

LIQUID AND GRIT

SOCIAL CASINO REPORT

Competitive research and actionable recommendations for product owners on innovations in social casino

MAY 2016

3 KEY FEATURES AND RECOMMENDATIONS

Rewards programs
Card collections
Competitive challenges
Out-of-chips flow
Content downloads

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INTRODUCTION



Dear Product Owner,

In this month's report you will see a deep analysis of rewards systems. Rewards systems are powerful mechanics that are widely adopted in social casino. Use these recommendations to create a valuable and unique niche to drive up revenue with your loyal players.

Next, we dive into card collection mechanics. Sloto Cards, Slotomania's innovative card collection feature, is capitalizing on Supercell's highly successful casual card-based game, Clash Royale.

On May 2nd, Scatter Slots released Battle Mode for players who attain level 45 and above. In the Competitive Challenges section, we breakdown this whale-targeted feature and suggest how to build a competitive system around your game's most popular mechanics.

There is huge value in monitoring the entire social casino market for innovative features. Topping our list of poker-based recommendations is a high-ROI feature, the out-of-chips flow. This feature drives substantial value for Zynga Poker.

The Economy Deep Dive focuses on Vegas Downtown Slots, a game that was first released in August 2015 and is now the 36th highest-grossing social casino game on iOS.

New this month is a Market Watch section that summarizes all updates to the top 30 grossing social casino games on iOS. Take note of the major changes highlighted at the top of each page.

Knowing the latest innovations in mobile gaming is paramount for product owners to grow top-line revenue. As poet T.S. Elliot said, "Immature poets imitate; mature poets steal; bad poets deface what they take, and good poets make it into something better, or at least something different."

Brett Nowak Editor-in-Chief

KEY FEATURES AND RECOMMENDATIONS

FEATURE RECOMMENDATIONS SUMMARY

Find a niche for your rewards system; consider the card collection mechanics that are becoming increasingly popular in today's market; add competition for whales; and optimize the out-of-chips flow

| Feature | Impact | Recommendations |
|---------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rewards programs | Increase retentionIncrease revenue | Find a rewards niche and plan to release across multiple games Base benefits both on monthly and lifetime play |
| Card collections | Increase retentionIncrease revenue | Make card content valuable and tied to game play Release content regularly through an inbox and test out alternative marketing channels |
| Competitive challenges | Drive whale revenue | Make competition opt-in, whale-focused, and added to an already popular feature Sink wallets with extreme bet-based goals |
| Out-of-chips flow | Increase revenue per transaction | Use urgency and alternative choice to drive conversion on the out-of-chips dialogue Prompt a "contact support" dialogue when purchases are canceled |
| Quick Win: Content downloads | Improve D1 retention | Create an HD and SD download package in the same game Trigger HD download for appropriate devices or ask players to upgrade to HD during play |

REWARDS PROGRAMS

PLAYTIKA

Playtika's rewards system is clearly explained and marketed well, driving user retention

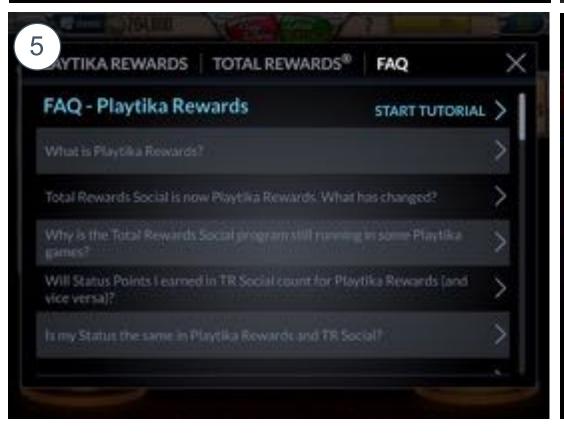
- Marketing first appears when players enter the lobby from gameplay (image 1).
- Upon first clicking into the rewards program, players go through an informative but simple tutorial flow (image 2).
- Players can check their progress any time in the rewards area (image 3).
- Clicking the call to action button (image 3) opens a clear presentation of the rewards for each status (image 4).
- For more information, players can easily find the "FAQ" tab (image 5).
- In areas of the game, such as "collect gifts," "buy coins," and "bonanza bonus" (shown here), players are reminded of status benefits (image 6).









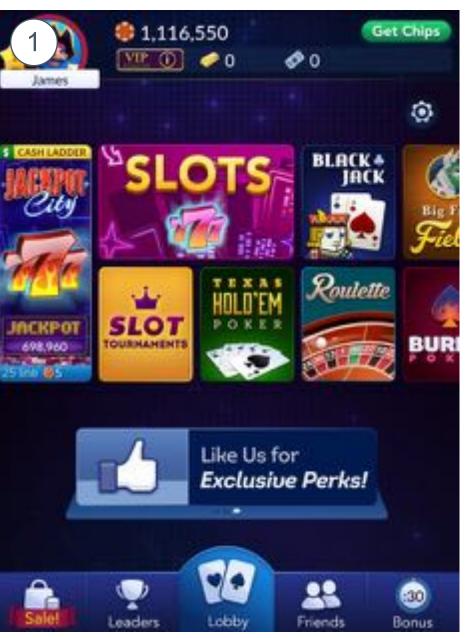


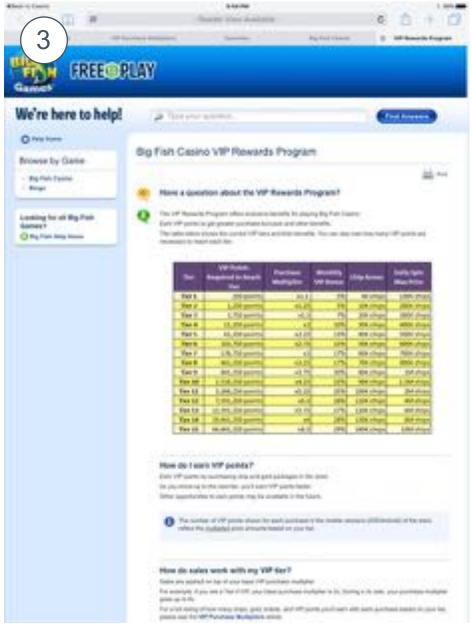


BIG FISH GAMES

Big Fish Games' VIP program has 15 tiers and is based purely on chips and gold purchased

- There is very little marketing for the VIP feature in the lobby. Players must click on the VIP button in the top left corner of the game (image 1).
- The first image on the "Become a VIP" page has a bright yellow "Buy now!" button (image 2).
- The VIP program is based purely on chips and gold purchased.
- Players can learn more about the VIP program at Big Fish Games' website (image 3).
- The buy page contains information about VIP points (image 4).
- Big Fish Games' VIP program has been updated since the Liquid and Grit December 2015 Social Casino Report.









ZYNGA

Zynga's new Loyalty Lounge spans two games and is currently live in Wizard of Oz Slots and Princess Bride Slots

- The Loyalty Lounge is marketed in the lobby with a small icon in the top right corner. On certain days, there is a VIP status boost with a countdown timer (image 1).
- Players submit their email address to sign up for the Loyalty Lounge (image 2).
- Zynga differentiates itself by providing exclusive rooms, account managers, and special events to top-tier players (image 3).
- Players monitor their current progress by clicking on the LL button in the lobby (image 1) and receiving the VIP overview dialogue (image 4).
- The Loyalty Lounge currently syncs across Wizard of Oz Slots and Princess Bride Slots (Hit it Rich! will be added soon) (image 5).
- VIP bonuses are shown on features like the daily bonus (image 6).













PLAYSTUDIOS

myVegas focuses purely on real-world prizes from major casinos like the Bellagio, ARIA, and MGM Grand

- The rewards card is prominently displayed in the center of the lobby (image 1).
- Clicking on the rewards card takes players to the rewards center, where the rewards are organized by partner (image 2).
- In each partner category, there are individual items that can be purchased using loyalty points (image 3).
- Players earn loyalty points primarily by playing the games (image 4).
- A loyalty points icon fills up based on coins spent. Clicking on the icon opens up the progress bar that explains the next award, which in this case is 20 loyalty points (image 5).
- Players do not receive loyalty points with purchases, as illustrated on the buy page (image 6).



