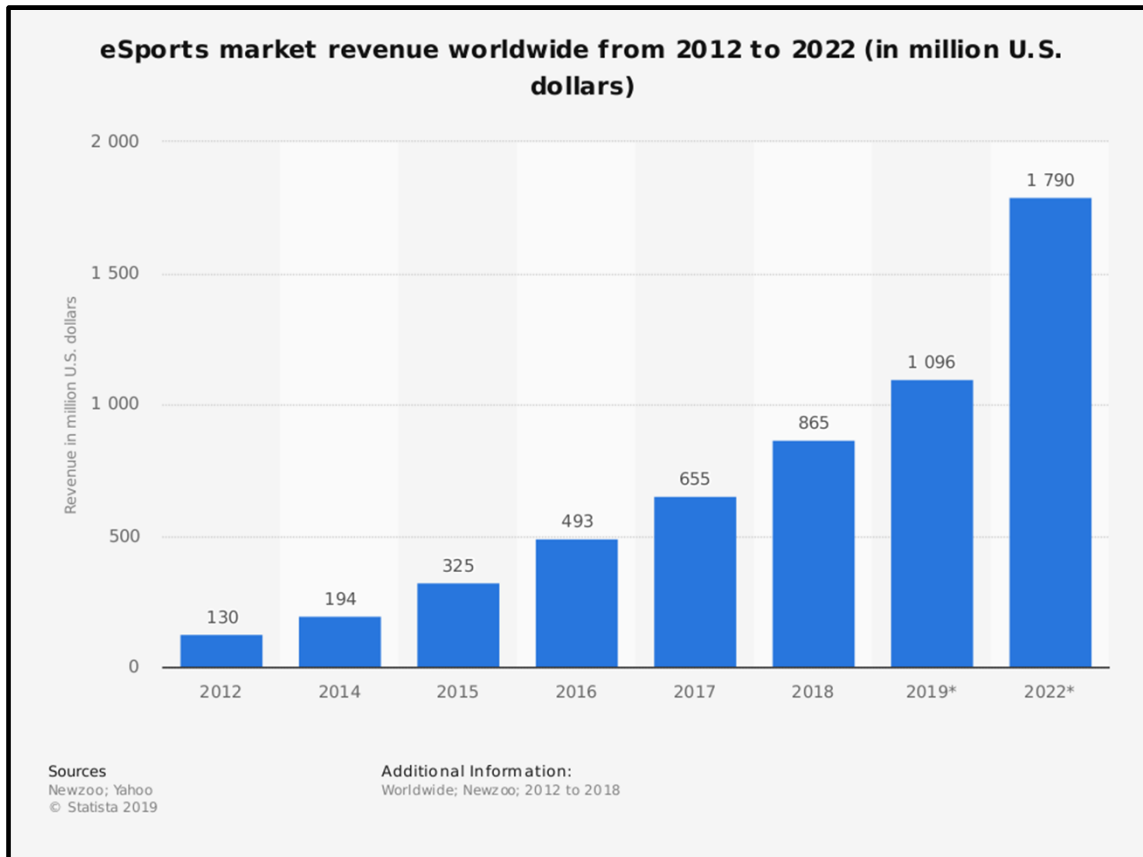
- $1.8B eSports Market by 2022
- IEM Katowice 2019: 20M unique single-day viewers, 195M viewers for CS:GO tournament
- NBA 2019 Finals Average Viewership: 17.7M
- Super Bowl LIII Average Viewership: 98.1M

eSports, Streamers and the FTC Endorsement Guide

5 Key Questions for FTC

➢ Are loot box drop odds manipulated to incentivize continued play, eventual monetization?

➢ If so, what factors are used to influence loot box drop odds?

➢ Does disclosure of loot drop odds influence player behavior?

➢ Would better disclosure of cumulative in-game spend in USD address in-game currency concerns?

➢ Are publishers, eSports leagues & streamers complying with FTC Endorsement Guide?

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Renee Gittins
International Game Developers Association

IGDA

The International Game Developers Association (IGDA) is the largest non-profit membership organization in the world serving all individuals who create games.

Mission: The IGDA supports and empowers game developers around the world in achieving fulfilling and sustainable careers.

What is a Loot Box?

- Consumable item in a video game containing randomized rewards
- Huge range of items and mechanics that can fall under the term "loot box"
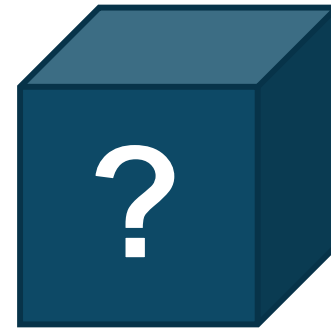
Loot Box Acquisition

- Bought with real money
- Bought with purchased in-game currency
- Bought with earned in-game currency
- Bought with in-game currency that can be purchased or earned
- Awarded for in-game achievements
- Awarded for in-game achievements if you have a paid subscription
- Awarded for in-game achievements in purchased game modes
- Granted at time intervals
- Granted at time intervals if you have a paid subscription

Loot Box Contents

- Cosmetics
  - Visual, auditory, and other changes unrelated to gameplay
- Content
  - Mechanically unique characters
  - Game modes
- Consumables
  - Experience boosts, healing items, etc.
- Upgrades
  - Weapons, items, and other game changing boosts
- In-game currency

Handling of Acquired Contents

- Locked to account (cannot sell/trade)

- Giftable to other users

- Tradeable to other users for in-game currency

- Tradeable to other users for real money

- Tradeable to other users only after loot box period ends

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Loot Box Complexity

- 10 different acquisition methods
- 5 core types of content
- 5 different methods of handling acquired contents

Combinations: 10*5*5 = 250

Loot Box Complexity

- 10 different acquisition methods
- 5 core types of content
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Combinations: ~~10*5*5 = 250~~

Loot Box Complexity

- 10 different acquisition methods
- 5 core types of content
- 5 different methods of handling acquired contents

Combinations: 10!*5!*5! =

52,254,720,000

Example of Complexity

- Game #1
  - Can earn loot box type #1 through gameplay after an initial purchase or purchasing progress (no direct purchase)
  - Can earn loot box type #2 through event participation
  - Only permanent cosmetic rewards, no duplicate rewards
  - Loot box type #1 acquired cosmetics are account-bound
  - Loot box type #2 box cosmetics can be sold for real money
  - No other methods of acquiring this content

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Similar Mechanics

- Many core video game mechanics that could fall under improper "loot box" definitions
  - Loot drops from monsters
  - Event participation awards

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Similar Mechanics

- ## Real life crossover
  - – E.g. trading cards, toy capsules, children's meals

Monetary Motivations

- Games back in 1977 cost between $50-80

- Average game price has been $60 for well over two decades

- Adjusted for inflation, $60 in 1977 is $253.61

- Game development costs, consumer expectations, and team sizes have grown greatly

- Mobile games represent over 50% of global game revenue, but consumers do not support up-front purchases of mobile games

Average Video Game Prices
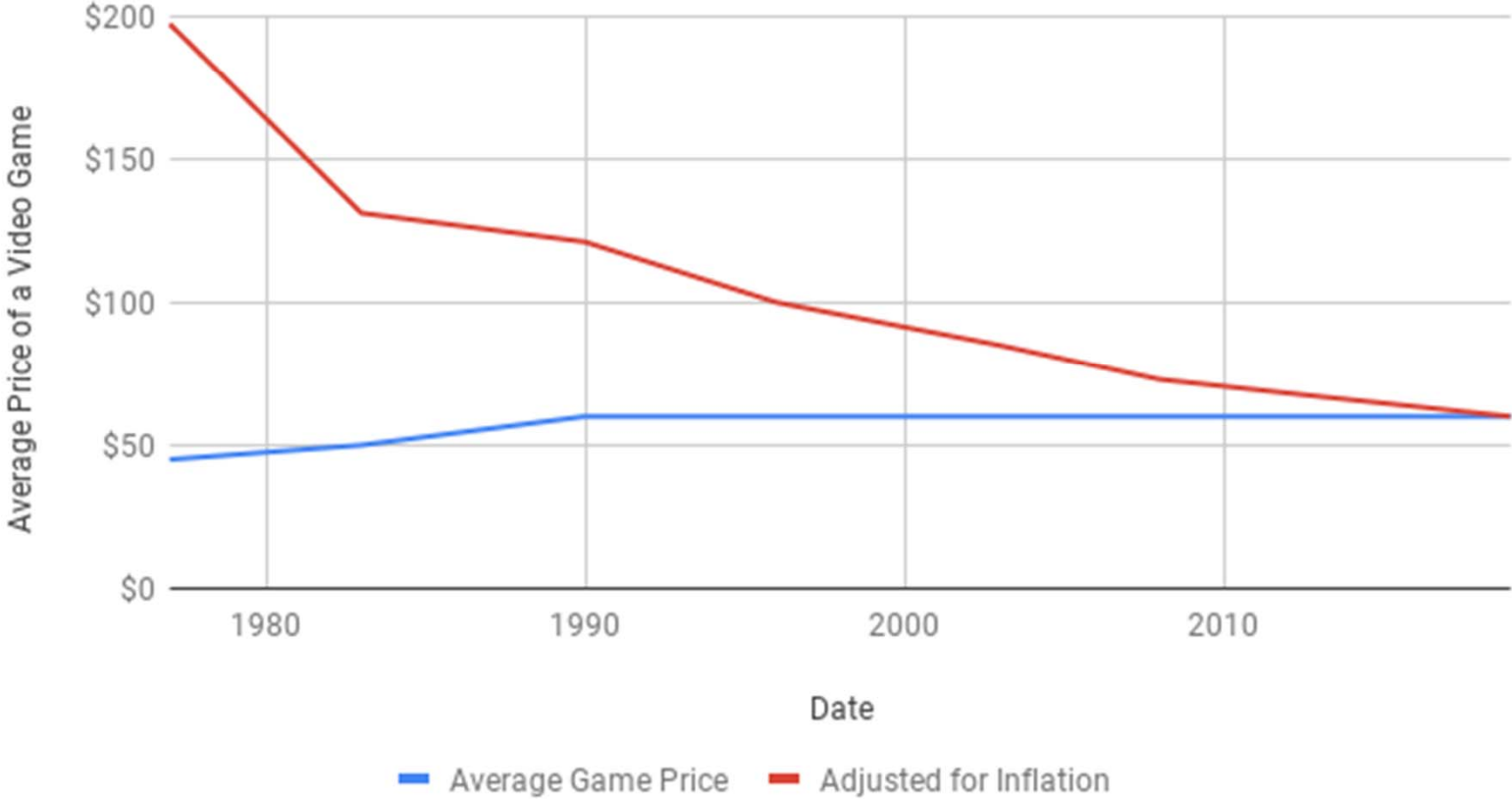
Implementation Costs

- Mechanics changes can be costly and affect established in-game economies

- Large developers can react rapidly to changes, but small developers suffer

- Small app developers often live on passive income from many previous games while developing more

Current Protections

- Children's Online Privacy Protection Act
  - Children under 13 cannot have an account to which loot boxes can be credited

- Online purchases require credit cards or 18+ accounts
  - Exception: Gift cards for in-game credit

- App and console store parental controls

Game Dev Opinions

Summary

- Extremely complex and varied space

- Large overlap with established game mechanics

- Monetization driven by inflation and decreasing customer willingness for upfront payments

- Current protections guard children

- Game developers are worried about heavy-handed regulation hurting the industry and their creativity

![Inside the Game logo]

Omeed Dariani
Online Performers Group

Online Performers Group
Represents Content Creators...

