

Puzzle Report

Competitive Research and Actionable Product Recommendations

EXECUTIVE SUMMARY



"[We took] some regular old ugly rocks and we put them in the can [rock grinder] with a little bit of liquid and little bit of grit powder, and we closed the can up. And he turned this motor on and he said, come back tomorrow. And I came back the next day, and we opened the can. And we took out these amazingly beautiful polished rocks."

- Steve Jobs' metaphor for passionate product teams

Revenue Drivers

Revenue was +20% 2Wo2W in Lost Island Blast Adventure after the launch of *Clubs*. In *Clubs*, members ask for lives that are granted by other *Club* members (similar to Toon Blast's *Team Gifting*). A day after *Clubs* was released, *Club Chest Event* went live, illustrating the shift in pre-release investment from *just* the feature to *both* the feature and the feature's events.

A six-day bank event went live in Seekers Notes that spiked revenue +35% WoW. Banks are an established mechanic in both Puzzle and Casino that continue to evolve. If tuned properly, tied to the core game loop, and implemented with pricing logic, they can generate first-time purchases, transactions, and revenue. Review all the bank variations from both Puzzle and Casino listed in this section.

Breakout Apps

Hard-launched in December 2018, Polysphere by Playgendary is now a top 20 grossing iOS Puzzle category app. The core game play is a 3D art puzzle. And, strong subscription revenue is driven by the new user tutorial ... which has a very effective, well-integrated up-sell.

Level Mechanics

Toon Blast released Flower Pots, a relatively new hazard that is a generator for an existing, spreadable Ivy mechanic. And, Gardenscapes added Hot Air Balloons, a visually simple and intuitive mechanic that is also challenging and move-burning for players.

Market Watch

Homescapes is releasing *Teams* soon; Angry Birds 2 launched a skill-based mini-game event similar to the app Jetpack Joyride; and Bubble Witch Saga 3 delivered a competition event to bounce the most *Bubbles* off the walls before hitting targets.