BENEFITS COMPARISON

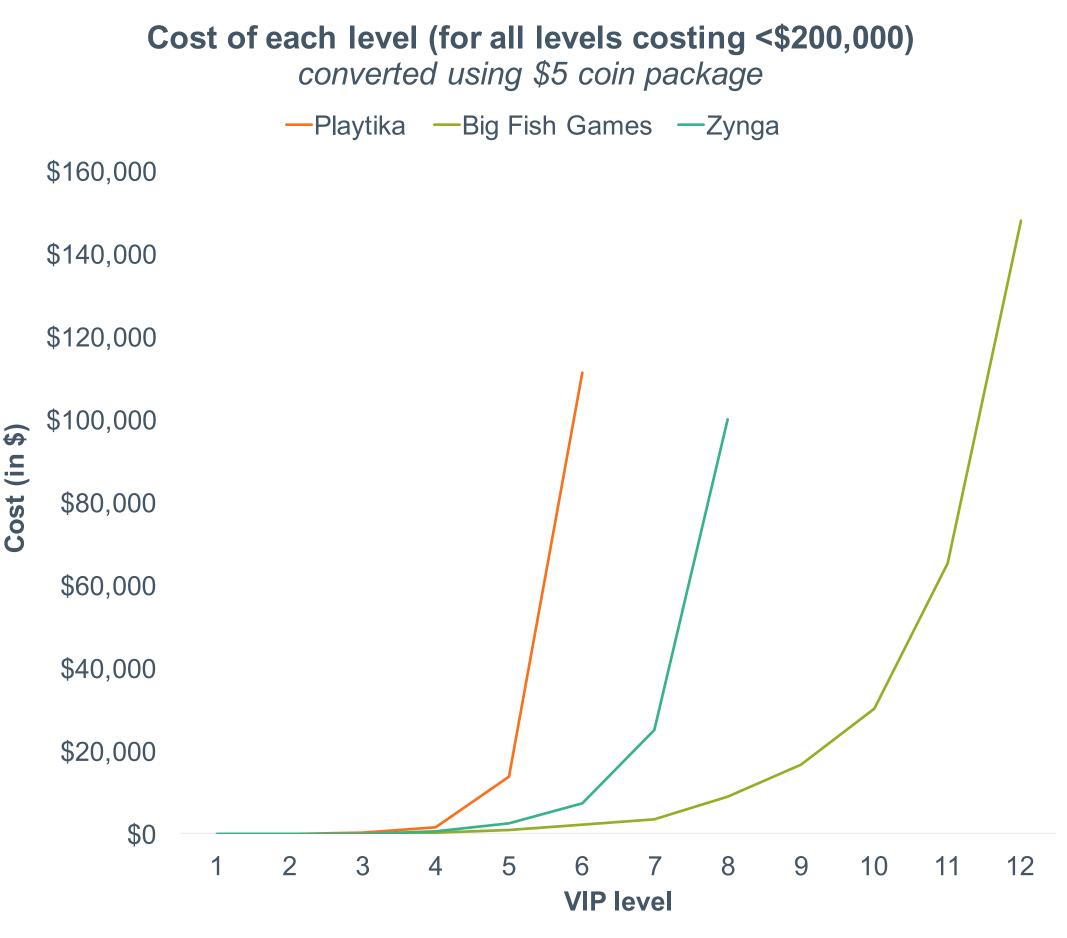
Playtika focuses on in-game bonuses; Big Fish Games bases rewards on core features; Zynga offers VIP features to top-tier players; and myVegas focuses purely on real-world prizes

| Category | Playtika | Big Fish Games | Zynga | PlayStudios |
|-------------------------------|----------|----------------|-------|-------------|
| Coin package multiplier | | | | |
| VIP/Status point multiplier | | | | |
| Fan-page gifts bonus | ✓ | | | |
| Email gifts bonus | ✓ | | | |
| Friends gifts bonus | ✓ | | | |
| Primary coin bonus | ✓ | | | |
| Secondary coin bonus | ✓ | | | |
| Monthly VIP bonus | | | | |
| Dedicated account manager | | | | |
| Invitations to special events | | | | |
| VIP room | | | | |
| Real-world prizes | | | | |
| | | | | 10 |

COLLECTING REWARDS COMPARISON

Depending on the game, players can earn rewards by purchasing them, playing the game, or doing both

| ublisher | Acquiring reward points |
|----------|---------------------------------|
| tika | Purchasing and playing the game |
| Games | Purchasing only |
| ga | Purchasing and playing the game |
| udios | Playing the game only |
| | |



MARKET INFO: TOP 10 GROSSING

Zynga just released a new cross-game rewards program

| Game | Strength | Notes |
|-----------------------|----------|--------------------------------------------------------------------------------------------|
| Big Fish Casino | | VIP program based on purchases (image A) |
| Slotomania Casino | | Playtika's total rewards program (same as Vegas Downtown Slots) (image B) |
| DoubleDown Casino | | No rewards program |
| Jackpot Party Casino | | No rewards program |
| House of Fun | | Playtika's total rewards program (same as Vegas Downtown Slots) |
| Heart of Vegas | | No rewards program |
| Wizard of Oz Slots | | Zynga's new cross-game Loyalty Lounge program (image C) |
| World Series of Poker | | Playtika's total rewards program (same as Vegas Downtown Slots) |
| GSN Casino | | No rewards program |
| Hit it Rich! | | VIP program with exclusive machines (transitioning soon to Zynga's Loyalty Lounge program) |







MARKET INFO: TOP 11 – 20 GROSSING

DoubleU Casino has a VIP club program; Scatter Slots has a new status system with features borrowed from Playtika, Big Fish Games, and Zynga; and Viva Slots Las Vegas has a VIP program with exclusive machines

| Game | Strength | Notes |
|------------------------|----------|-----------------------------------------------------------------|
| myVegas | | Comprehensive rewards program with real-world prizes |
| DoubleU Casino | | VIP club room (image A) |
| Caesars Slots | | Playtika's total rewards program (same as Vegas Downtown Slots) |
| Scatter Slots | | Relatively new status system (image B) |
| Zynga Poker | | VIP program based on purchasing and leveling up |
| Quick Hit Slots | | No rewards program |
| Gold Fish Casino Slots | | No rewards program |
| KONAMI Slots | | Comprehensive rewards program with real-world prizes |
| Viva Slots Las Vegas | | VIP lounge with exclusive machines (image C) |
| DoubleUp Slots | | No rewards program |



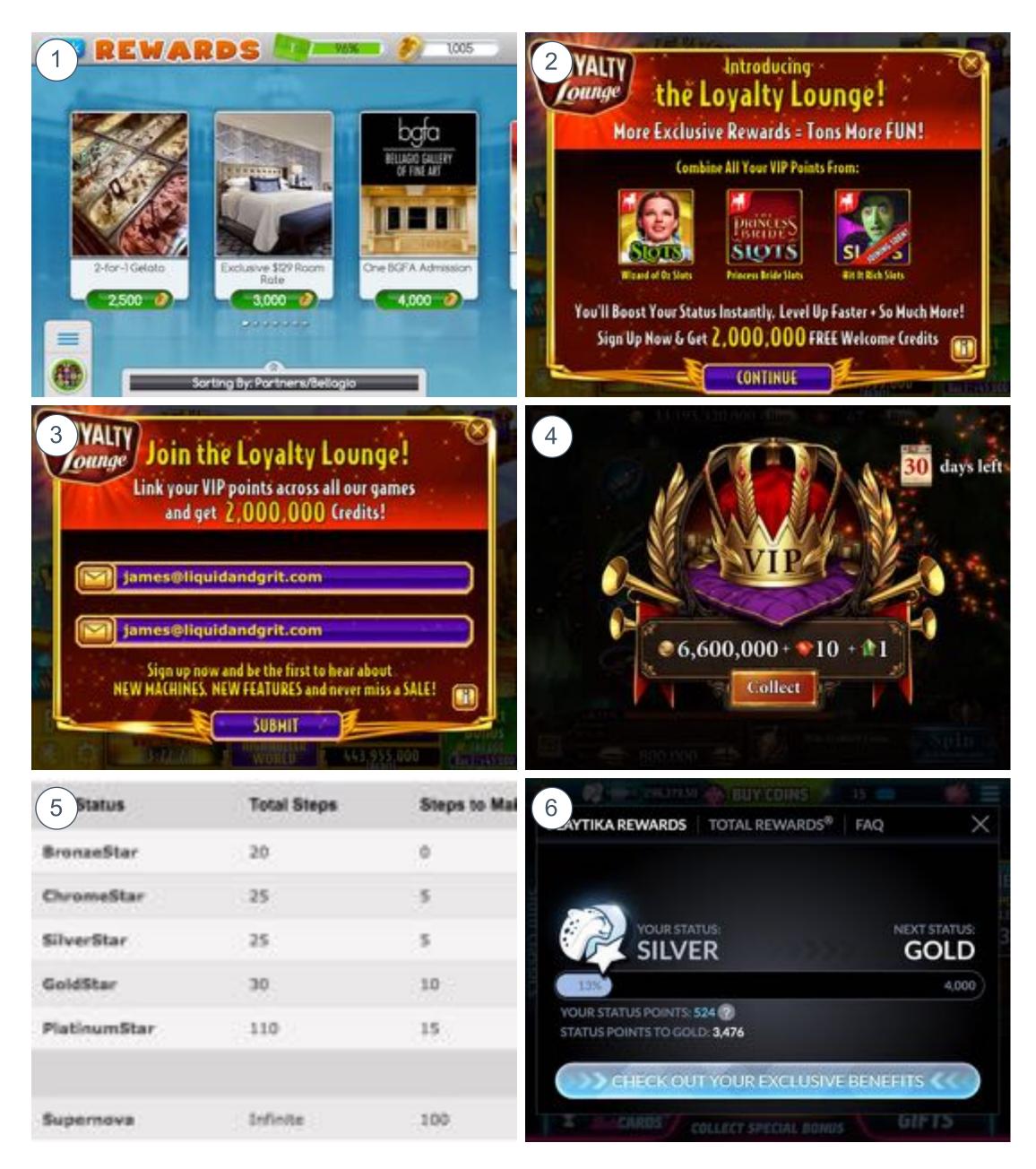




RECOMMENDATIONS

Find a rewards niche and plan to release across multiple games. Base benefits both on monthly and lifetime play