Select Clients
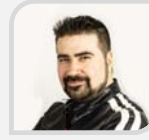
CohhCarnage   T-Pain   The Angry Joe Show   DragonForce   Trevor May

- Founded in 2014, OPG provides management support services and professional representation to content creators.

- We work for content creators exclusively.

- We do not work for game companies or accept direct compensation from them.

- Fighting exploitation, improving the game industry and creating transparency are OPG's primary objectives.

Fast Facts about OPG

#1 — **professional roster on Twitch.tv**
70 of the top variety gaming content creators

50+ — **million followers**
Across social media platforms

60+ — **years of content**
consumed daily by viewers of OPG channels

Online Performers Group

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...And Content Creators Represent the Gaming Community

Broadcasters are passionate fans born out of the gaming community.

Expressing popular or controversial opinions about the industry helps them attract a following.

Many become opinion leaders, advocates, or critics of the industry.

This is making the game industry better. For decades, fans have lacked a direct feedback loop with game companies – and lacked advocates with a platform strong enough to command attention.

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The Lootbox Controversy Started With Content Creators
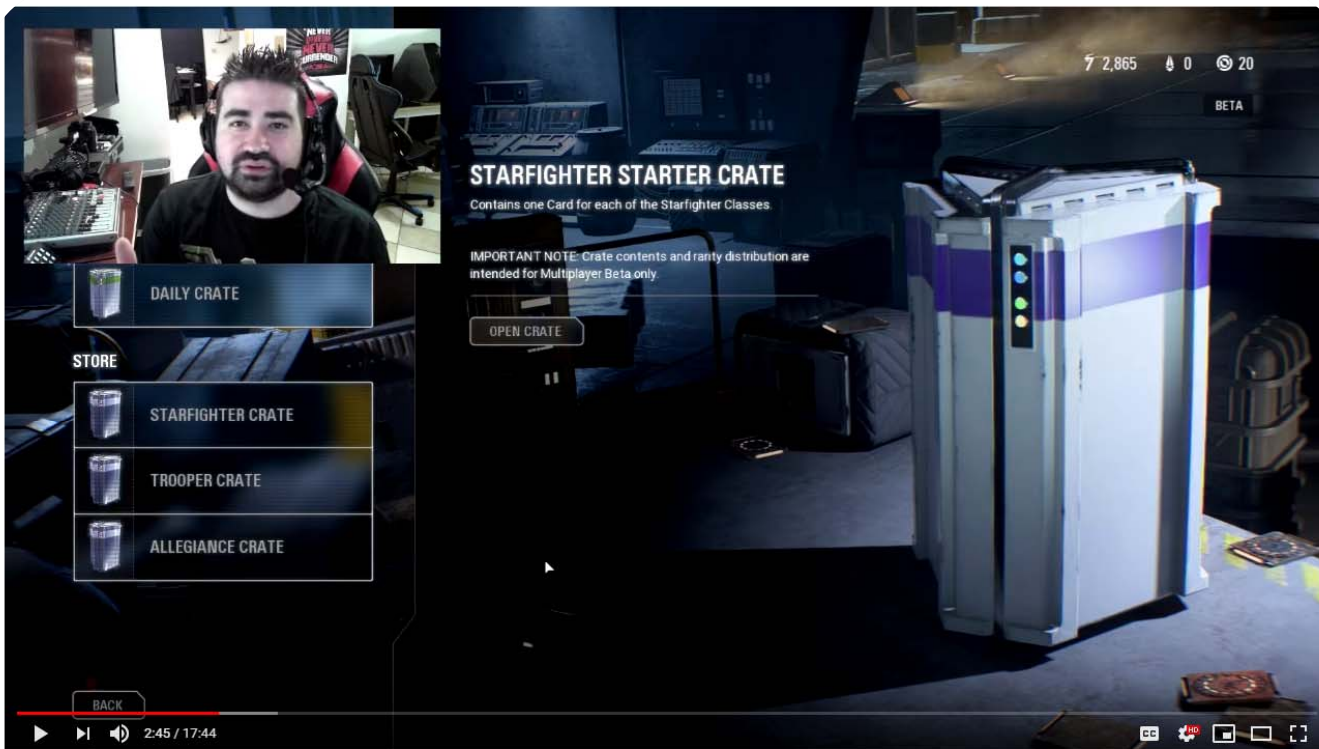

Broadcasters like the Angry Joe Show have long been critics of microtransactions, aggressive DRM and similar topics.

Star Wars: Battlefront II became a focal point of community outrage about lootboxes.

Angry Joe, Jim Sterling, and others like them shaped the debate from beginning to end.

Ultimately… They Affected Change

CNBC EA vows to never offer paid 'loot boxes' in its controversial 'Star Wars Battlefront II' game

Joe Vargas of the AngryJoeShow, who has more than 2.9 million subscribers for his channel, agreed.

"This is admittedly a step in the right direction, I'm happy that EA is backing off of at least paid progression through loot boxes — I'm only sorry that it took such a large backlash from all parties involved to get them to do something positive for the gaming community, giving us what we suggested in the first place," Vargas wrote in an email. "We will be keeping an eye on these types of practices in the future, not just in Star Wars but in other $60 retail Triple AAA titles."

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Let's Talk About...
What The Community Wants

We have an incredible set of panelists here, representing the game industry and institutions focused on consumer protection.

We do not have a group or advocacy organization representing the gaming community itself.

The gaming community is massive and reaches across all socio-economic groups,
ages, and ethnicities.

It's impossible to capture every viewpoint of such a broad group... but I tried. Here's what I've got.

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The Community Wants:
To Be Heard

Overall, the gaming community has mixed feelings on lootboxes.

They are, however, virtually unanimous in their belief that game companies don't listen to their – or anyone's - opinions on lootboxes.

Via Twitter:

All of the companies on my permanent blacklist have engaged with loot boxes among other shady anti-consumer practices.

My opinion of game companies that nickel and dime customers with loot boxes is certainly negative and I generally stay away from companies that push these mtx. The executives are making millions but the actual developers make squat and deal with a bad workplace. See Bioware.

Google

blizzard doesn't

blizzard doesn't **care**
blizzard doesn't **care about loyalty**
blizzard doesn't **care about console overwatch**
blizzard doesn't **know how to balance**
blizzard doesn't **care about customers**
blizzard doesn't **care about console**
blizzard doesn't **listen to the community**

Google

ea doesn't

ea doesn't **understand**
ea doesn't **care about customers**
ea doesn't **care**
ea doesn't **send security code**
ea doesn't **work**
ea doesn't **deserve star wars**

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The Community (Mostly) Thinks:
Lootboxes Are Gambling

Via Twitter:

FindMyNucleus @FindMyNucleus · Jul 15
Replying to @Omeed
Yes, they are a form of gambling. You spend money on a randomized item. You can spend thousands and not get what you want. Recently, the BBC wrote an article about a man whose kids spend $550 on FIFA cards and didn't get Messi (dad didn't know they spent it).

💬   🔁   ♡ 1   ✉

Lycis @JustLycis · Jul 16
Replying to @Omeed
Yes

💬   🔁   ♡   ✉

Prime038 @Prime038_ · Jul 15
Replying to @Omeed
100% yes.

💬   🔁   ♡ 3   ✉

Zaelkrie 🏳️ @thegothking · Jul 15
Replying to @Omeed
I'd argue they are worse than gambling because at least a child can't walk into a casino and bankrupt their parents.

💬   🔁   ♡ 2   ✉

Rodrigo @sdjob1 · Jul 15
Replying to @Omeed
Even worse since children pay for them without their parents knowing. Also many gaming companies hired specialists to make lootboxes psychologycaly addictive and akin to slot machines.

It's difficult to argue that lootboxes are gambling, when comparing them to slot machines or the lottery, but the community STRONGLY associates the mechanics with gambling behavior.

Gambling is well-defined – and lootboxes don't clearly fall within the definition, but there is enough of an emotional link for gamers that it warrants further investigation.

Perhaps it is not gambling, per se, but plays like "gambling within a game system."

Via Email:

I unquestionably believe lootboxes are gambling. When you lose you get a sticker/spray or low quality skin that you will never use. That equals nothing in my mindset. Heck, even if you win, it is often just flashy pixels on your character, you could argue that isn't worth money either.

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The Community Wants:
To Keep Kids Safe

A lot of concern is rooted in the ease with which purchase options are given to children at a time when they are difficult to supervise: during game play.

These purchases can happen in the blink of an eye. Without proper setup, a child can spend thousands of dollars without a parent's permission. And it's difficult to notice until the credit card bill comes.

Via Twitter:

How could anyone say they're good for games? Many of the items are actively removed from the game to be sold in packs. Heck, some of it is already on the disc! Do you know how many arguments loot boxes cause? I teach a kid who spent over two grand on fortnite (mom's money).

Even worse since children pay for them without their parents knowing. Also many gaming companies hired specialists to make lootboxes psychologycaly addictive and akin to slot machines.

BBC NEWS

Basketball game cost our family £2,000

My 16-year-old son spent nearly £2,000 of my money on EA's NBA basketball game.

He used my bank card and I didn't realise until I had a payment declined.

He accessed the app via Google Play.

EA made no response to me and Google Play has a disclaimer about kids using parents' bank details without permission.

My daughter had to use her university savings to pay the bill for this and it has caused huge damage to our family.

My son spent £3,160 in one game

I have a 22 year-old disabled son, who has cerebral palsy, complex epilepsy, autism, learning difficulties and the approximate cognitive ability of a seven-year-old child.

He is unable to do any bilateral activities so relies heavily on his iPad and PlayStation for entertainment and educational activities.

He has recently been playing a game on his iPad called Hidden Artifacts which involves finding various items and matching them to the description.

BBC NEWS

He has been charged £3160.58 between 18 February and 30 May 2019, clearing out his entire savings.

INSIDE THE GAME

An Email I Received...

"When I was 12, I started playing a free to play browser game called Dark Orbit. I spent at least 600€ without realizing it. I probably spent a lot more than that.

I did this because I felt pressured to compete with other players and to be helpful for my clan.

The publisher regularly released new premium items or gameplay mechanics that I felt I needed. For example, base ammunition was available without purchase, but to be competitive, you needed to buy premium ammunition for your ship.

Up to 300% damage ammunition was available for direct purchase, but special 400% ammunition was only available through a system called "Galaxy Gates," where you buy lootboxes that give you puzzle pieces. You must complete the puzzle to open the gates. You received one piece per lootbox.

There are eleven of these puzzles with up to 128 pieces each. You can imagine how much money this will cost you.

The game seems to be nearly dead, but the revenue it earns must justify keeping it online."

INSIDE THE GAME

The Community Wants:
To Get What They Paid For

In some ways, this feels like a new conversation... but it started in 2006 when Bethesda introduced a piece of "downloadable content" known as "Horse Armor" into their hit game, Oblivion. The content was included on the disc you purchased for $59.99. But it cost an additional $2.50 to unlock.

As games like Zynga's Farmville normalized the concept of microtransactions, the gaming community never forgot that the initial versions of DLC felt like cash grabs designed to raise the price of a game beyond the established MSRP.

As gamers, we had been accustomed to "buy the box, get the game." When companies began to add these day-one DLC items, many gamers felt that a key "social compact" of gaming had been broken.

The gaming community has a long memory. Horse Armor has not been forgotten.