Brett Nowak

CEO

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MARCH

2019

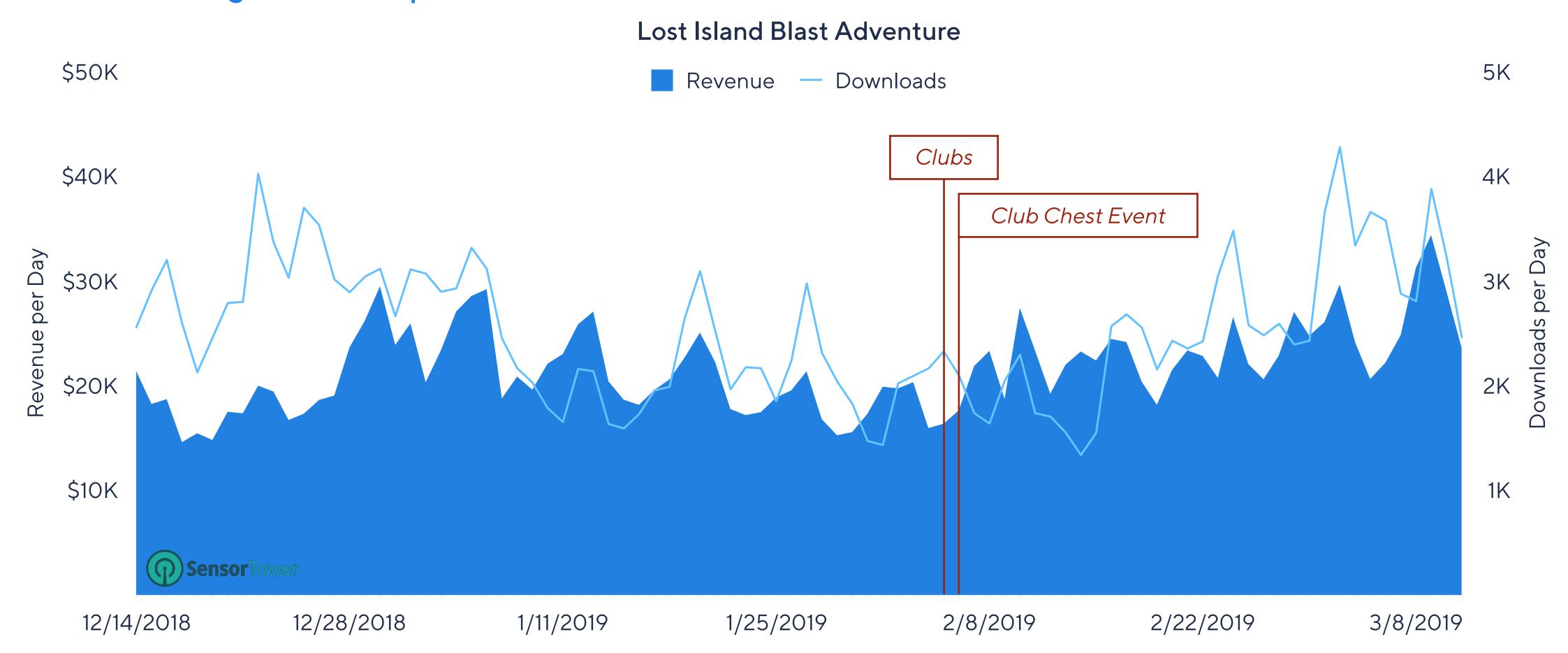
REVENUE DRIVERS

CLUB FEATURES

Clubs in Lost Island Blast Adventure

REVENUE ANALYSIS

Lost Island Blast Adventure released *Clubs* on 2/5, and then the *Club Chest Event* from 2/6 to 2/8. Starting on 2/5, revenue was +20% WoW and +20% 2Wo2W. Downloads were +6% WoW and -3% 2Wo2W during that same period.



FEATURE TEARDOWN

Every four hours, *Club* members can request five lives. Other members must help the requesting player to unlock the lives. Players use the *Club* chat rooms to communicate and assist each other.

Feature Details

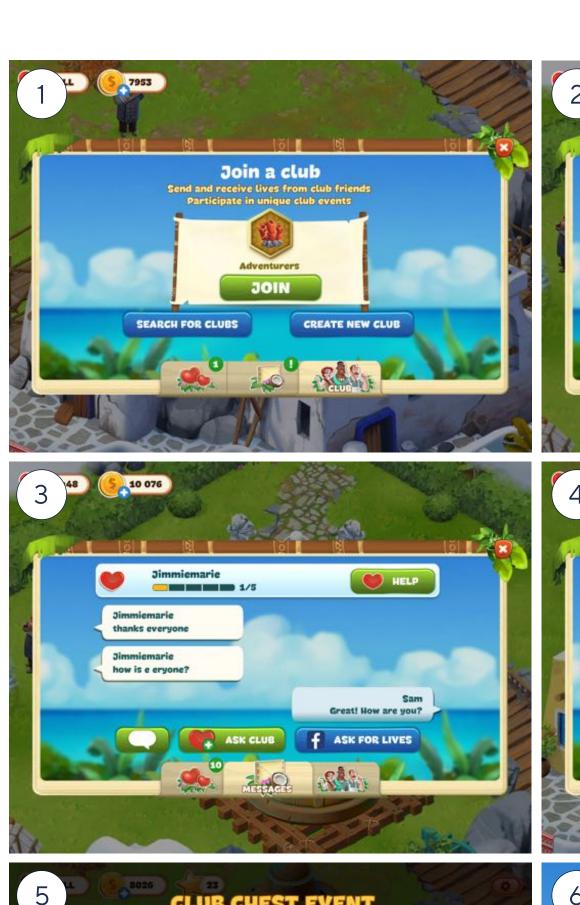
- Players must be over level 49 to join a *Club*, and over level 149 to start one (1).
- Club members can 'Ask Club' for five lives every four hours (2).
- Other members can then 'Help' the requester, awarding a life for every 'Help' (3).
- Players can only have seven total lives at any time (4).
- The Club Chest Event requires Club members to fill a meter by collecting Keys.
- Players collect Keys by completing levels with remaining moves and boosters (5).
- On the event's meter, chests distribute awards to all members (6).

Report References

- Clan Chests with Leaderboards in 4/18 Puzzle Report
- Team Tournaments in 8/18 Puzzle Report
- Lost Island Blast Adventure in 10/18 Puzzle Report

Related Features

- <u>Team Gifting</u> in Toon Blast
- Clans in Angry Birds 2
- <u>Teams</u> in Homescapes











EXPERT INSIGHTS

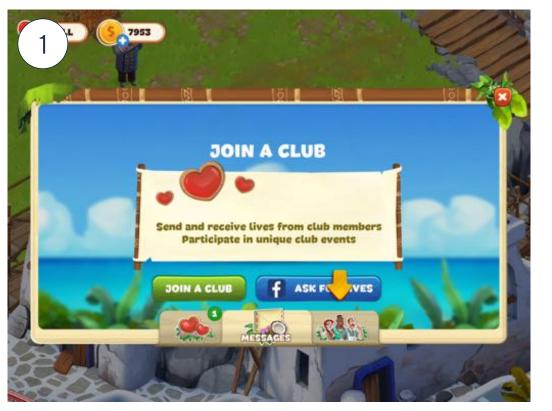
Release simpler features and invest more pre-release resources into events that utilize that feature. To ensure initial feature-adoption, make the core benefit the primary currency or energy. Then, use economy and social limits to avoid inflation.