- Find a niche, hook, or corner: myVegas has clearly carved a niche with real-world rewards. Simply fast-following existing rewards programs is not going to add a ton of value (image 1).
- Build to scale across multiple games: Like Zynga, release the rewards program in one or two games, but build to scale across multiple games (image 2).
- Control more of your distribution: Collect emails or reward through push notifications; then tie rewards, such as a daily bonus, to emails and push notifications (image 3).
- Add a monthly VIP mechanic: Allow players to purchase a bonus that is extremely rewarding; Scatter Slots' version is \$2.99 for ~\$150 worth of coins if players return every day for 30 days (image 4). See our January 2016 Social Casino Report for more details on this feature.
- Base rewards on monthly play: PokerStars' rewards program is based on a rolling window of monthly requirements for reaching and maintaining each VIP status (image 5).
- Consider adopting Playtika Rewards' UI/UX: Focus on reward innovation and fast-follow this solid user flow (image 6).



CARD COLLECTIONS

FEATURE SUMMARY

Sloto Cards is a card collection mechanic that allows players to send and receive cards with friends

- Slotomania's Sloto Cards rewards players for completing sets of cards.
 Players earn bigger rewards for completing entire albums (image 1).
- Players can receive cards by spinning a slot machine, making a purchase, completing levels ending with five, and receiving gifts from friends. Rewards improve with higher bets and larger coin package purchases (image 2).
- Initially, players receive five free cards in a pack. Each card shows a symbol or character from one of Slotomania's machines. Each card's banner color and number of stars represent its rarity: yellow banners and one star are most common, and purple banners and five stars are the rarest (image 3).
- Completing a set of cards rewards players between 180K to 21M coins, valued at \$30 to \$3,667. Completing the album rewards players 37.5M coins, valued at \$6,250 (converted using \$5 worth of coins) (image 4).
- Players can request cards from friends. Owning two or more of a given card allows players to send that card to their friends (image 5).
- Expiration: the first album expires August 1st. Players who complete the album after August 1st receive compensation prizes (image 6).
- Cards are added onto coin packages and scale upwards, depending on the price of the coin packages, from +5 to +12 cards.













MARKET INFO: TOP 10 GROSSING

Big Fish Casino gives out tickets with every purchase for redemption in the rewards center; Hit it Rich! has a fill-the-meter charm mechanic

| Game | Strength | Notes |
|-----------------------|----------|----------------------------------------------------------------------------------------------------------------------------------|
| Big Fish Casino | | Players receive bonus tickets with each purchase for redemption in the rewards center (image A) |
| Slotomania Casino | | Sloto Card system (image B) |
| DoubleDown Casino | | No card collection system |
| Jackpot Party Casino | | No card collection system |
| House of Fun | | No card collection system |
| Heart of Vegas | | No card collection system |
| Wizard of Oz Slots | | No card collection system |
| World Series of Poker | | No card collection system |
| GSN Casino | | No card collection system |
| Hit it Rich! | | Fill-the-meter mechanic that dispenses charms after a certain number of spins. Higher bets fill the charm meter faster (image C) |







MARKET INFO: TOP 11 – 20 GROSSING

None of the top 11 – 20 grossing social casino games have a card collection system

| Game | Strength | Notes |
|------------------------|----------|---------------------------|
| myVegas | | No card collection system |
| DoubleU Casino | | No card collection system |
| Caesars Slots | | No card collection system |
| Scatter Slots | | No card collection system |
| Zynga Poker | | No card collection system |
| Quick Hit Slots | | No card collection system |
| Gold Fish Casino Slots | | No card collection system |
| KONAMI Slots | | No card collection system |
| Viva Slots Las Vegas | | No card collection system |
| DoubleUp Slots | | No card collection system |
| | | |

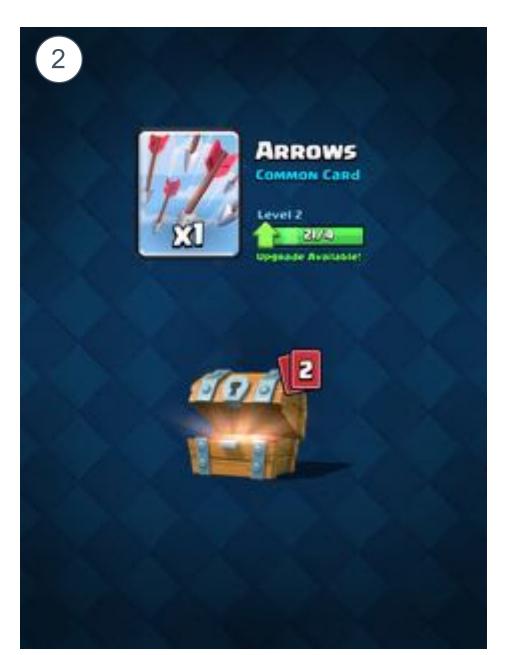
CLASH ROYALE INFO

The top-grossing iOS app, Clash Royale, uses a card-based mechanic to monetize players in a PvP battle game

- Clash Royale is a PvP battle game where players collect chests that hold cards, gems, coins, and other prizes (image 1).
- Players earn cards in free chests and crown chests, or they can purchase them directly with gems. Free chests are given out every four hours, like a secondary coin bonus. Crown chests are given out every 10 battles fought (image 2).
- The epic Sunday card shop shows the most recent cards released and a countdown timer until new cards are released. New cards are released regularly; six new cards were added in the most recent release (image 3).
- Collecting multiples of a given card lets players level up cards. Each card has a specific set of attributes. Upgrading improves the card's attributes.
 Upgrades occur when a player collects enough copies of a given card to level up. Upgrades can also be purchased using coins (image 4).









RECOMMENDATIONS

Make card content valuable and tied to game play. Release content regularly through an inbox and test out alternative marketing channels

- Add an inbox to easily market new content releases: Playtika uses Appoxee, a mobile marketing automation tool, to power their games' inboxes (image 1).
- Test out alternative video marketing channels: Through the inbox, Slotomania releases Sloto Shows, which are YouTube videos explaining upcoming features, recent winners, and other game information. The most popular video has over 100K views (image 2).
- Tie card mechanics into added value in each machine: A missing piece to Slotomania's Sloto Card system are cards that improve players' ability to win. The cards in Clash Royale, for instance, improve a player's likelihood of winning a battle (images 3 and 4).
- Start off with minimal content and release new content regularly: A core revenue-driving component for card mechanics is additional content releases; Clash Royale releases new content every Sunday (image 5).
- Create novel cards to drive sharing: Adding 15 new characters in the first Crossy Road update increased social media sharing by 50%.* The Zombie character in Crossy Road walks in darkness, and the Celebrity character is followed by paparazzi (image 6).
- Give away cards and characters for free: In Crossy Road and Clash Royale, cards are initially free, and players see and feel the value of cards before they need to earn or purchase them (image 7).
- Add mystery boxes with cards inside: Every chest in Clash Royale is a mystery box, which keeps players engaged (image 8).



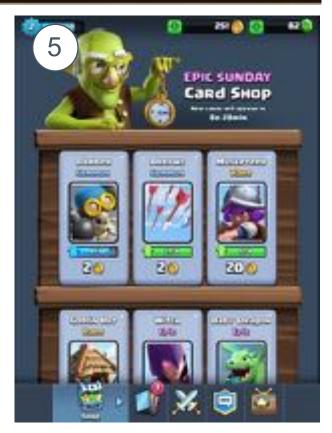


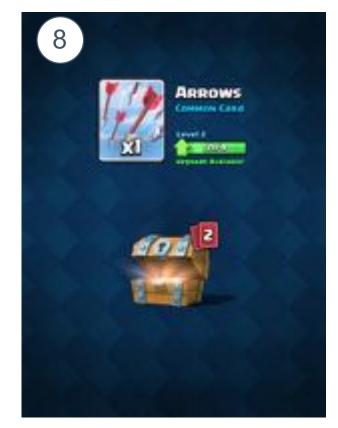












COMPETITIVE CHALLENGES

FEATURE SUMMARY

Unlocked at level 45, Scatter Slots' Battle Mode is a combination of tournaments, leaderboards, and challenges

- Players first face the arduous task of reaching level 45. A Liquid and Grit test run cost approximately \$150 to reach this level (image 1).
- Battle Mode is only accessible in the free mode (image 2).
- After picking a machine, players are taken to the Battle Mode leaderboard (image 3).
- Clicking "Rules" will convert the leaderboard to FAQs. The rules are pretty simple: players compete based on challenges won. Players in the top spots receive bet limit increases (image 4).
- Battle Mode challenges are simple: win X number of coins to earn points. X starts at 500M then progresses to 1B and then 35B (\$208, \$417, and \$14,583 worth of coins) (image 5).
- These amounts seem ridiculous, but shortly after entering Battle Mode our test player won \$2,000 worth of coins. This seemed to be rigged (image 6).
- Players win only one point for the first challenge and seven points for the second challenge. There are no start, stop, or other time limits. Eight points brought our test player to 1,096th place on the leaderboard.