Via Twitter:

Yes. While you still get "something", there is aan extremely high probability it isn't what you are looking for.
Take CSGO crate. You have 90% chance of getting something worthless, or 9% of something good, or 1% extra rare
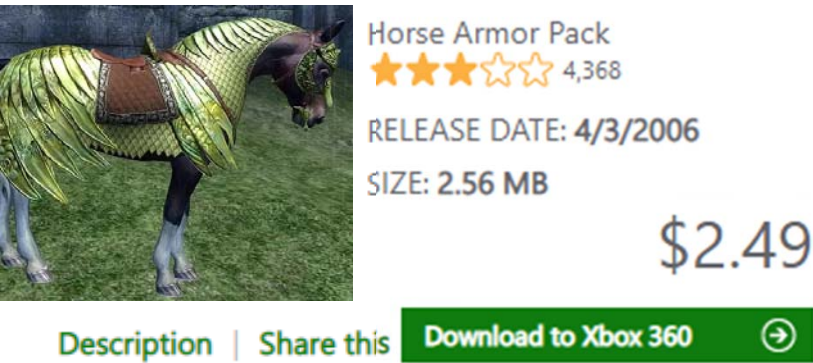
Those prey upon people with addictive personalities. And even in games where they're an optional means of purchasing things they can trick players into thinking they're an efficient way to get stuff.

Depends, if the game is not free to play or doesn't use the money from them to fund free updates no. Like Shadow or War had lootboxes that added nothing so they gave me no reason to buy them.

No because the entire game becomes designed around trying to maximize

Forbes

Original Game — Expansion Pack — Expansion Pack — THEN

Original Game — Pre-Order Bonus — -DLC — -DLC — -DLC — -DLC — -Best Buy Exclusive — \Gamestop Exclusive — NOW

INSIDE THE GAME

A Brief History of Add-On Purchases

Elder Scrolls: Oblivion	Farmville	Candy Crush Saga
2006	2009	2012

INSIDE THE GAME

Star Wars: Battlefront II

2018

The Community (Kind Of) Wants:
Regulation of Lootboxes

Via Email:

4. Do you favor government regulation? No, I feel like I don't trust the government to regulate them well, that most of our government officials, especially politicians, are Luddites who will end up hurting the industry more through broad, grand-standing regulation. But if the industry won't regulate itself then someone has to.

It has gotten to the point that I do favour some sort of government regulation. At the very least we need to see the % chances for attaining the stuff we want. I wouldn't mind the purchase of lootboxes to be banned forever. Let me buy specifically what I want, instead of sending my money into a black hole for a chance of something good.

I favour best practices. A clear statement "this is what we expect you to do". This should be industry led but if that can't happen, then government-sanctioned/enforced.

Paid or free, a lootbox can have potential to be dangerous without regulation. That's what matters

I think regulations are about what they're not ok in. They should have information on the odds and should be a consideration to increase the ESRB rating so a game can't target underdeveloped minds with it.

INSIDE THE GAME

What Do I Think?

I'm glad you asked!

- I think lootboxes feel like gambling.

- The things to the right also feel like gambling to me.

- Everything pictured to the right is over 20 years old.

I find it difficult to understand why these older blind-purchase models are acceptable and lootboxes are not.

I Wasn't Born Yesterday...

There are several things standing in the way of good government regulation on lootboxes and the game industry in general.

- Games and technology are poorly understood by our elected officials.

- The average Congressperson is sixteen years older than the Atari 2600 and thirty-seven years older than Google.

- The president is six years older than the original lootbox, Mr. Potato Head and sixty-nine years older than the oldest iPhone you can play Fortnite on.

- The recent influx of young elected officials is a positive development, but we still have a long way to go.

Average Congressperson: 1961

Atari 2600: 1977

Current President: 1946

Mr. Potato Head: 1952

Changing The Tone...

There are several things standing in the way of good government regulation on lootboxes and the game industry in general.

- Our leaders often speak with contempt and ignorance when it comes to games, blaming them for societal ills.

- Reactionary, poorly designed legislation or regulation will cost Americans jobs and make us less competitive in the global game industry.

- Dialogue is needed – not just with game companies and their representatives... but also directly with passionate American gamers who want to see our industry flourish.

- As politicians learn the power of directly addressing gamers through livestreaming, forming partnerships with content creators will be immensely valuable.

Donald J. Trump ✔
@realDonaldTrump

Video game violence & glorification must be stopped—it is creating monsters!

Broman ✔ @Professorbroman · 12 Apr 2017

Just lost a very close family friend to cancer and I'm shook up about it a bit. Gonna focus on @GuardianCon stuffs for the afternoon.

St. Jude PLAY LIVE ✔
@StJudePLAYLIVE

Follow

We just hit $4M for the kids of @StJude thanks to @GuardianCon and all of YOU!

Forbes Feb 15, 2019, 08:54pm

New Study Shows That There Is No Link Between Violent Video Games And Aggression In Teenagers

TRUMP BLAMED VIDEO GAMES FOR PARKLAND SHOOTING BUT HIS SCHOOL SAFETY COMMISSION SAYS OTHERWISE Newsweek

BY ANDREW WHALEN ON 12/19/18 AT 12:15 PM EST

INSIDE THE GAME
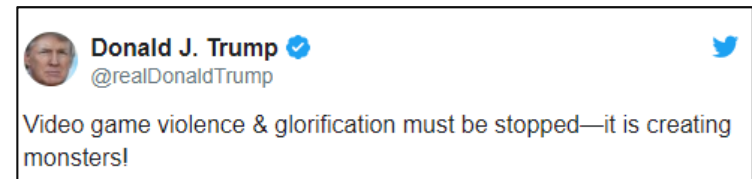
BREAK

PANEL 1 DISCUSSION

LUNCH

INSIDE

THE GAME

Unlocking the consumer
issues surrounding loot boxes

August 7, 2019 · Washington DC

PANEL 2
Head in the Game – What Drives Loot Box Spending?

David Zendle
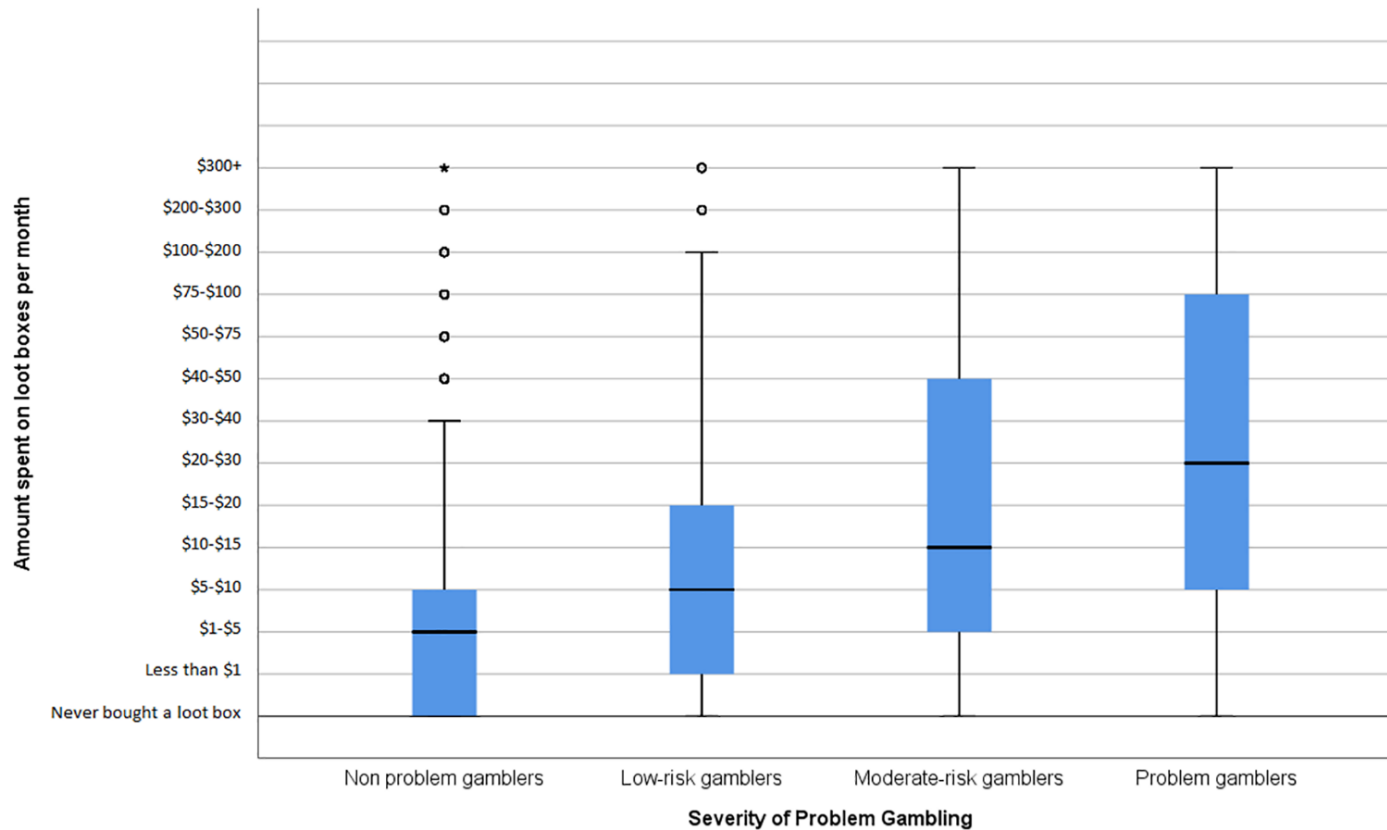**York St John University**

Publications

- **Zendle, D.**, Bowden-Jones, H. Loot boxes and the convergence of video games and gambling. *Lancet Psychiatry* (In Press)
- **Zendle, D.,** McCall C., Barnett, H., Cairns, P. Paying for loot boxes is linked to problem gambling, regardless of specific features like cash-out and pay-to-win: A preregistered investigation. *Computers in Human Behaviour,* (July 2019, available online)
- **Zendle, D.**, Meyer R, Over H, Adolescents and loot boxes: Links with problem gambling and motivations for purchase, *Royal Society Open Science*, (June 2019)
- **Zendle, D.**, Cairns P, Video game loot boxes are again linked to problem gambling: Results of a replication study, *PLoS ONE*, (February 2019)
- **Zendle, D.**, Cairns P, Video game loot boxes are linked to problem gambling: Results of a large-scale survey, *PLoS ONE*, (October 2018)
- **Zendle, D.** Only problem gamblers spend less money when loot boxes are removed from a game: A before and after study of Heroes of the Storm. Under Submission
- **Zendle, D.,** Meyer, R., Waters, S., Cairns, P. The prevalence of loot boxes in mobile and desktop games. Under Submission.