Product Council Insights

- Utilize simpler features to also increase design flexibility. Clubs was released with minimal functionality ... allowing the feature to grow in many different directions with the iterations and events.
- Release feature-specific events almost immediately after a new feature is introduced. The Club Chest Event went live a day after Clubs was released. Adopt this shift in pre-release development towards investing in both features and feature-specific events.
- To ensure strong feature adoption for new releases, make a high value in-game currency the core reward. The marketing and adoption for *Clubs* is strong mostly because it centers on receiving lives ... the game's equivalent of energy (1).
- Use a social-based earning system to ensure player engagement and limit inflation. In *Clubs*, players can only request five lives every four hours, must receive 'Help' from other members to unlock a life, and have a total lives limit of seven (2).
- Market new events coming soon to maintain strong feature retention. In Gardenscapes Event Tab, players can click on 'Events' and see both current and 'Coming Soon' events (3).

Additional Information in the Feature Database

- More images and videos of <u>Clubs</u> and <u>Club Chest Event</u> in Lost Island Blast Adventure
- All club features released in Puzzle, go to Puzzle > Feature > <u>Clubs</u>
- All club events released in Puzzle, go to Puzzle > Events > <u>Clubs</u>
- All Casino category clubs, go to Casino > Feature > <u>Clubs</u> and Casino > Events > <u>Clubs</u>
- In Casino, review Huuuge Casino's <u>Billionaire's League</u>, DoubleU Casino's <u>Winner's Club</u>, and Big Fish Casino's <u>Jackpot Clubs</u>





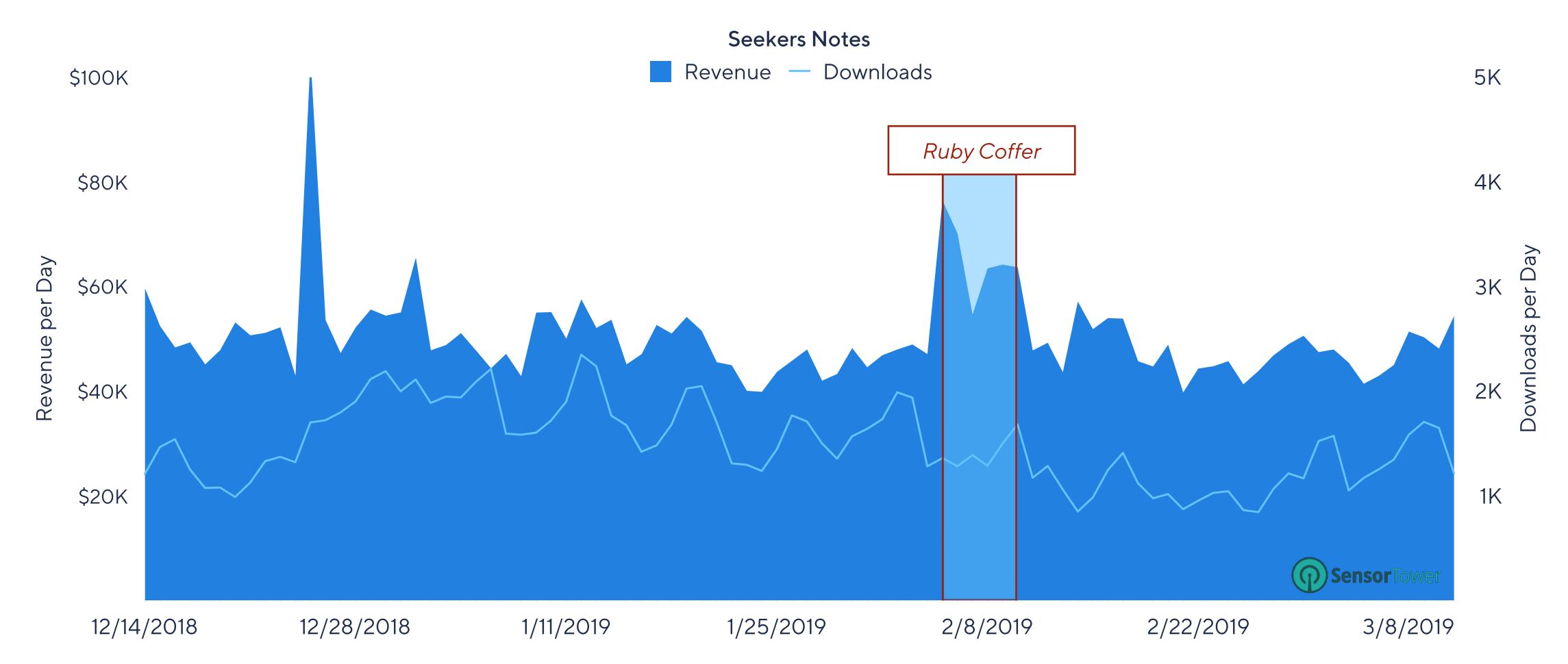


BANK EVENTS

Ruby Coffer in Seekers Notes

REVENUE ANALYSIS

Seekers Notes released a bank event, *Ruby Coffer*, that ran from 2/5 to 2/10. Starting on 2/5, revenue jumped +35% WoW and downloads were -16% WoW.



Graph data is iOS U.S. only

FEATURE TEARDOWN

Players accumulate *Rubies* by completing *Locations* and *Puzzles*. Once a certain number of *Rubies* are collected, the ability to purchase the *Rubies* is unlocked. Any *Rubies* not purchased at the end of the event are lost.