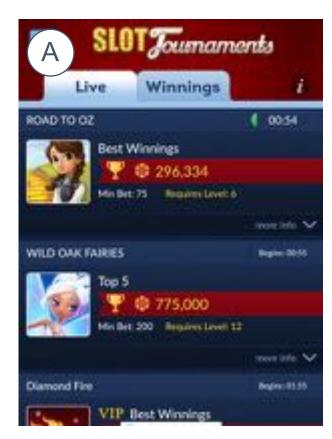




MARKET INFO: TOP 10 GROSSING

Big Fish Casino has tournaments and leaderboards but no competitive challenges

| Game | Strength | Notes |
|-----------------------|----------|--------------------------------------------------------------------|
| Big Fish Casino | | Tournaments and leaderboards – no competitive challenges (image A) |
| Slotomania Casino | | Tournaments – no competitive challenges |
| DoubleDown Casino | | Tournaments – no competitive challenges |
| Jackpot Party Casino | | No competitive challenges |
| House of Fun | | No competitive challenges |
| Heart of Vegas | | No competitive challenges |
| Wizard of Oz Slots | | No competitive challenges |
| World Series of Poker | | Tournaments – no competitive challenges |
| GSN Casino | | Daily challenges – no competitive challenges (image B) |
| Hit it Rich! | | Daily race leaderboard based on chips won (image C) |







MARKET INFO: TOP 11 – 20 GROSSING

Zynga Poker has a poker league that includes a leaderboard, points, and tiers, similar to Scatter Slots' Battle Mode

| Game | Strength | Notes | |
|------------------------|----------|--------------------------------------------------------|--|
| myVegas | | No competitive challenges | |
| DoubleU Casino | | Tournaments – no competitive challenges (image A) | |
| Caesars Slots | | A contest system is coming soon | |
| Scatter Slots | | Battle Mode at level 45 | |
| Zynga Poker | | League system with tiers and a leaderboard (image B) | |
| Quick Hit Slots | | No competitive challenges | |
| Gold Fish Casino Slots | | Tournaments – no competitive challenges | |
| KONAMI Slots | | No competitive challenges | |
| Viva Slots Las Vegas | | Tournaments – no competitive challenges | |
| DoubleUp Slots | | Challenge system – no competitive challenges (image C) | |







RECOMMENDATIONS

Add a competitive challenge to an already-popular feature. Competition should be opt-in and focused on whales

- Temporarily spike whale wallets: Like in DoubleUp Slots, spike players' wallets to make them feel rich before driving their wallets down dramatically; the velocity of decline is imperative for conversion (image 1). See our February 2016 Social Casino Report for more details on this feature.
- Push the limit of bet-based goals: In Battle Mode, players are expected to hit goals valued at over \$2,000 in coins, and the maximum bet is \$333 worth of coins. A mission of winning \$14,583 worth of coins provides players with two Battle Mode points (image 2).
- Add a competitive leaderboard (image 3).
- Create opt-in competition aimed at whales: Most social casino players, both slots and poker players, are less competitive than companies realize (PMs are often competitive and assume others are too). Therefore, adding a competitive leaderboard could alienate many non-purchasing players. Scatter Slots directs Battle Mode towards whales by unlocking it at level 45 and placing it in the free play mode (image 4).
- Add a competitive challenge to an already-popular feature in your game: Big Fish Casino has leaderboards for gifting and likes, and Scatter Slots added a leaderboard to challenges. Add competition to any currently popular feature in your game.
- Consider challenges around all aspects of the game: DoubleUp Slots has goals on bonus coins, machine play, etc., and has continued to build upon Daily Goals, adding Bronze, Silver, and Gold goals (image 5).









OUT-OF-CHIPS FLOW

FEATURE SUMMARY

Zynga Poker's out-of-chips dialogue utilizes urgency, alternative choice, and price discrepancy mechanics to drive conversion

Details

Out-of-chips dialogue (first time)

- The first time players run out of chips, a full-page dialogue appears (image 1).
- The dialogue has a three-minute countdown timer.
- The dialogue also uses a sales technique called the alternative choice close. This is basically a question with two answers, and either answer creates an agreement. Both resolutions lead toward a sale.
- In this example, the alternative choices are the \$19.99 package or the \$49.99 package.
- The dialogue includes a "BEST VALUE" banner over the \$49.99 package.
- There is also an option to "See All Deals" in the bottom right-hand corner, which takes players to the full buy page.

Out-of-chips dialogue (second time)

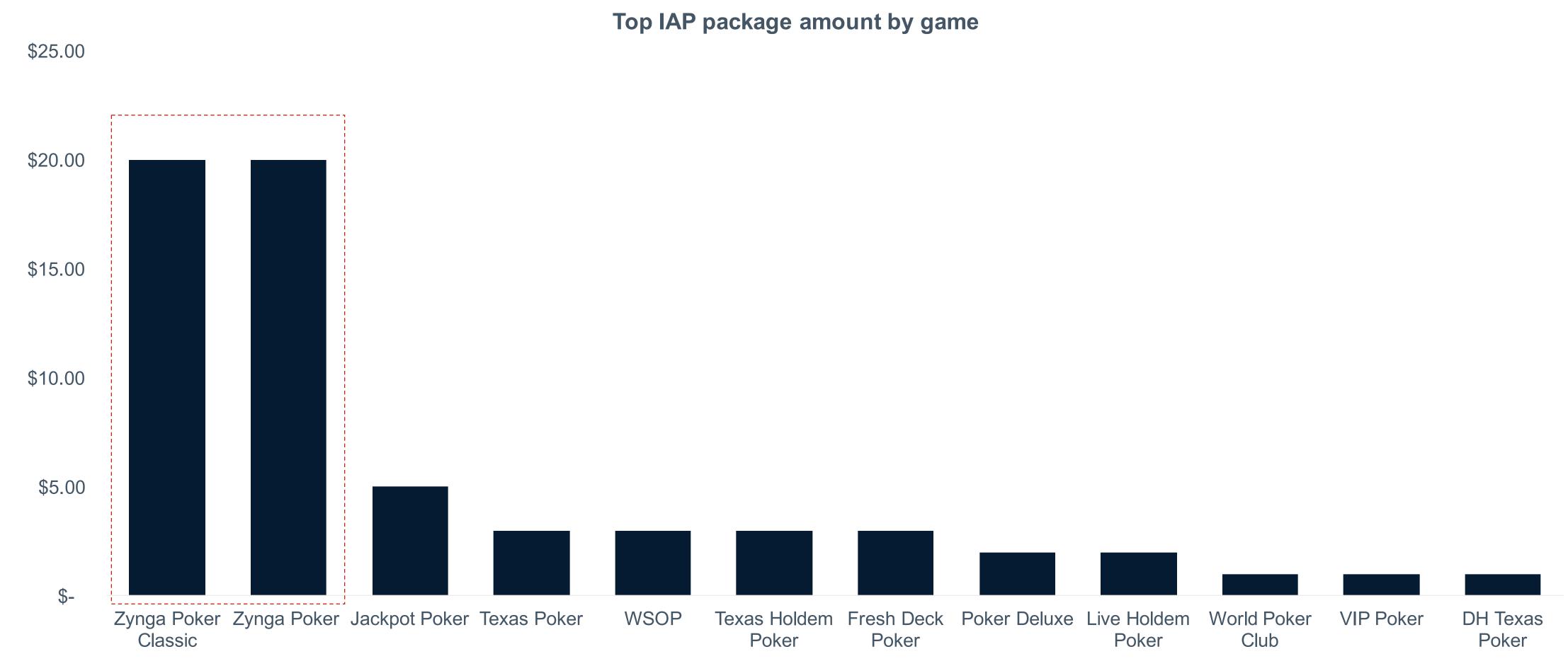
- The second time players run out of chips, the buy page appears with a custom title message (image 2).
- The \$19.99 package has a "MOST POPULAR" banner on it, and the \$99.99 package has a "BEST VALUE" banner.