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Loot boxes are linked to problem gambling

https://tinyurl.com/LootBoxGambling1
https://tinyurl.com/LootBoxGambling2

https://tinyurl.com/LootBoxReanalysis

https://tinyurl.com/LootBoxAdolescents

Error bars: 95% CI

https://tinyurl.com/LootBoxAdolescents
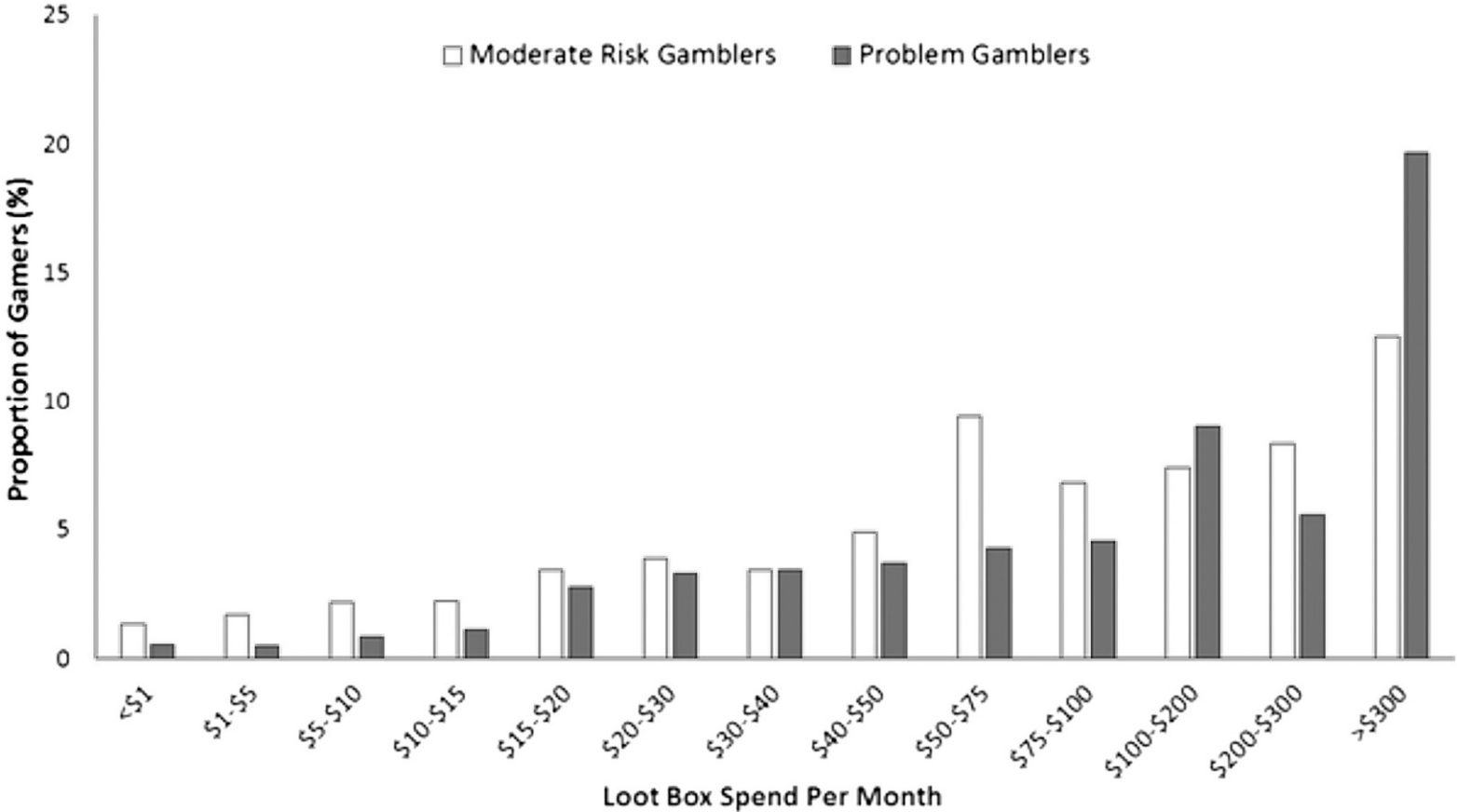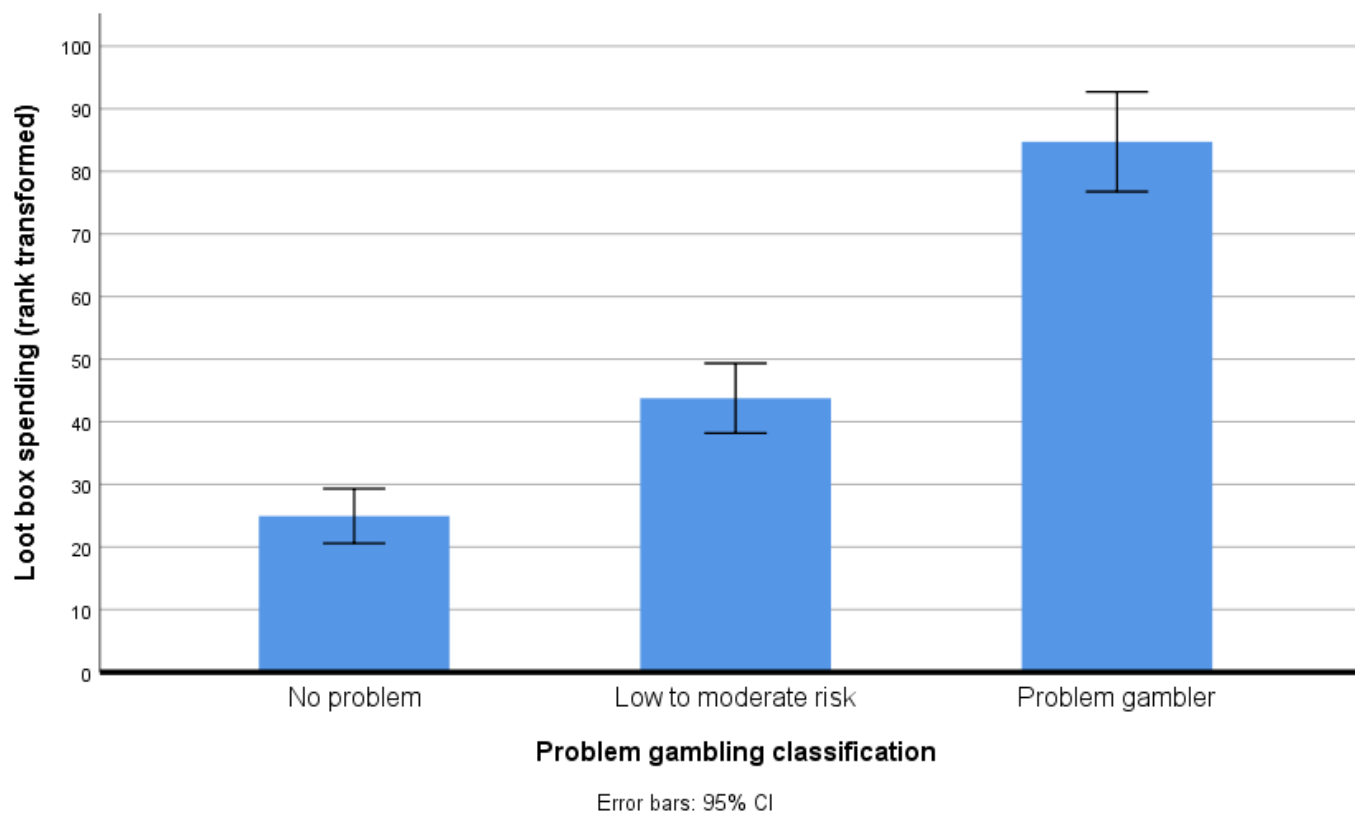
Motivation	Frequency
Gameplay advantages	96 (21.9%)
To gain specific items and characters, and to create a collection	84 (19.2%)
The fun, excitement, and thrills of opening the box itself	70 (16.0%)
Cosmetic reasons	67 (15.3%)
Support the developers or pay for the game	47 (10.7%)
The perception that loot boxes are good value	43 (9.8%)
Time advantages	27 (6.2%)
Profit	4 (0.9%)

Table 1: Prevalence of motivations for buying loot boxes within the sample of older adolescents

https://tinyurl.com/LootBoxAdolescents

- Gameplay advantages (21.9%)
  - "Feel pressured to get new gear and continue to compete with ever-changing boundaries of what is classed as good gear. New gear is added constantly and thus gear quickly becomes outdated."
  - "Enjoy the game, compete with friends. Don't want to fall behind them."
  - "You can not be competitive in NBA2k19 or FIFA19 with out them"

https://tinyurl.com/LootBoxAdolescents

- The fun, excitement, and thrills of opening the box itself (16%)
  - "shit just feels good man, seeing other people opening hundreds and you get a few of that feels good and keeps me goin"
  - "Because its addicting and thrilling reaching into the unknown"

https://tinyurl.com/LootBoxFeatures

Bar chart. Y-axis: "Problem Gambling Severity" ranging from 0.00 to 6.50. X-axis: "Whether a player pays for loot boxes" with two categories: "Gamers who only engage in unpaid openings" (approximately 2.20) and "Gamers who pay to open" (approximately 5.40). Error Bars: 95% CI

https://tinyurl.com/LootBoxFeatures

Loot box
features

Loot box
spending

Problem
gambling

https://tinyurl.com/LootBoxPrevalence

- Analysed top 100 highest-grossing Google Play games in the UK
  - 54% contained loot boxes
  - 94% PEGI-rated as suitable for 12+
- Lower prevalence of loot boxes on desktop
  - **Let's start talking about mobile games for children**

THANKS!

Loot Boxes: Two Views

1. Loot boxes enhance **gaming**

   ▶ Voluntary option to obtain virtual items that are useful in the game
   ▶ For companies: helps to monetize video games (bundling)
   ▶ For consumers: gives a chance to obtain a great item and progress faster
      ▶ Akin Ng's (1965) indivisibility argument on the benefits of lotteries

2. Loot boxes are **gambling**

   ▶ Betting (purchased) in-game currency on a chance of obtaining a useful item
   ▶ Can provide utility to consumers beyond the in-game functionality, leading to gambling addiction, bingeing and/or other "over-consumption"
   ▶ Particularly concerning for minors

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This Paper

1. What drives demand for loot boxes?

- Is it in-game functional value of the items?
- Or a separate utility from opening a loot box?

2. Do user preferences for loot boxes have patterns that suggest addiction?

- Does past consumption increase the propensity of future consumption (habit formation)?
- Is it moderated by the variance of the outcomes (variable-ratio schedule of reinforcement)?
- Do users open loot boxes more in certain conditions (cue-based consumption)?

Toy Model

► Bob considers playing a video game with loot boxes. He makes two decisions:

- ► Do I play the game, $Y_G \in \{0,1\}$?
- ► Do I open a loot box, $Y_L \in \{0,1\}$?

► Playing the game, $Y_G = 1$, gives

$$U_{Y_L 1} = \alpha_G + \beta Pr(\text{win}, Y_L)$$

► Opening a loot box, $Y_L = 1$, gives

$$U_{10} = \alpha_L - \gamma_L p$$

and weakly increases the probability of winning at this game stage,

$$Pr(\text{win}, 1) - Pr(\text{win}, 0) \geq 0$$

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Model Predictions

► Two reasons to open a loot box:

1. Higher game win probability, $Pr(\text{win}, 1) - Pr(\text{win}, 0)$
   ► Predicts that consumers open loot boxes more when the functional value of potential items is higher

2. Persistent taste for opening loot boxes, α_L
   ► Consumers enjoy opening loot boxes even when there is no functional values

INSIDE THE GAME

Model Predictions

► Two reasons to open a loot box:

1. Higher game win probability, $Pr(win, 1) - Pr(win, 0)$
   ► Predicts that consumers open loot boxes more when the functional value of potential items is higher

2. Persistent taste for opening loot boxes, α_L
   ► Consumers enjoy opening loot boxes even when there is no functional values

► We test these predictions in a case study of a Japanese mobile video game
   ► Limited social interaction, items have primarily functional value and the focus is on the in-game progress

Game Description

- ► Popular mobile game in Japan
  - ► A puzzle game with multiple stages

- ► Every stage is a "battle" that requires in-game characters
  - ► Acquire the characters through playing or opening loot boxes
  - ► Characters differ in quality and specialization

- ► As users progress, stages become increasingly hard
  - ► Require higher quality and different specialized characters

Data

- Individual-level data on play and loot box opening
  - A sample of 841,649 users

- Measures of play success (win/loss, revival, scores) and characters used
  - We estimate the importance of each character in succeeding in each stage
  - Allows us to identify the moments when a new character is needed

- Loot box realizations and distributions of outcomes
  - Can assess the expected and realized value of a loot box

- Actual spendings on the in-game currency

Descriptive Evidence

- ▸ Do users open loot boxes more when they start losing?