Feature Details

- Players start without any Rubies in the Coffer (1).
- Players add Rubies to the Coffer by completing Locations and Puzzles (2).
- The purchase button is locked until a certain amount of Rubies are gathered (3).
- Once unlocked, players must buy the collected *Rubies* to acquire them (4 & 5).
- There is a countdown timer on the Coffer and the lobby icon (6).
- At the end of the timer, all the accumulated *Rubies* are lost (if not purchased).

Report References

- Impact Sales in 7/18 Puzzle Report
- Prestiging in 3/18 Puzzle Report
- Level Unlock Discounts in 9/18 Puzzle Report

Related Features

- Gold Reserve in Homescapes
- Piggy Bank in Matchington Mansion
- Piggy Bank in Solitaire TriPeaks













EXPERT INSIGHTS

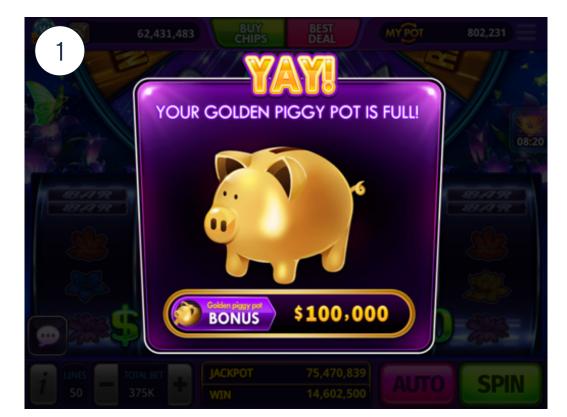
Add a free bonus to a bank to increase daily engagement. Test different bank fill rates and max amounts ... making sure that the value of the earned currency is *notably* better than the value of the buy page packages. Adjust the price and the bank's economy as players transact.

Product Council Insights

- Consider offering a free option, in addition to a more valuable purchasable option. In DoubleU Casino's version of a bank, Golden Piggy Pot, players receive a free bonus (1 & 2).
- Price the first purchase of the bank low to drive conversion and transactions, then increase prices for following purchases to produce more meaningfully revenue. In Slotomania, five out of the top ten most-transacted IAP packages are related to their bank feature. The price of Slotomania's bank first purchase is \$2.99 ... then, the price increases to \$5.99, \$11.99, and lastly \$19.99.
- Create urgency with a countdown timer that intensifies when time is running out. In myVEGAS Slots <u>Tournaments</u>, the countdown timer flashes red when time is running low (3).
- Clearly explain the price changes to players to limit player backlash. In Seekers Notes forum pages, players compared prices and complained about different price variations.

Versions of banks across Puzzle and Casino

- Play & Purchase: Piggy Bank in Matchington Mansion and Piggy Bank in Slotomania (Casino)
- Play & Free Collect with Purchase Option: Golden Piggy Booster Pack in Double U Casino (Casino)
- Level Up & Purchase: Piggy Pinata in Slotomania (Casino)
- Play & Collect-to-Unlock: Pop the Piggy in Jackpot Party (Casino)
- Spin & Collect or Continue with Daily Reset: <u>The Bank Job</u> in Cashman Casino (Casino)
- Level-Based Subscription: Piggy Bank Subscription in Ellen's Road to Riches (Casino)
- Spin, Collect, & Purchase: Piggy Bank in Heart of Vegas (Casino)