BACKGROUND INFO

At \$19.99, Zynga Poker Classic and Zynga Poker have the highest priced, most popular in-app purchase (IAP) packages



MARKET RESEARCH

There is little variation in the out-of-chips dialogue across the top poker games. Pokerist's Texas Poker gives players a starter bonus, and Fresh Deck Poker gives a 2X chip discount with a one-minute countdown timer

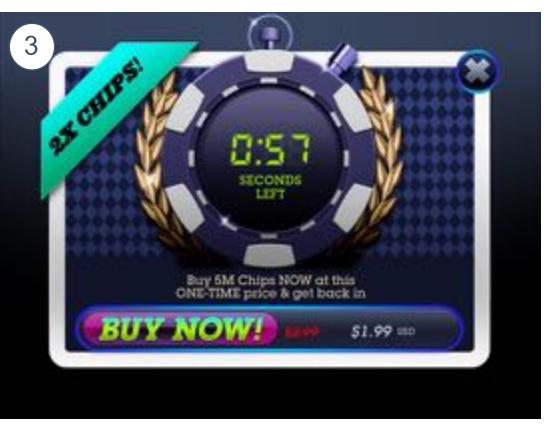
Details

- WSOP: A simple message accompanies a "GET MORE CHIPS" button (image 1).
- Texas Poker: When new players run out of chips, they are offered a starter bonus of 500 chips. Players receive up to five of these starter bonuses when they run out of chips (image 2).
- Fresh Deck Poker: Players receive a \$1.99 package with a 2X chip discount and a one-minute countdown timer (image 3).
- Jackpot Poker: Players must click an "I'm back" button to open up the "Refill Discount" dialogue (image 4).

Out-of-chips dialogues in other games









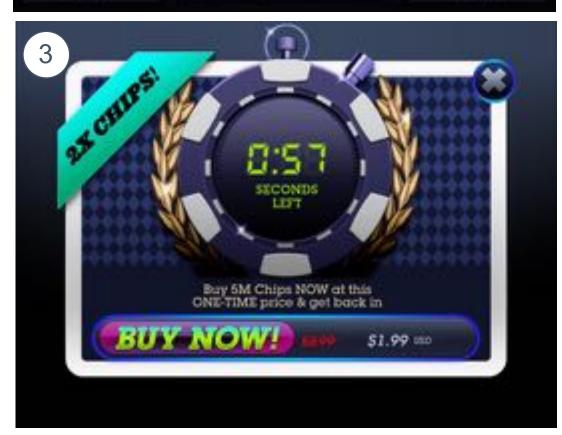
RECOMMENDATIONS

Use urgency and alternative choice to drive conversion on the out-of-chips dialogue. Prompt a "contact support" dialogue when purchases are canceled

- Make it easy to run out of all chips: The table selectors should have a
 wide range of values, both above and below the player's wallet amount.
 But players should be able to easily stop the selector at 100% of their
 wallet (image 1).
- Test giving bonus chips when players run out of chips up to a certain level: Texas Poker and VIP Poker both provide bankruptcy protection (image 2).
- Make the countdown timer prominent (image 3).
- Use an alternative choice mechanic: Offer two options, both of which are purchases (image 4).
- Zynga Poker has \$19.99 and \$49.99 package amounts, much higher than other games. Although this will drive up revenue per transaction, it will obviously drive down overall conversion. Run a long-term high price vs. low price test to optimize player LTV.
- Add a "Best Value" banner on one of the higher-priced packages (image 4).
- If players cancel their purchase, trigger a "contact support" dialogue (image 5).
- Make the contact support page mobile friendly: Clash Royale's information page is built with Apple's native dashboard, and Quick Hit Slots' contact support form is a nice in-app email form (image 6).













QUICK WIN: CONTENT DOWNLOADS

RECOMMENDATIONS

Create an HD and SD download package in the same game. Trigger HD download for appropriate devices or ask players to upgrade to HD during play

Details

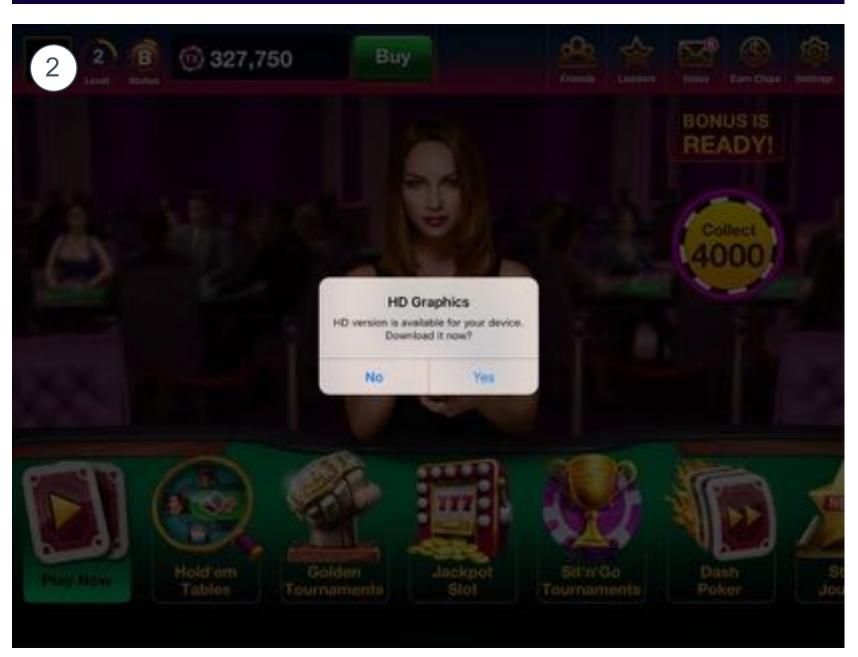
HD and SD download packages:

- There is only one version of TX Poker in the app store, but players can download HD graphics while playing. The size of the game in the app store is 96.2MB, but the initial download is less than half that, at 36.8MB.
- If the device is recognized upon app-load, the game downloads the appropriate SD or HD package (image 1).
- When the SD package is downloaded, but HD is available for the device, the game prompts the player to download the HD version (image 2).
- Players can then download the HD version.

Downloading new content:

- In Scatter Slots, downloading new machines occurs after players have clicked on a feature. For example, downloading the newest slot machine might start after clicking on Scatter Slots, the primary coin bonus.
- Download content only after players have loaded and become invested in playing the game.





MARKET WATCH

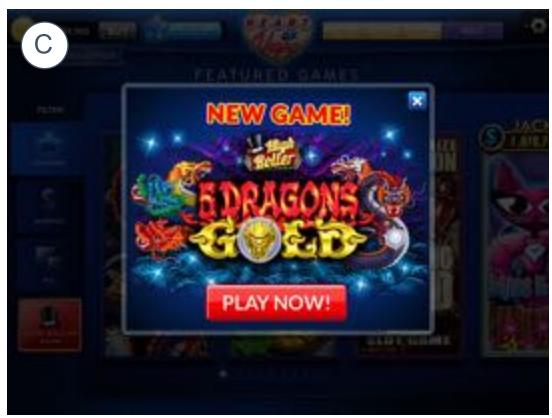
RELEASES: TOP 10 GROSSING

Slotomania just released Sloto Cards; House of Fun released the Winners' Challenge feature

| Game | Strength | Date | Notes |
|-----------------------|----------|----------|----------------------------------------------------------------------|
| Big Fish Casino | | 2/11/16 | New slot machine, improved XP system, bug fixes |
| Slotomania Casino | | 4/27/16 | Sloto Cards released 4/14/16; fixes released 4/27/16 (image A) |
| DoubleDown Casino | | 5/6/16 | New machine 4/13/16 and support for upcoming features 5/6/16 |
| Jackpot Party Casino | | 5/2/16 | New slot machine |
| House of Fun | | 5/4/16 | Winners' Challenge jackpot; new slots machines (image B) |
| Heart of Vegas | | 4/6/16 | 5 Dragons Gold is HoV's first mobile-first machine release (image C) |
| Wizard of Oz Slots | | 5/3/16 | New Scarecrow slot machine |
| World Series of Poker | | 11/23/15 | More free chips and iOS 9 updates |
| GSN Casino | | 3/8/16 | New slot machine and Video Bingo progressive jackpot |
| Hit it Rich! | | 4/27/16 | New slot machine |







RELEASES: TOP 11 – 20 GROSSING

Scatter Slots released Battle Mode for players at or above level 45. DoubleUp Slots released feature improvements to daily goals

| Game | Strength | Date | Notes |
|------------------------|----------|---------|-----------------------------------------------------------------|
| myVegas | | 4/20/16 | Two new machines, one a Konami machine |
| DoubleU Casino | | 4/25/16 | New slot machine |
| Caesars Slots | | 5/6/16 | New slot machine |
| Scatter Slots | | 5/2/16 | Battle Mode released for players at or above level 45 (image A) |
| Zynga Poker | | 4/19/16 | Bug fixes |
| Quick Hit Slots | | 5/1/16 | New slot machine |
| Gold Fish Casino Slots | | 5/3/16 | Memory and stability improvements, bug fixes |
| KONAMI Slots | | 4/27/16 | Two new slots machines, including Wild Aztec (image B) |
| Viva Slots Las Vegas | | 4/28/16 | Stability and performance improvements |
| DoubleUp Slots | | 4/18/16 | New slots machines and three new sets of daily goals (image C) |