- ▸ Correlate daily "success rate" for a user with indicators of opening loot boxes
  - ▸ Regress indicator of opening a loot box on loss rates and relative scores
  - ▸ Including user, day and stage fixed effects

	Dependent variable:			
	Open any type of loot boxes		Open one standard paid loot box	
	(1)	(2)	(3)	(4)
Share of games lost this day	0.047***		0.017***	
	(0.002)		(0.002)	
Relative score this day		−0.039***		−0.009***
		(0.001)		(0.001)
Observations	3,204,612	3,194,345	3,204,612	3,194,345
R^2	0.331	0.331	0.417	0.415
Adjusted R^2	0.200	0.202	0.303	0.303
Note:			*$p<0.1$;	**$p<0.05$; ***$p<0.01$

Loot Box Opening versus Scores
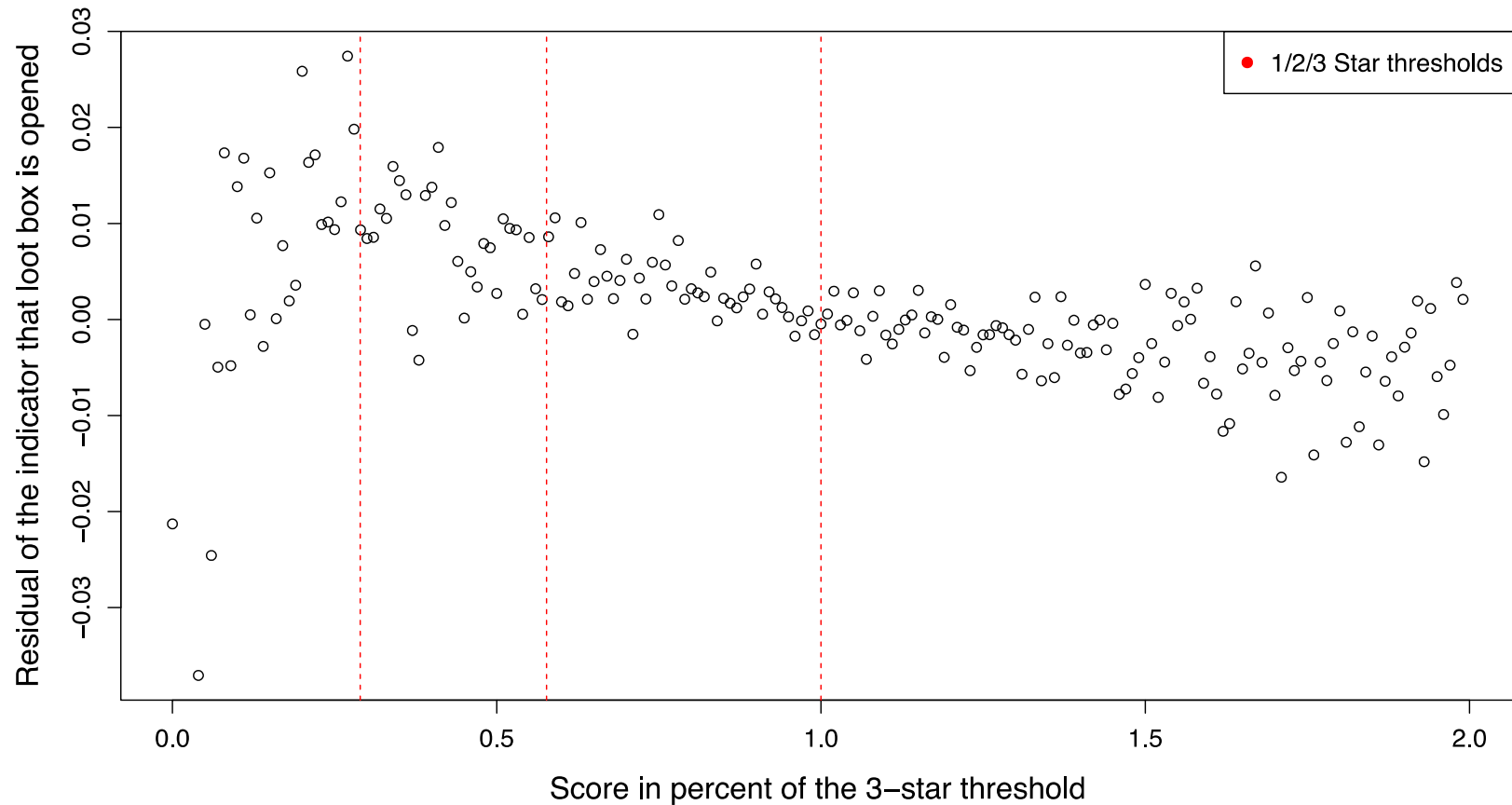
Conclusions

► Early descriptive evidence suggests loot boxes have some functional value

   ► Suggestive evidence for story one

   ► But, it <u>does not</u> mean that user open loot boxes <u>only</u> for the functional value

   ► Assessing relative importance of the two explanations for loot box value require estimating the empirical version of the model (ongoing work)

Adam Elmachtoub
Columbia University

Loot Box Pricing and Design

- Authors
  - Prof. Ningyuan Chen, University of Toronto
  - Prof. Adam N. Elmachtoub, Columbia University
  - Prof. Michael L. Hamilton, University of Pittsburgh
  - Xiao Lei, Columbia University

- Paper
  - SSRN and columbia.edu/~xl2625/files/LBPD.pdf

Research Questions

- Why do video game companies use loot boxes?
  - Quantify the optimality of such strategies

- What is the optimal way to design a loot box?
  - Consider design aspects such as allowing duplicates, item allocation probabilities, and item resale

- How does it affect consumer behavior?
  - Quantify volume of purchases and consumer surplus

Framework

- We use a mathematical modeling and analysis framework to tackle these questions
  - No math today, see paper for details!

- Consumers have a specific willingness-to-pay for each item, which is random across items and customers (assume distribution is known)

Framework

$0, $3, $7
$1, $0, $8

$6, $2, $7
$1, $9, $2
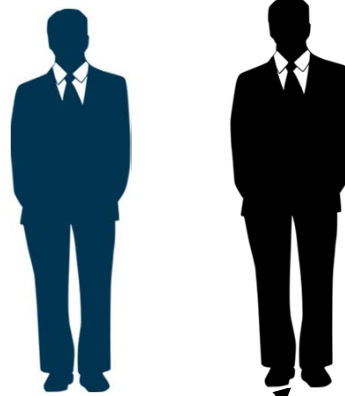
Framework

- Seller may use one of the following two kinds of loot boxes to maximize revenue
  - *Unique loot box* always ensures consumer receives a new item
  - *Traditional loot box* allocates a completely random item, resulting in consumers getting duplicates

- Consumers purchase loot boxes repeatedly until they no longer expect positive benefit
  - Duplicates have no value, and will be resold if the seller allows it

Unique Box

EACH TREASURE CONTAINS 1 OF THESE ITEMS

ALCHEMIST Frostreach Brigands	
CENTAUR WARRUNNER Iceplain Ravager	
CLOCKWERK The Iron Pioneer	
DEATH PROPHET Mistress of the Long Night	
ENCHANTRESS First Night of the Summer Child	
HUSKAR Hunter's Dawn	
INVOKER Northern Blight	
LEGION COMMANDER Siege of the Arctic Hall	
OGRE MAGI Tales of the Grey Wastes	
TECHIES Powdersled Rookery	
TIMBERSAW Trek of the Trailblazer	
VISAGE Chill of the Keeper's Gaze	
LUNA Black Ice Scourge	

You will not receive duplicates until you get one of each.

WITH A CHANCE TO RECEIVE BONUS ITEMS

BUNDLE Serac and Floe - the Seal Bundle	RARE
PUDGE Hunt of the Odobenus One	RARE
SILENCER Hush of Eternal Night	VERY RARE

Traditional Box

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Example (Traditional Box)

$6, $2, $7
$1, $9, $2

($6+$2+$7+$1+$9+$2)/6=$4.5>$2.99

1

$2.99

Example (Traditional Box)

$6, $2, $7
$1, $9, $2

1

$2.99
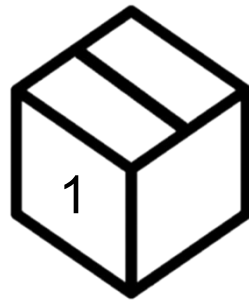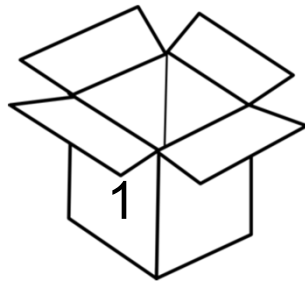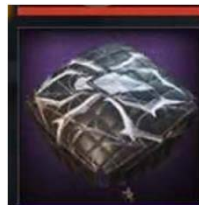
Example (Traditional Box)

$6, $2, $7
$1, $0, $2

($6+$2+$7+$1+$0+$2)/6=$3>$2.99

$2.99
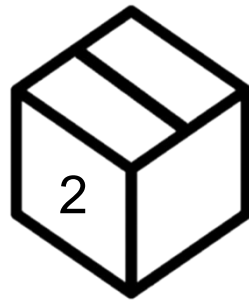
Example (Traditional Box)

$6, $2, $7
$1, $0, $2

2

$2.99

Example (Traditional Box)

$6, $2, $7
$1, $0, $2

($6+$2+$7+$1+$0+$2)/6=$3>$2.99

3

2.99 $

Example (Traditional Box)

$6, $2, $7
$1, $0, $2

3

2.99 $
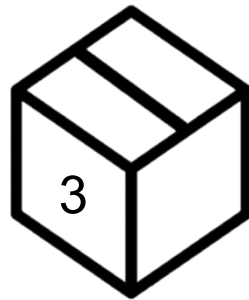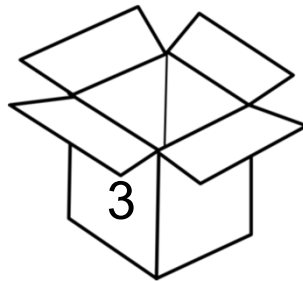
Example (Traditional Box)

$0, $2, $7
$1, $0, $2

($0+$2+$7+$1+$0+$2)/6=$2<$2.99

4
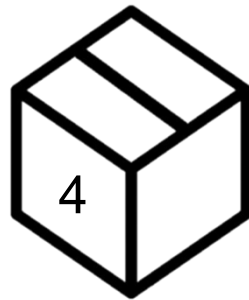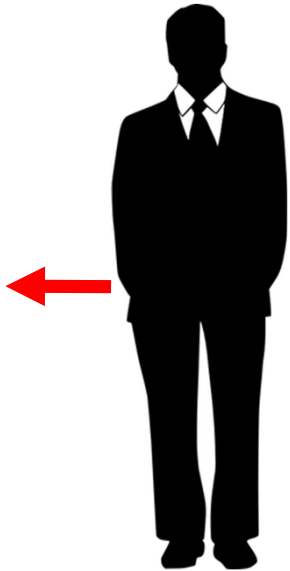
$2.99

Goal

Theoretically describe optimal seller and consumer behavior, and the corresponding impact on seller and consumer happiness