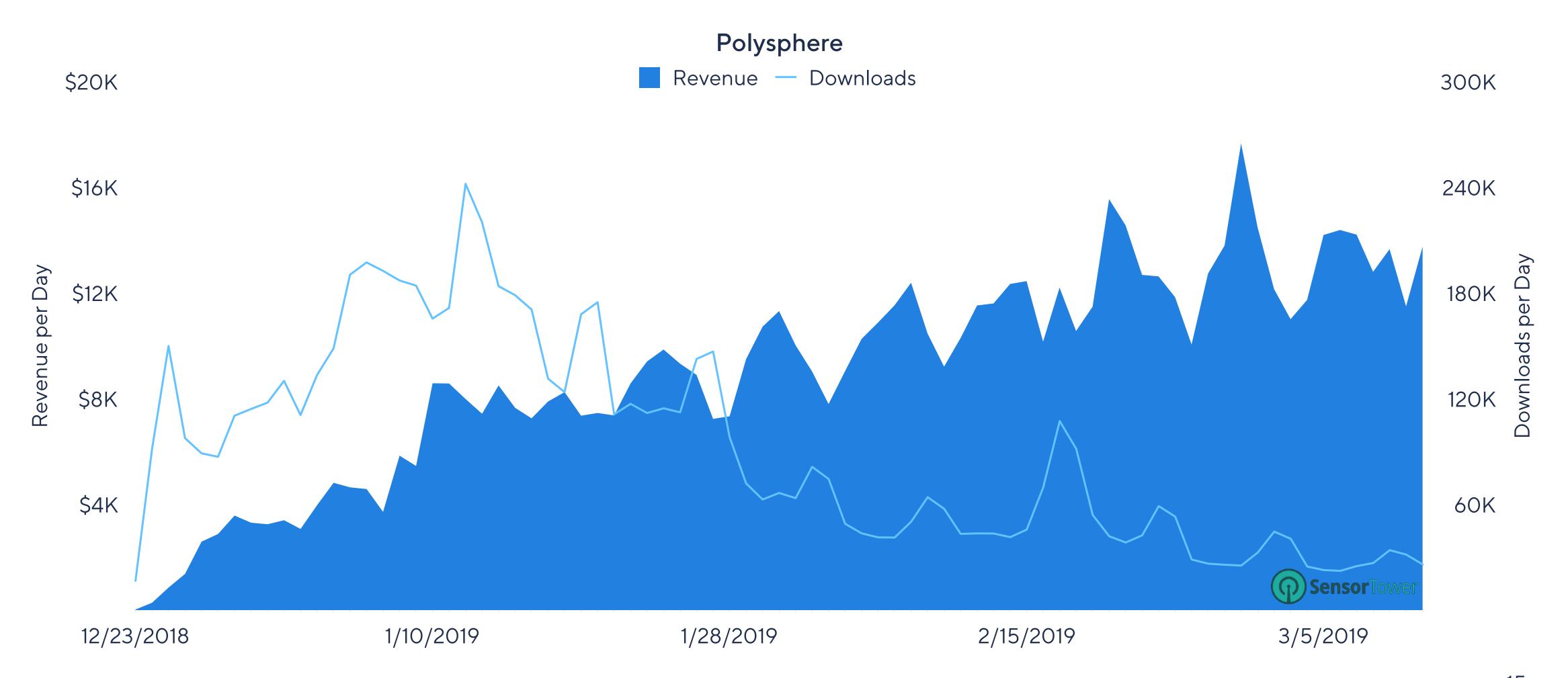
^{*} Most of the bank feature variations are in Casino category apps

BREAKOUT APPS

POLYSPHERE BY PLAYGENDARY

REVENUE ANALYSIS

Polysphere was hard-launched at the end of 2018 and is currently averaging \$13K daily revenue in the U.S. on iOS ... and ranked in the top 20 grossing in the iOS Puzzle category.



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APP TEARDOWN

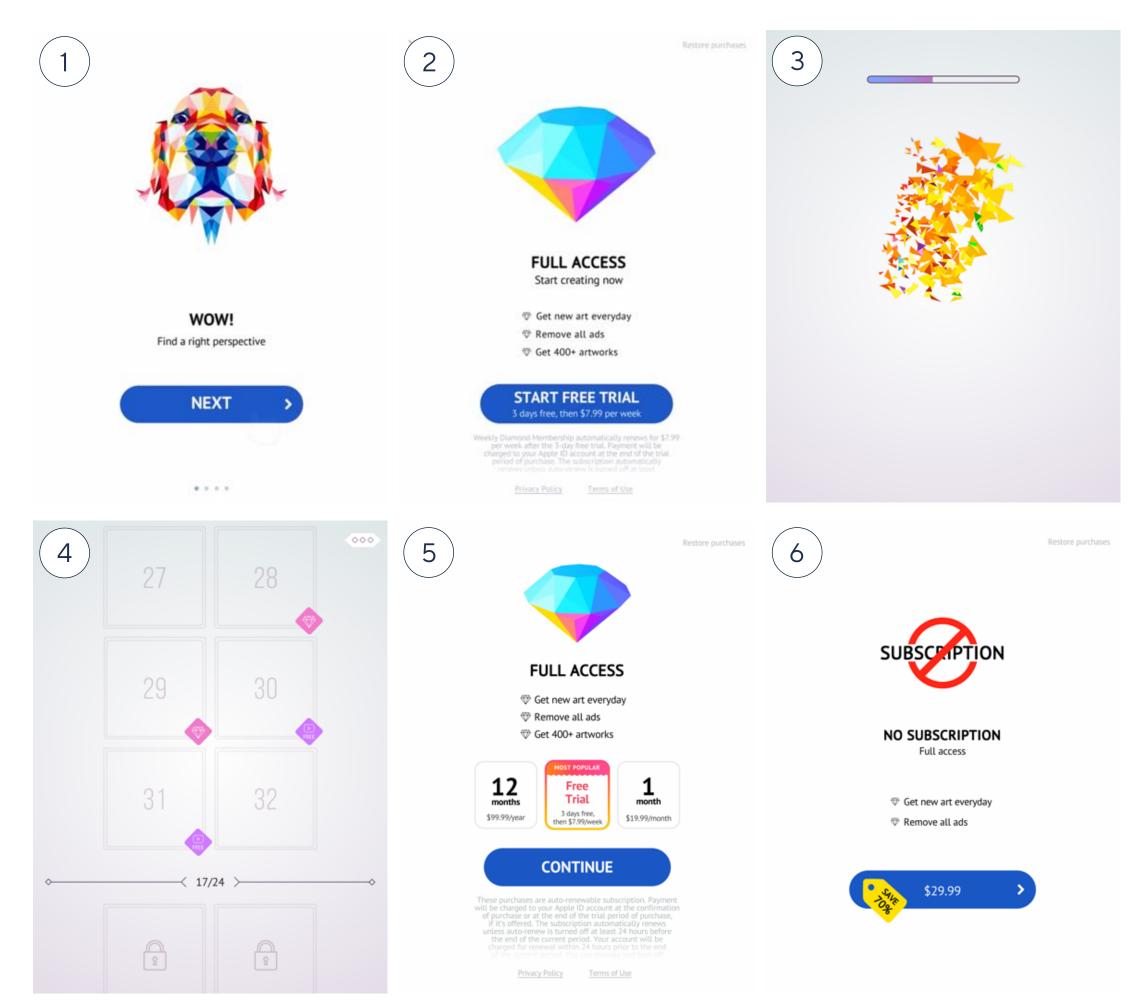
Polysphere's core gameplay is an innovative 3D puzzle. To drive revenue, the new user flow pushes a weekly subscription onto players.