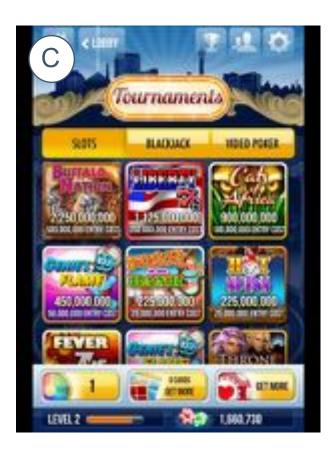
RELEASES: TOP 21 – 30 GROSSING

Slots! Lucky Play Casino added slots tournaments. Slots – Pharaoh's Way released a new VIP slot machine

| Game | Strength | Date | Notes |
|------------------------------|----------|----------|-------------------------------------------------|
| SLOTS - Black Diamond Casino | | 4/25/16 | New slot machine |
| Slots - Pharaoh's Way | | 4/4/16 | New VIP slot machine (images A and B) |
| Texas Poker | | 12/28/15 | Last release in 2015 |
| Willy Wonka Slots | | 4/25/16 | No changes evident |
| GSN Grand Casino | | 5/3/16 | Bug fixes |
| Slots! Lucky Play Casino | | 5/4/16 | New slots machines, slots tournaments (image C) |
| Slots - Classic Vegas Casino | | 3/18/16 | Game optimizations |
| Jackpotjoy Slots | | 5/3/16 | Product enhancements and stability improvements |
| Infinity Slots | | 4/26/16 | New slot machine: Cute Kittens |
| Old Vegas Slots | | 4/27/16 | New games, feature improvements, bug fixes |







ECONOMY DEEP DIVE: VEGAS DOWNTOWN SLOTS

VEGAS DOWNTOWN SLOTS: GAME OVERVIEW

Playtika's classic slots game with Bally's IP machines, tournaments, gifting, and casinos

Coin bonuses

- The primary coin bonus gives out 2,000 coins daily.
- The secondary coin bonus starts by giving out 4,000 coins for the first four collections; then, gives out a bonanza bonus on the fifth collection.
- The secondary coin bonuses increase in amount as the player continues to collect.



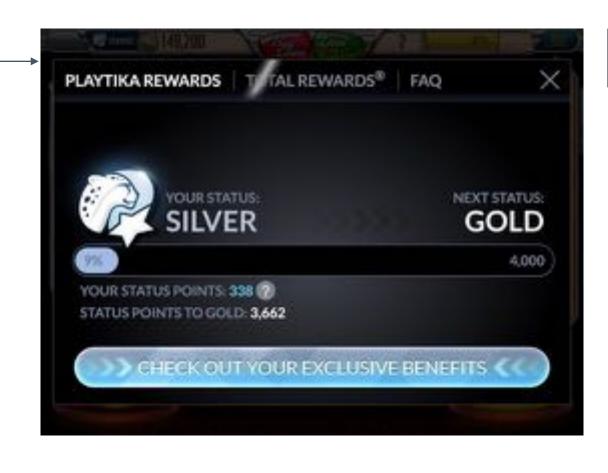
Classic IP machines

- The machines are mostly classic, like this 3 x 3 Super Double Jewels machine.
- Machine IP comes from Bally's.
- There are four casinos (soon to be five). The first three casinos are unlocked by level, and the fourth is unlocked to all.



Rewards

- There is a comprehensive rewards system – the same system used in all of Playtika's games.
- Players earn points by playing and purchasing.
- This rewards system is reviewed in detail on page 6 of this report.



Tournaments

- Tournaments are free and open to all players, across all machines.
- Once a tournament starts, players continue regular play.
 When the tournament runs out of time, whoever has the most coins wins the tournament.



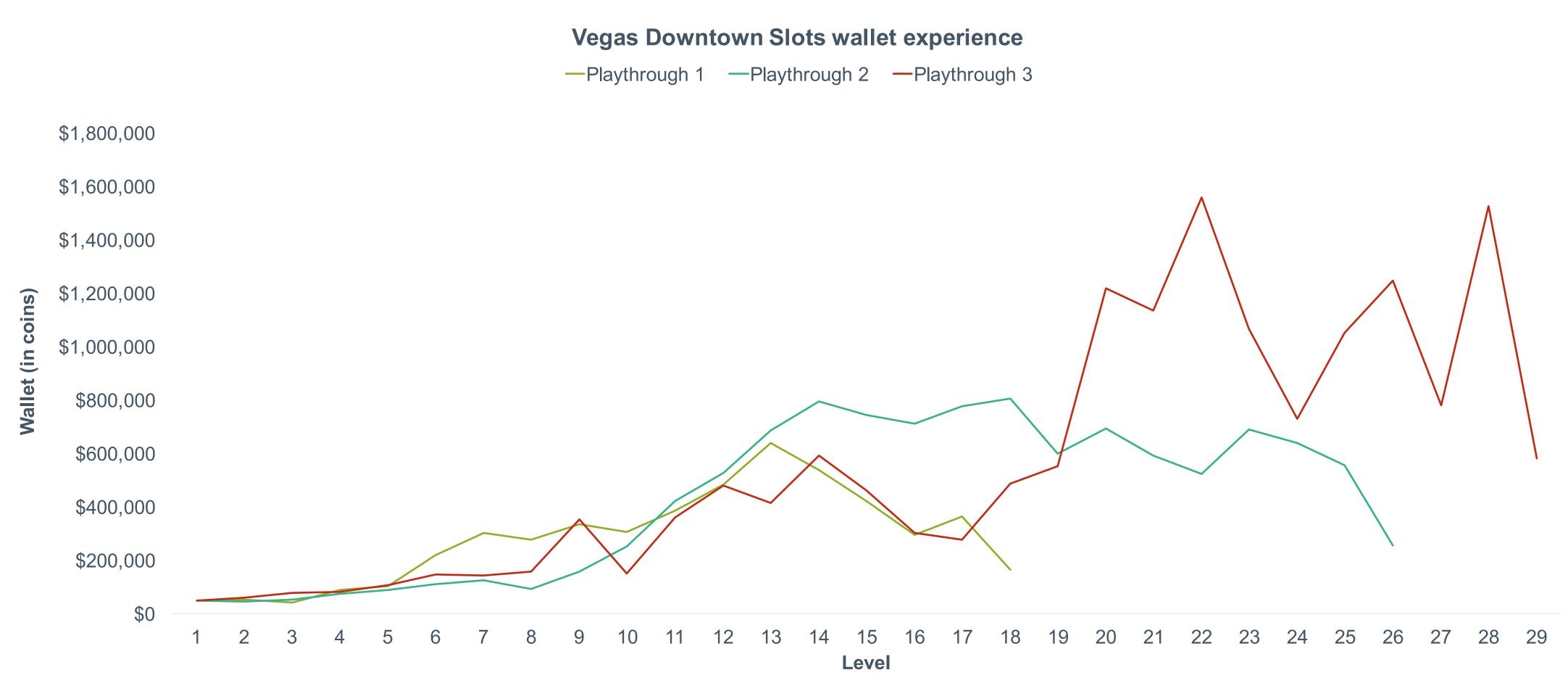
ECONOMY SUMMARY

The game economy focuses players on progressing through each level to unlock new content

| | Value | Tightness | Notes |
|--------------------------|---------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wallet experience | Long | | Players can play the game for a very long time on default bet levels |
| Coins-to-dollar ratio | 70K | | The economy is moderate compared to top-grossing slots games |
| Initial coin balance | \$0.71 | | The initial value players receive is small |
| New user bet values | \$0.01 default \$0.001 minimum | | The initial default and minimum bets are small |
| New user tuning | 50 default spins 500 minimum spins | | Players receive a relatively small number of spins at the default bet level Players receive an above-average number of spins at the minimum bet level |
| Total daily coin bonuses | \$0.37 | | Players collect a small number of coins daily compared to top-grossing slots games |