Unique vs. Traditional Loot Boxes

1. Unique box strategies are **optimal** for maximizing revenue, while traditional box strategies only earn 36.7% as much

2. Optimal price of unique box is higher than the traditional box, but number of loot box purchases approximately the same

3. However, the number of unique items obtained is significantly less for traditional box strategy

4. Consumer surplus is minimal (about 0) under the unique box strategy, but positive for traditional box strategy

Resale Market

- What happens if the seller allows gamers to resell unwanted items?
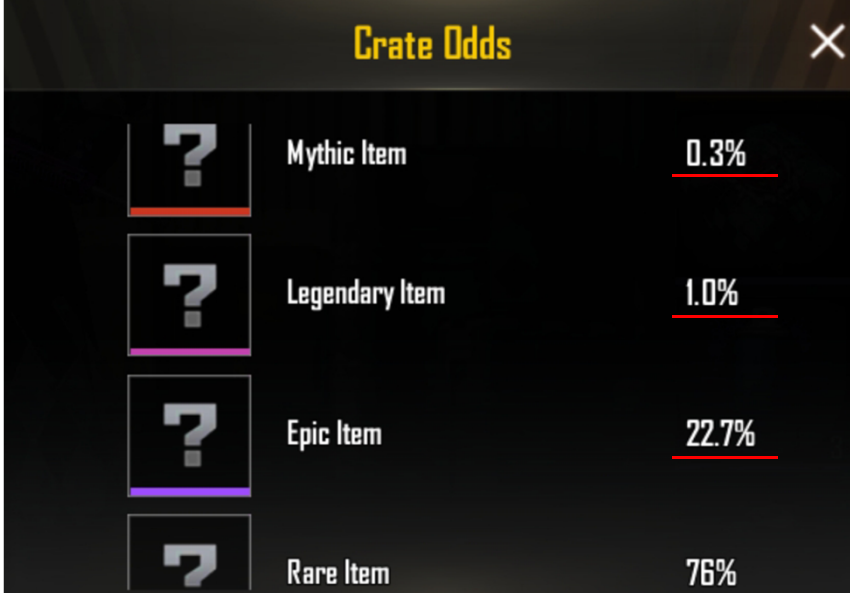
Resale Market

- What happens if the seller allows gamers to resell unwanted items?
  - Prices go up because items have more value now
  - Surprisingly, consumer surplus only increases by at most 1.4%, and sometimes even decreases

Allocation Probabilities

- With what probability should the seller allocate each item in a loot box?

Allocation Probabilities

- With what probability should the seller allocate each item in a loot box?

  - Answer is surprisingly simple, purely random is best!
  - This is true even if the items are very different in strength or value
  - If 1% of items are "Legendary", then allocate "Legendary" with 1% probability

Manipulating the Truth

- What happens if the seller lies about the allocation probabilities?
  - Seller can actually earn significantly more revenue
  - Consumers cannot detect lies easily since they do not have enough data
  - Explicit regulation may be needed to prevent this

Conclusions

- Cannot design regulations and policies without understanding the mindset of a video game company

- Show that unique boxes are best for companies, but actually traditional boxes are better for consumers

- Allowing a resale market is only marginally beneficial for consumers

- Always allocate uniformly is actually the best approach for the seller, while also fair for consumers

- Sellers can benefit from lying, need a mechanism to prevent this

INSIDE
THE GAME

Children and Gaming: Current Issues in the Digital Age

Sarah E. Domoff, PhD

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Central Michigan University

Licensed Psychologist
Problematic Media Assessment & Treatment Clinic
Center for Children, Families, and Communities
www.sarahdomoff.com twitter: @sarah_domoff

Children and Gaming:
Current Issues in the Digital Age

- Gaming trends among children

- Parent-child interactions around gaming

- Unique concerns related to current games

- Problematic gaming: when does gaming interfere with a child's functioning?

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Gaming Trends among Children

- Amount of time children use mobile devices has tripled in the past few years (Rideout, 2017).

- Fortnite remains a popular game, with 45% of children and 61% of teens ever playing (Common Sense Media, 2018).

Gaming Trends among Children

- A quarter of teens endorse playing Fortnite in class (Common Sense Media, 2018).

- Besides nationwide studies on screen media use among children, limited research has been conducted on pre-teens or younger children and gaming experiences.

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Parent-child interactions around Gaming

- Approximately three-quarters of parents and children have *never* played Fortnite with each other (Common Sense Media, 2018).

- Recent naturalistic study found very limited interaction between parents and children around media and mobile devices (Domoff et al., 2019).

Parent-child interactions around Gaming

- Recent research supports setting limits around gaming (Van Petegem et al., 2019).

- Parent-child communication about gaming could be important for older children and adolescents.

- Parents' beliefs about video games associate with parenting around gaming (Nikken & Jansz, 2006).

Unique Concerns in Current Games

- Gaming embedded in social interactions among children

- Children are developmentally vulnerable to gaming risks

- Parent-child conflict around gaming and problematic gaming

Problematic Gaming

- DSM-5 (APA, 2013) Section 3: Internet Gaming Disorder
- Symptoms include:
  - Preoccupation
  - Withdrawal
  - Unsuccessful attempts to cut back
  - Loss of interest in other activities
  - Continued excessive use despite psychosocial problems
  - Escape/relieve negative affect

Gaming Disorder

- ICD-11 code: 6C51.0 Gaming Disorder, predominantly online; 6C51.1 Gaming disorder, predominantly offline
- Symptoms:
  - Impaired control over gaming (e.g., onset, frequency, intensity, duration, termination, context);
  - Increasing priority given to gaming to the extent that gaming takes precedence over other life interests and daily activities;
  - Continuation or escalation of gaming despite the occurrence of negative consequences.
- Must be severe enough to lead to significant impairment in important areas of functioning.

Problematic Media Use Measure (Domoff et al., 2017)

- Using DSM-5 criteria to identify children at risk for problematic gaming (or other media use)

- Predicts psychosocial functioning above and beyond *amount* of screen media use

- Works equally well for boys and girls

- Tested in children ages 4-13 years

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Problematic Media Assessment and Treatment Clinic
Center for Children, Families, and Communities
Central Michigan University

- Clinic to address screen media-related concerns, such as:

  – Problematic gaming or other media use

  – Cyber-victimization and social media conflict

  – Media parenting skills

Problematic Media Assessment and Treatment Clinic
Center for Children, Families, and Communities
Central Michigan University

- Provide clinical training to help psychologists, social workers, and MDs screen for problematic media use.

- Provide training to clinicians and school personnel on how to assess and address problematic media use in youth.

- Develop interventions to treat screen media-related concerns

Problematic Media Assessment and Treatment Clinic
Center for Children, Families, and Communities
Central Michigan University

For more information on Dr. Domoff's research and clinic:

-Email domof1se@cmich.edu

-Visit www.sarahdomoff.com

-Follow @sarah_domoff

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THANKS!

PANEL 2
DISCUSSION

BREAK

PANEL 3
A Level Playing Field – What's Fair Game?

Patricia Vance
Entertainment Software Rating Board

About the ESRB

- Founded in 1994
- Non-profit, self-regulatory body
- Key activities:
  1. Inform consumers, especially parents, prior to purchase
  2. Enforce marketing guidelines
  3. Ensure responsible online privacy practices

Three-Part Rating System

RATING CATEGORIES

EVERYONE — **E** — ESRB
EVERYONE 10+ — **E 10+** — ESRB
TEEN — ESRB
MATURE 17+ — **M** — ESRB
ADULTS ONLY 18+ — **A** — ESRB

CONTENT DESCRIPTORS (EXAMPLES)

Language
Suggestive Themes
Violence

INTERACTIVE ELEMENTS

In-Game Purchases
Users Interact
Shares Location
Unrestricted Internet

INSIDE THE GAME

Broad Coverage for ESRB Ratings

- **Boxed Games**
- **Digitally Delivered Games**

- **Mobile Apps**
- **VR/AR/MR Games & Apps**

High Awareness & Use of ESRB Ratings

Parental Awareness of ESRB Ratings

87%
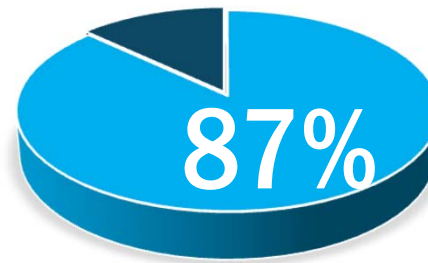
Regular Use of ESRB Ratings

77%

Source: 2019 Hart Research Associates

INSIDE THE GAME
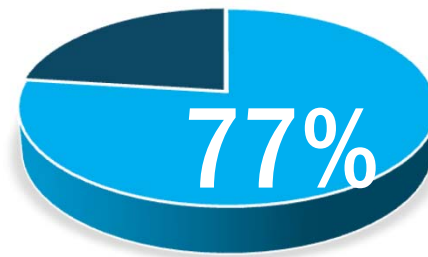
Awareness & Use
of Interactive Elements

Parental Awareness of Interactive Elements

70%

Regular Use of Interactive Elements

79%

Source: 2019 Hart Research Associates

INSIDE THE GAME
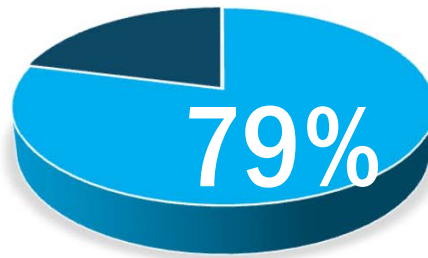
Interactive Elements Ranked by Importance
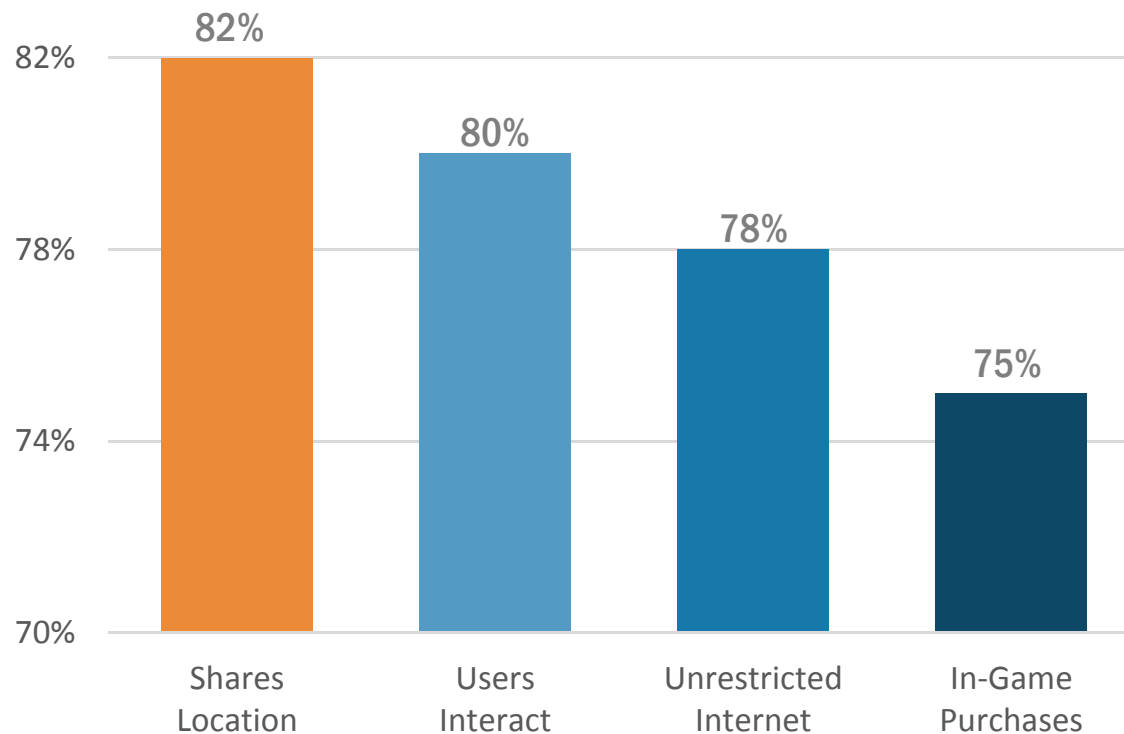
"Extremely" or "very" important in helping parents decide which games their kids play.