Feature Details

- · Upon app-download, players enter a tutorial.
- Players click a 'Next' button to advance through the first few steps (1).
- A 'Full Access' dialogue is then shown with a three-day free trial for \$7.99/week with a subtle X in the top left corner of the screen (2).
- If players press the X-out, they start the more interactive part of the tutorial, swiping on the puzzle elements (3).
- In the core game, players rotate shapes to form a clear picture (see this video).
- Content with a *Diamond* icon is locked behind a subscription. Content with a 'Free' icon is locked behind an ad (4).
- There are three subscription options:
 - Three-day trial, then \$7.99 weekly
 - \$19.99 monthly
 - \$99.99 annually (5)
- There is also a one-time purchase of \$29.99 for full access without ads (6).

Additional Game Features

- New User Flow
- Misc. Features
- Subscription
- Full Access
- Help
- Video Clips
- Download the App



LEVEL MECHANICS

NEW LEVEL DESIGNS I

Flower Pot in Toon Blast

- After matches are made next to a Flower Pot, lvy spreads.
- The *Ivy* is then cleared by additional adjacent matches or boosts ... to complete level goals (1 & 2).

Candy Monster in Toy Blast

- Candy Monsters eat sections of a Candy Stick for each match or boost made adjacent to the Stick.
- Candy Monsters are collected for level goals when Sticks are devoured (3 & 4).

Toaster in Homescapes

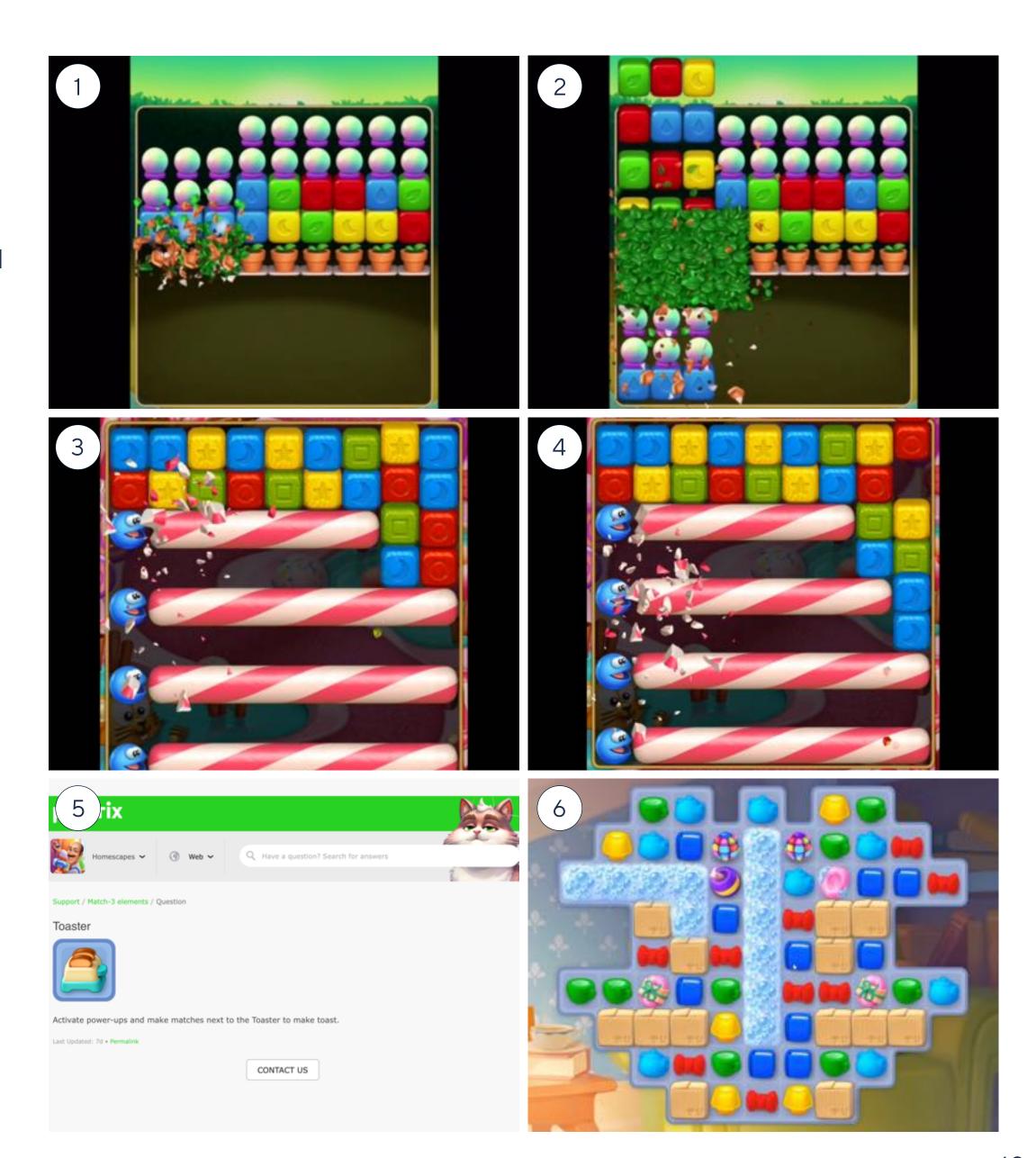
• Matches and boost activation adjacent to a *Toaster* will cause *Toast* to pop out ... to be collected for level goals (5).