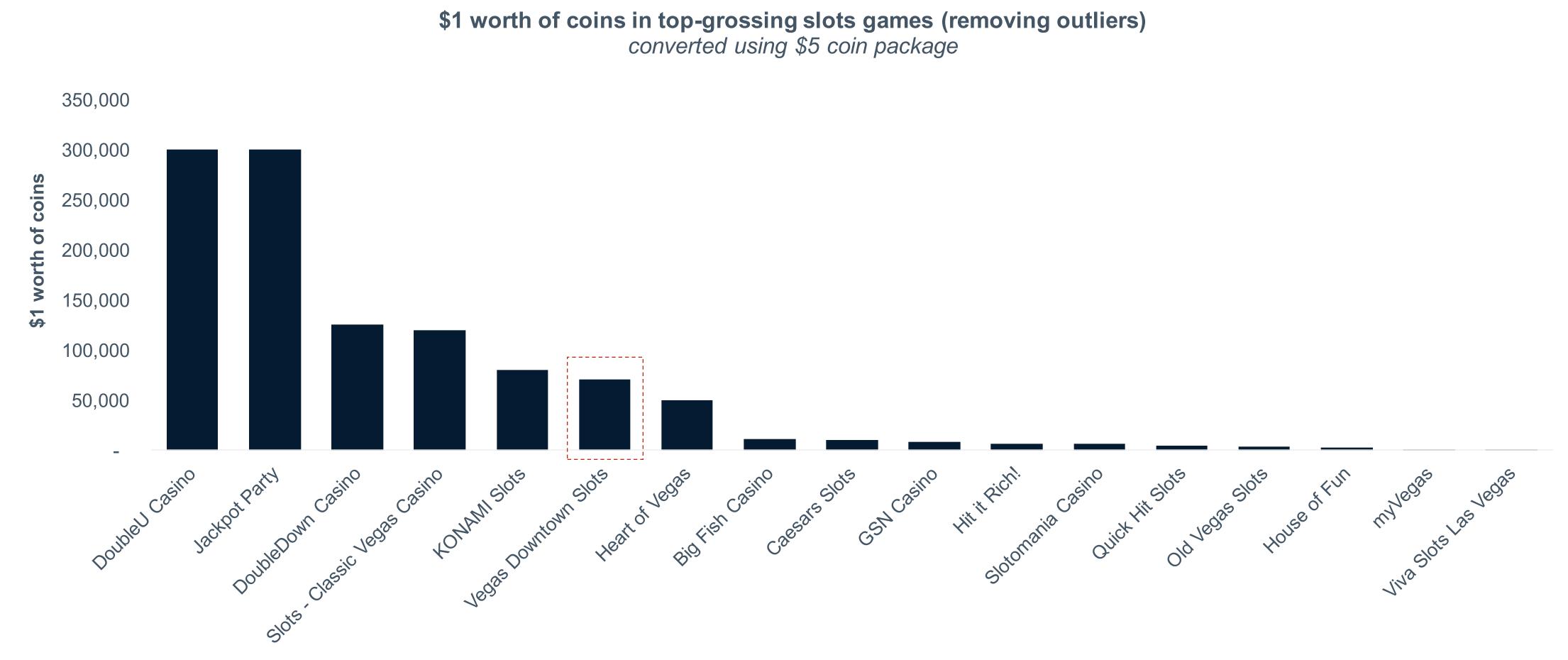
WALLET EXPERIENCE

The wallet experience in Vegas Downtown Slots is long, slow, and seemingly endless. All three playthroughs took over eight hours to complete



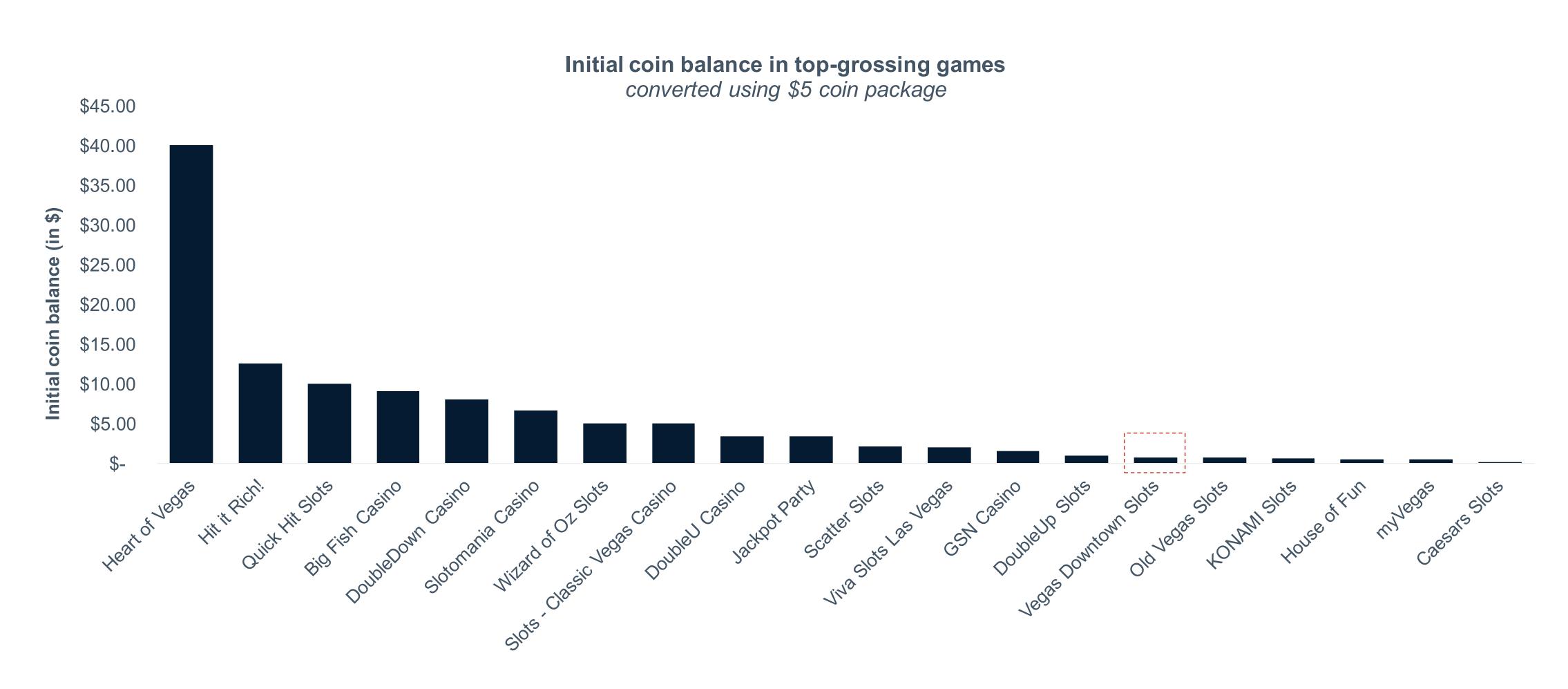
COINS-TO-DOLLAR RATIO

Vegas Downtown Slots has a moderate economy that focuses on long-term player retention and monetizing off player progression



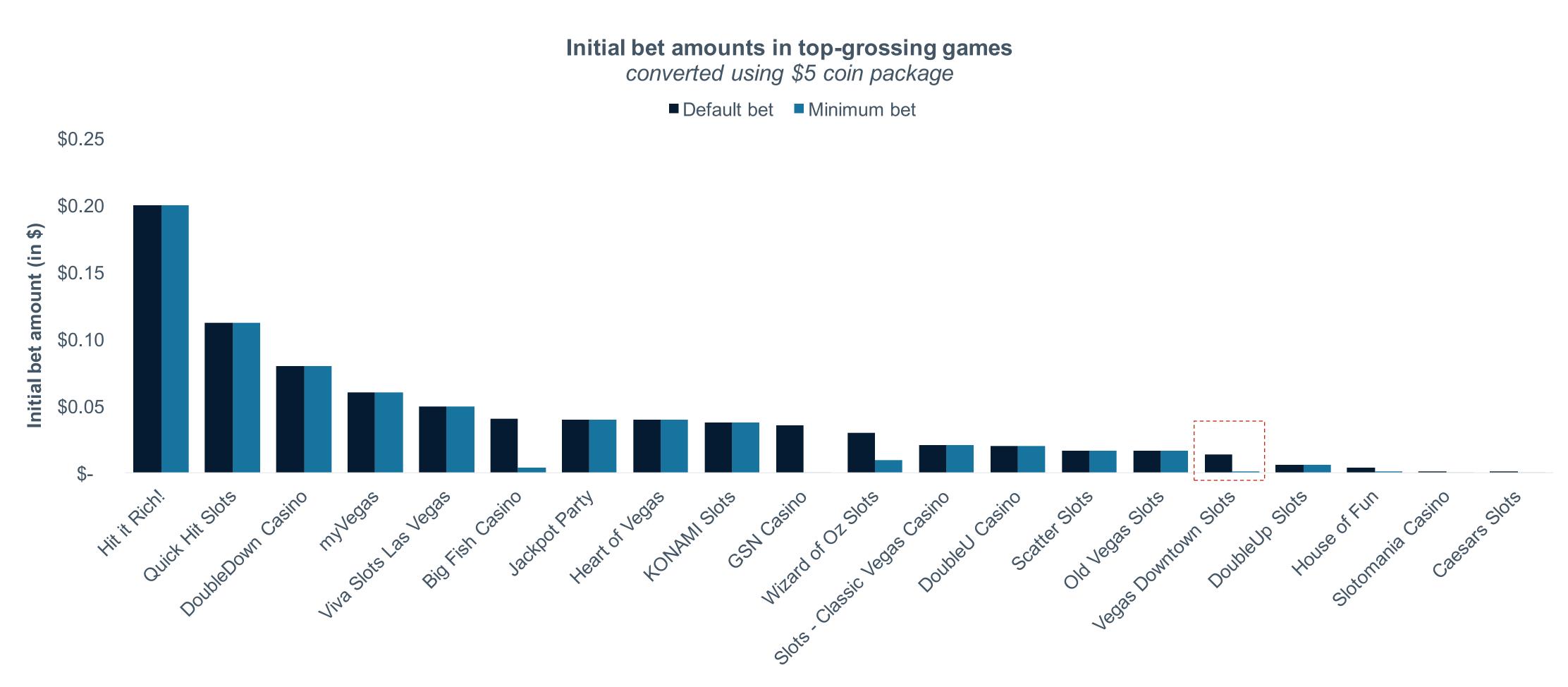
INITIAL COIN BALANCE

Vegas Downtown Slots has a tight initial coin balance – but allows players to play a long time, if desired, with low minimum and default bets