Source: 2019 Hart Research Associates

Parents Consult Multiple Sources for Information

Sources of Game Information MOST Helpful to Parents	2018
ESRB assigned age rating	42%
Playing the game yourself	38%
The type of game it is (e.g., sports, adventure, shooter games)	29%
Search results showing or describing the content of the game	22%
The description on the game box or download page	22%
User reviews	20%

Source: 2018 Hart Research Associates

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Parents are Actively Engaged

- **91%** of parents set household rules.

- **64%** frequently discuss online safety with their children.

- **70%** have prevented their child from playing a game because of the Interactive Elements assigned.

Sources: 2018 Hart Research Associates – Family Online Safety Institute Online Safety survey; 2019 Hart Research Associates – ESRB ratings awareness & use survey

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ESRB Integration w/Parental Controls

Parental Controls

Parental Controls

Parents Use Parental Controls

Parents who use parental controls on a game device (computer, mobile device, or console)

72%

78%
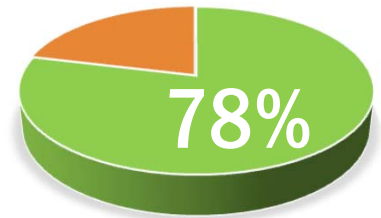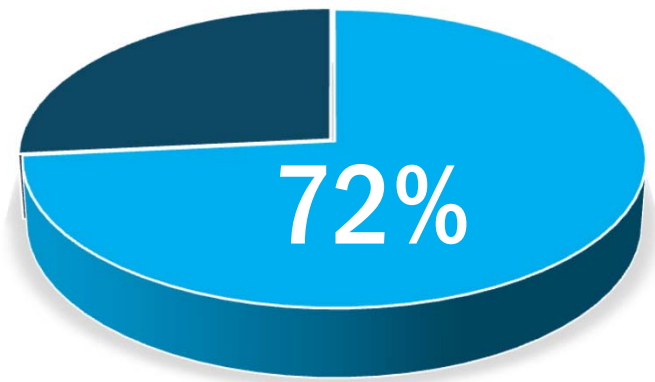
Parents with kids ages 3-9

66%
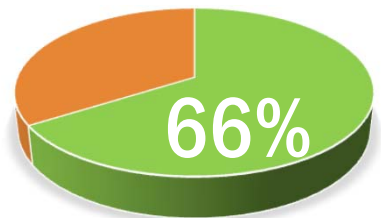
Parents with kids ages 10-15

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Parental Control Use for Consoles or Mobile Devices

Manage in-game spending	Restrict access to social media	Block games based on age rating	Set time limits	Manage online communication
66%	64%	61%	52%	50%

INSIDE THE GAME

Parents & Loot Boxes

- A large majority of parents don't know what a "loot box" is.
  - In 2018, only 32% of parents (unaided) said they knew what a loot box is, but less than a third of them selected the correct definition.

When informed of what a loot box is:

  › Parents expressed that they would be most concerned with their children **spending money.**
  › They were far less concerned about the random nature of loot boxes or their impact on time spent playing games.

Informing Parents & Consumers

Based on our research, in April 2018 ESRB introduced an *In-Game Purchases* notice for physical video games.*

To date, 18% of all rating assignments for physical video games include an *In-Game Purchases* notice.

*Interactive elements (including for in-game purchases) were first introduced for digital and mobile games in 2013.

In-Game Purchases

- Contains in-game offers to purchase digital goods or premiums with real world currency, including but not limited to bonus levels, skins, surprise items (such as item packs, loot boxes, mystery awards), music, virtual coins and other forms of in-game currency, subscriptions, season passes and upgrades (e.g., to disable ads)
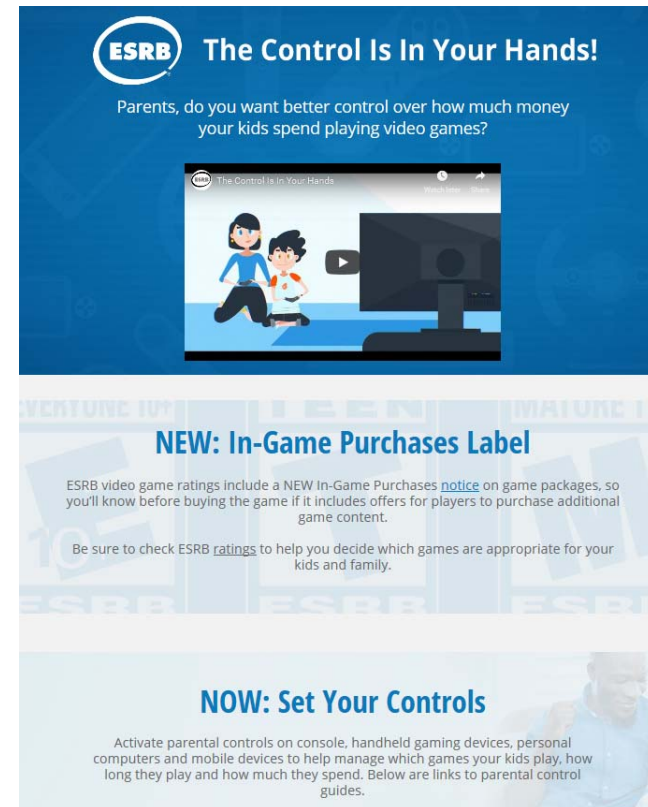
ParentalTools.org

- Launched in April 2018
- Step-by-step guides for setting up parental controls on each game device
- Animated introductory video

To date:

- 475,000 video views
- 80,000 page views
- Articles, blogs & social media amplification

2019 Outreach to Parents

ParentalTools.org update:

- First focus on what parents can do
- Then link to specific device for instructions
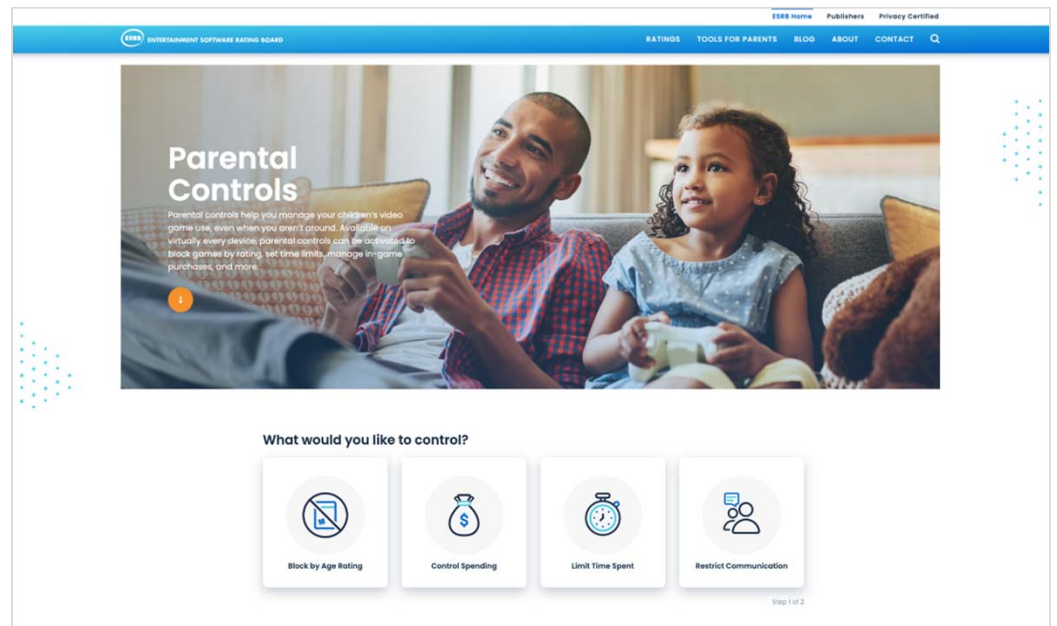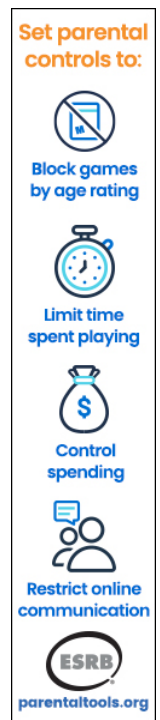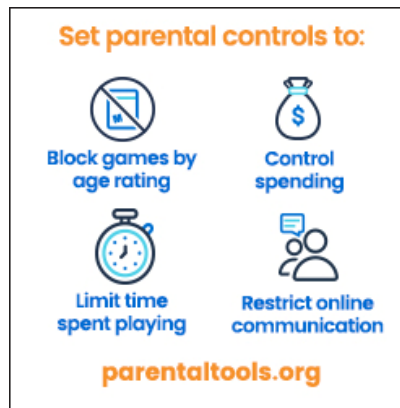
2019 Outreach to Parents
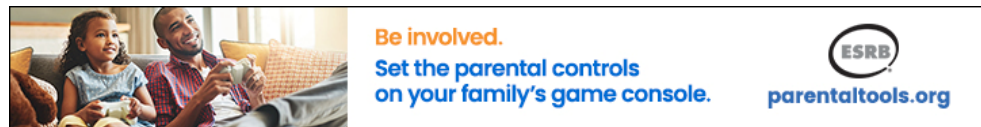
Parent engagement through:

- Holiday insert program with video game retailers
- Hardware purchases made in-store and online

2019 Outreach to Parents

Parent engagement through:

- Holiday insert program with video game retailers
- Banner ad campaign targeting parents

2019 Outreach to Parents

Parent engagement through:

- Holiday insert program with video game retailers
- Banner ad campaign targeting parents
- Articles, blogs & social media amplification

Summary

- All games now disclose in-game purchases.

- Parents have low awareness and understanding of what a loot box is.

- When told what a loot box is, parents' main concern would be about spending money.

- Especially when coupled with parental controls, parents have effective tools to manage money and time spent playing video games.

- ESRB will continue to support parents through disclosures, educational outreach and responding to their concerns accordingly.

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Anna Laitin
Consumer Reports

Overview of Marketplace Trends

Consumer Issues and Marketplace Trends

Obfuscation of the true cost of a product/service
- Drip pricing
- Hidden fees

Manipulating consumer psychology
- Monetizing user experiences
- Dark patterns

Trends in the Gaming Marketplace

Increasing monetization of play

- Downloadable content (one-time purchases)
  - expansions, maps, story chapters
- Microtransactions (repeat purchases, consumables)
  - Ammo, building material, premium currency
  - Lootboxes

Manipulative user experiences

- Dark patterns: subtle tactics to influence consumer behavior
- Nudges consumers to purchase lootboxes

What are lootboxes?

FTC:

"Loot boxes are in-game rewards that contain a random assortment of virtual items ("loot") to assist a player in advancing in the online game or to customize his or her game avatar."