Soap in Homescapes

• Soap is a boost and then a hazard, clearing obstacles but leaving Suds behind (6).

Level Design Expert Comments

- Flower Pot is a relatively new hazard that is a generator for an existing, spreadable lvy mechanic.
- The *Flower Pot* increases level difficulty, reduces over-using hazards and obstacles, and creates opportunity to reveal goal elements as players progress through the level.
- Consider creating nice patterns with the *Flower Pots* (or a flower design with individual elements).



NEW LEVEL DESIGNS II

Cattails in Gardenscapes

- · Cattails have up to three Spikes.
- Spikes are cleared by adjacent matches or boosts ... to remove the Cattail hazard (1).

Hot Air Balloons in Gardenscapes

• Hot Air Balloons are tied to surrounding pieces and are released by 'untying' the pieces with matches or boosts (2).

Purple Jam in Candy Crush Friends Saga

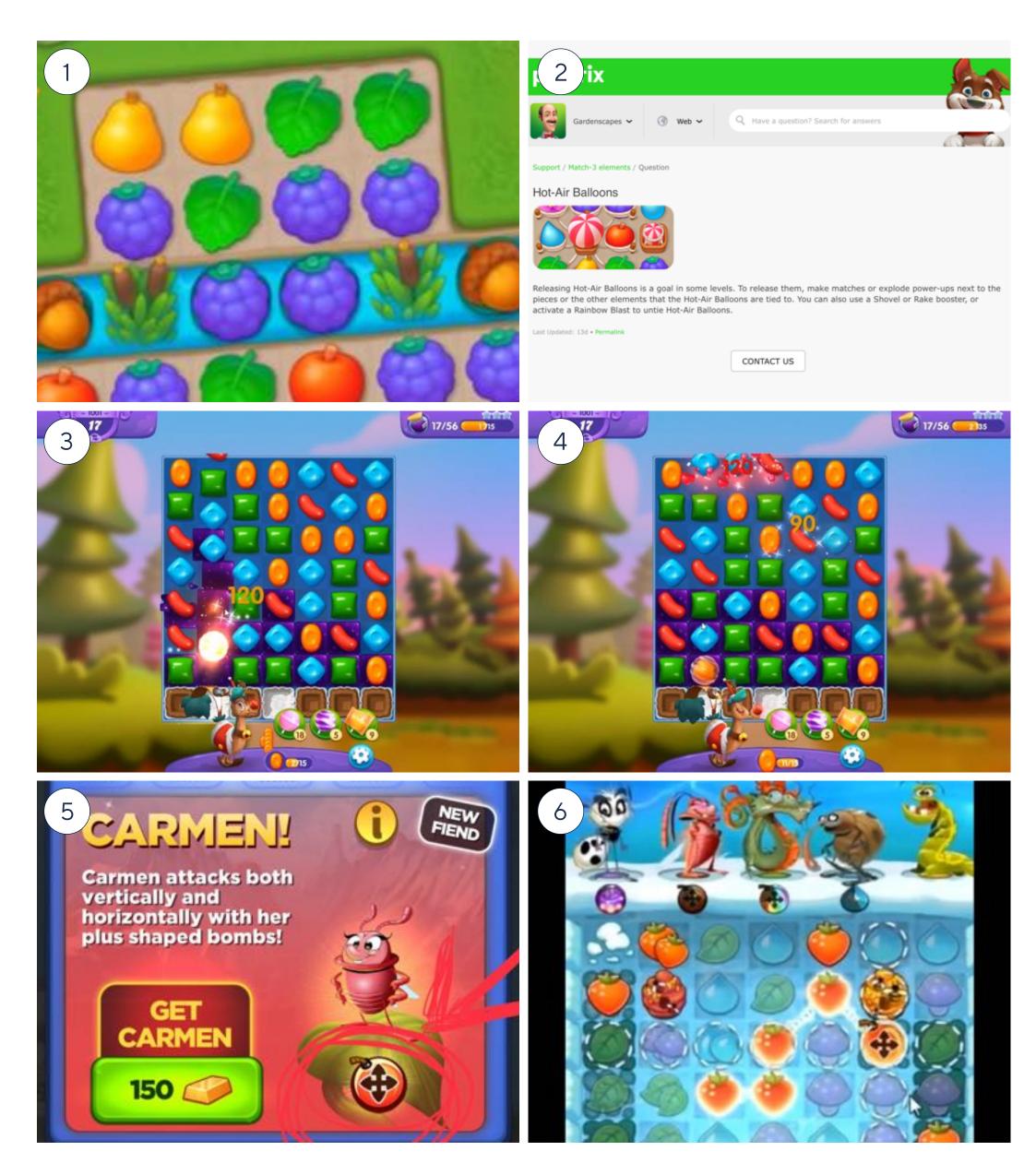
- Gravity spreads Purple Jam, which settles at the bottom of the board to complete levels (3 & 4).
- Note: This feature has only been confirmed in YouTube videos.