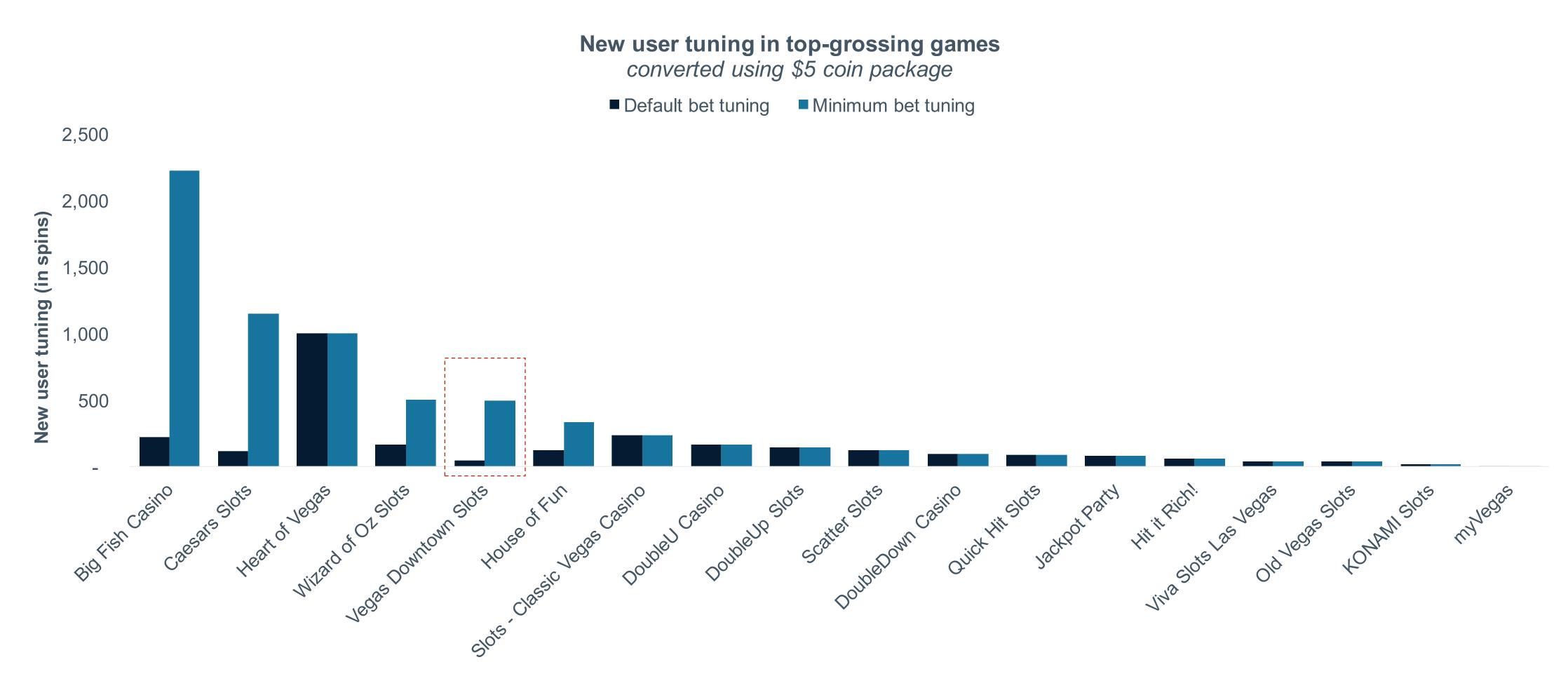
NEW USER MINIMUM AND DEFAULT BET

Vegas Downtown Slots has cheap minimum and default bets



NEW USER TUNING

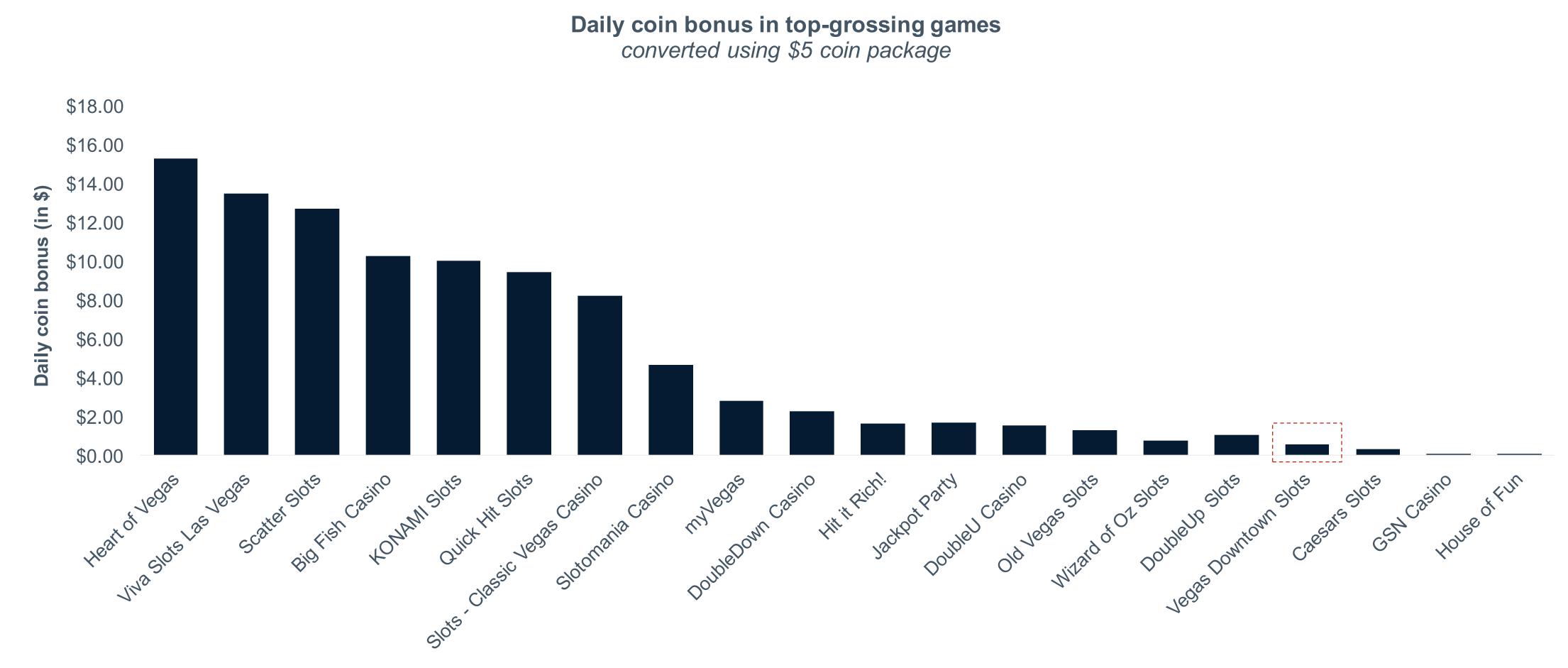
Vegas Downtown Slots' new user tuning is relatively loose, with 50 spins for the default bet and 500 spins for the minimum bet



Slotomania Casino and GSN Casino were removed as outliers

TOTAL VALUE OF COIN BONUSES

Initially, Vegas Downtown Slots provides a small amount of coin value daily. The secondary coin bonus increases the payout every five collections so the daily coin bonus increases



APPENDIX

DATA COLLECTION PROCESS

Data is collected from market research, app intelligence tools, and a deep analysis of the game

Market research

- Transaction information comes from the iOS App Store's In-App Purchases tab. These packages are ranked based on number of transactions
- Las Vegas player insights come from online sources like the Las Vegas Convention and Visitors Authority and the UNLV Center for Gaming Research
- Progressive jackpot information comes from online research, specifically from Wizardofodds.com
- Trending revenue, downloads, and package-rank data comes from Priori Data, a Liquid and Grit partner

Analysis of competing hypotheses

- "Analysis of competing hypotheses (ACH) requires an analyst to explicitly identify all the reasonable alternatives and have them compete against each other for the analyst's favor, rather than evaluating their plausibility one at a time." CIA.gov
- For example, in our analysis of Vegas
 Downtown Slots, all the components of the
 game (e.g., features, economy, theme)
 compete against each other to determine
 the most impactful features
- We illustrate how these components compete against each other to determine the most valuable features
- We also incorporate the uniqueness of a feature in the market, comparing the feature across both top-grossing and 2015 breakout slots games on iOS

Game information

- Game information comes from a deep-dive analysis of each game
- Return-to-player (RTP) and win percentage is found by tracking over 500 spins from a machine at a certain bet amount
- In the economy section and economy-related slides, the coin value is determined by converting coins into money using \$5.00 worth of non-sale purchasable coins in each game. For example, if the minimum bet is 1,000 coins and players can purchase 500 coins for \$5.00, the value of the minimum bet is \$10.00. For games without a \$5.00 package, the next closest package is used

Opportunities multiply as they are seized.

- Sun Tzu, The Art of War

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