Key attributes:

- Rewards are seemingly random
- Often paid for with real money or in-game currency
- Sometimes impact gameplay
- Contents are not transferable

Consumer Issues: Transparency in Lootboxes

Consumers are unaware of what they are actually purchasing. Odds of winning a specific items are not always disclosed.

(Counterstrike: Global Offensive)

In-game currency and pricing can obfuscate the true cost of goods.

(Fire Emblem Heroes)

Ratings for console games provide minimal detail.

App Store labeling for mobile games provides limited information.

(Screenshots taken from iOS App Store)

Lootboxes are not Transparent

As a method of purchasing items, the opaque and random nature of lootboxes is harmful to consumers

- Consumers are not sure of what they're getting;
- Odds of winning certain items aren't always disclosed;
- In-game currency and pricing hides the costs to consumers;
- Lootbox mechanics are insufficiently labeled.

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Consumer Issues: Dark Patterns

Dark Patterns

Dark patterns: Manipulative or deceptive tactics to nudge consumers towards taking a certain action; in this case, to purchase loot boxes.

- Grinding – alternative to making an in-game purchase is to perform repetitive and time-consuming tasks.
- Appointment dynamics – designs that build habits of daily gameplay, often using loss aversion to compel user to keep playing (*e.g.*, in Fire Emblem Heroes, users get in-game bonuses for logging in each day).
- Pay to Win – a game is playable without microtransactions, but winning in a competitive match or progressing through a campaign in a reasonable fashion requires in-game purchases.

This Problem is Both Deep and Broad

Press reports demonstrate that gamers are spending far more than they intend on lootboxes:

- Kotaku: "Meet The 19-Year-Old Who Spent Over $10,000 On Microtransactions"
- Eurogamer: "FIFA player uses GDPR to find out everything EA has on him, realises he's spent over $10,000 in two years on Ultimate Team"

A growing population of game players is exposed to loot boxes and manipulative content.

- 164 million gamers in the United States -- console and handheld.
- 65% of american adults play video games, with 75% of households having at least one gamer.
- Average mobile gamer is 37, average console gamer is 33.

(ESA, 2019)

This is Intentional

Some games are designed to do exactly this:

- *"Scarcity creates demand. Even if nothing needs to be scarce in a digital game, you should create rare items that players lust after.* *Time limited offers are a form of scarcity that play on the fast thinking and loss aversion aspects to become a really great monetisation tool.* *Combine with gacha (lootboxes)!"*
- *"Make the store where players spend hard currency as central to the game as possible. Try to make sure that the core loop goes through here, so that players are accustomed to it and just a tap away from spending."*

(Torulf Jernström, CEO of Tribeflame in a 2016 column entitled "Let's Go Whaling: A Guide to Monetisation through in-App Purchases")

Thank You!

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Keith Whyte
National Council on Problem Gambling

Loot Boxes or Slot Machines: Similarities & Solutions From Gambling Addiction Field

August 7, 2019

Keith Whyte, Executive Director

About NCPG

- Membership-based non-profit (501c3) founded in 1972

- Neutral on legalized gambling

- Advocate for people with gambling problems

- Work with government, gambling industry, healthcare providers and recovering gamblers.

Overview

- Many features of loot boxes are similar to slot machines
- Many of these characteristics are associated with the development of gambling-problems among users
- Whether or not loot boxes meet criteria for gambling in a particular jurisdiction consumer protection measures should be put into place specific

Grounds For Concern

- Experience: 50 years working with counselors, researchers and recovering gamblers tell us that the structural characteristics of many loot boxes are associated with addiction

- Evidence: every study published to date has found an association between loot boxes and gambling problems.

Risk Groups

- Males: tend to have higher rates of gambling participation, gambling problems, likely making them at higher risk to experience negative consequences from loot box use

- Youth: tend to have high rates of gambling participation, gambling problems. Extensive video game participation.

- Military/veterans: tend to be young, male, risk takers

Solutions

- Better inform consumers
- Prevent gambling-related problems
- Facilitate treatment seeking & support recovery
- Increase evidence base

Informed Consumers

- Build transparency through disclosure of loot box odds, prizes and value
- Develop addiction prevention & educational campaigns targeted to high-risk groups
- Prohibit marketing of games with loot boxes to under-18
- Require increased KYC for certain games
- Rate games with loot boxes M for Mature

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Prevention

- Encourage use of parental controls
- Encourage users to set their own loot box limits
- Develop independent certification programs for game designers and companies

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Treatment & Recovery

- Help steer gamers and loved ones seeking assistance to www.responsibleplay.org and then referrals to
  - Gambling addiction help & support
  - Gaming addiction help & support
  - Internet addiction help & support
- Create self-exclusion program with game companies & payment providers

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Evidence Base

- Provide de-identified player data to independent, objective researchers to help all stakeholders validate concerns and develop solutions

- Involve Federal health agencies

Support

- Portion of loot box revenues into a public health trust fund to support independent education, treatment, recovery & research initiatives
- With great profits come great responsibility
- ESA & member companies can play a constructive & productive role

National Council on Problem Gambling

730 11th Street, NW, Suite 601
Washington, DC 20001
Tel: 202.547.9204

Email: keithw@ncpgambling.org
Web: www.ncpgambling.org

THANKS!

**Ariel Fox Johnson
Common Sense Media**

Consumer Awareness & Understanding

What do kids know?

- Problem goes beyond kids
- Kids can be particularly susceptible
  - Play money vs. real money
  - Digital transactions
  - Microtransactions
  - Risk/reward calculus

What do kids know?

- Older kids want to compete with friends
- Kids want to be nice and do what they are asked
- Games take advantage of these instincts

App review by Amanda Bindel, Common Sense Media

Common Sense says

✓ age 4+ ★★★☆☆ ⓘ

Kitchen fun with real recipes; heavy pressure to spend.

iPhone, iPod Touch, iPad | Free (with in-app purchases) | Entertainment

🔖 Save | ☆ Rate app

BUDGE

---

ars TECHNICA   BIZ & IT TECH SCIENCE POLICY CARS GAMING & CULTURE STO

GAMING & CULTURE —

Activision's patented method to drive microtransactions with matchmaking

Unused system could push newbies to "emulate the marquee player" in pairings.

KYLE ORLAND - 10/18/2017, 5:45 PM

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Buy more Runes

20 Runes	$2.99	50 Runes	$5.99
100 Runes	$9.99	250 Runes	$19.99
550 Runes	$44.99	1200 Runes Best Value	$99.99

Kids' Experiences

- "Gamer" tweens and teens spend over two hours a day playing

- Growing concerns about tech addiction compounded by gambling fears

What do parents know?
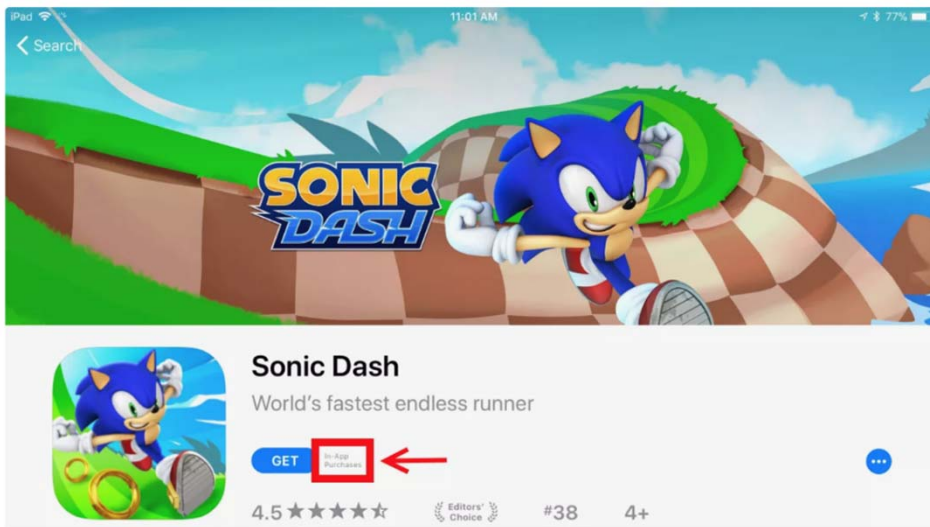
- Parents are often in the dark
    - Disclosures can be ineffective

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What do parents know?

- Parents are often in the dark
  - Don't realize kids have access to credit cards
  - Difficult-to-read statements don't come immediately—or at all
  - Don't know how to turn off in-app purchases, or how to tell if a game requires them

Families' Experiences

- Some examples…
  - Children rack up $1,400 in purchases on "free" apps
  - Four young kids spend hundreds of pounds trying to get a favorite soccer player. Parents realize only when bank card declined elsewhere
  - $6,500 spent by one teen in a few weeks

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Families' Experiences

- But once parents do know—most of them want to know how they can stop it
  - Over a quarter are concerned about in app purchases
  - High chargeback rates
  - Lawsuits

HOME > GAMING > NEWS

MARCH 1, 2019 7:27AM PT

Lawsuit Targets Epic's 'Predatory' Loot Boxes in 'Fortnite'

By LIZ LANIER

FORTNITE

CREDIT: EPIC GAMES

FTC Action

- Google (2014)
- Apple (2014)
- Amazon (2016)
- …. Facebook?

TECHNOLOGY

Advocates Ask FTC 'To Hold Facebook Accountable' For In-Game Purchases By Kids

February 21, 2019 · 10:00 AM ET

LAURA SYDELL

INSIDE THE GAME

Improving Practices for Families

Increasing Awareness

- Major app stores have to indicate in-app purchases

- ESRB notes which games have in-app purchases

- Common Sense tries to

APP DETAILS

Devices: iPhone, iPod Touch, iPad
Price: Free (with in-app purchases)
Pricing structure: Free to try ($6.99-$9.99 in-app purchase to unlock all content)
Release date: January 20, 2016
Category: Entertainment
Topics: Science and Nature
Size: 99.40 MB
Version: 1.1
Minimum software requirements: iOS 6.0 or later

Show less ∧

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Improving Practices

- Companies can take steps:

Loot boxes are expected to generate $50 billion in revenue for app makers by 2022.

"Overwatch"/Blizzard Entertainment

- Help children recognize and understand commercial aspects
- Speak to them (and parents) in a voice they understand
- Design games to be inclusive
- Platform responsibility

Improving Practices

An issue of global concern-but not consensus-for authorities

- Belgium & Netherlands: some lootboxes = gambling
  - UK disagreed
- China, South Korea: disclose odds
- Gambling Regulators European Forum
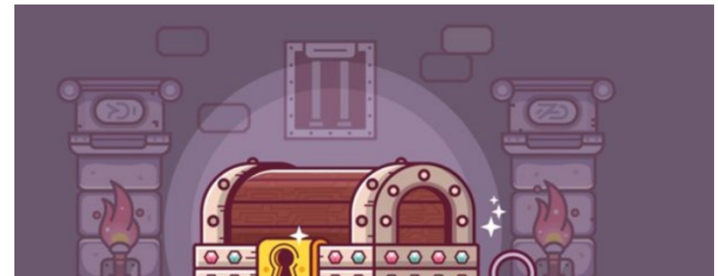
Improving Practices

Federal

- FTC Investigation
- Banning lootboxes & pay-to-win games for minors

Hawaii

- Ban lootboxes for under 21
- Disclose odds of winning
- Commission

Loot boxes should be banned, says US senator

9 May 2019

THANKS!

INSIDE THE GAME

Unlocking the consumer issues surrounding loot boxes

August 7, 2019 · Washington DC