Plus-Shaped Bomb in Best Fiends

• New *Fiend Carmen* has a boost that triggers a plus-shaped explosion when included in a red-link sequence (5 & 6).

Level Design Expert Comments

- Hot Air Balloons are visually simple and intuitive ... but also challenging and move-burning for players.
- For easy levels, place *Balloons* next to other mechanics to create enjoyable visuals.
- For harder levels, either occupy separated areas with *Balloons*, or form groups of *Balloons* to make players dig, removing one *Balloon* after another.

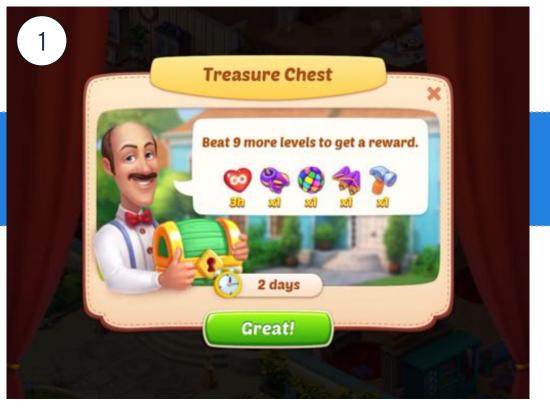


MARKET WATCH

2/1/19 - 2/28/19

NOTABLE RELEASES I

Арр	All Videos/Images	Key Image	Description
Homescapes	<u>Treasure Chest</u>	<u>Treasure Chest Challenge</u>	Players complete 10 levels before the end of the event to win a chest (replaced <u>Knitting Story</u>) (1).
	<u>Teams</u>	<u>Teams Announcement</u>	(Coming soon) <i>Teams</i> will be released in a future update with chat, leaderboards, and additional lives.
Candy Crush Friends Saga	<u>Valentine's Day</u>	<u>Dunk the Hearts</u>	Holiday-themed quest with completion rewards of a <i>Nutcracker</i> character costume. Event includes a Valentine-themed leveling goal of dunking cookies.
Fishdom	<u>Valentine's Day Chest</u> <u>Quest</u>	<u>Chest Quest</u>	Valentine-themed quest with chest rewards at checkpoints and the end (2).
Angry Birds 2	<u>Jetpack Run</u>	<u>Jetpack Run Tutorial</u>	Leaderboard event guiding a <i>Hatchling</i> with a <i>Jetpack</i> through a hazardous course to collect <i>Apples</i> , earning points based on the duration of the flight (3).







NOTABLE RELEASES II

App	All Videos/Images	Key Image	Description
Angry Birds 2	<u>Exotic Hat Tier</u>	Exotic Hat Collections	New tier of <i>Hat</i> collections added to the <u>Hat Shop</u> . Players can now purchase <i>Carnival</i> and <i>Sweetheart</i> <i>Hats</i> (1).
Bubble Witch 3 Saga	<u>Treasure Round</u>	<u>Treasure Chest</u>	Leveling event offering a chest reward for each <i>Star</i> earned. Players are offered the ability to purchase five more moves after a failed attempt.
Bubble Witch Saga 3	<u>Bouncee Bonanza</u>	Bouncee Collection	Leaderboard event to collect <i>Bouncees</i> by bouncing bubbles off the walls before hitting the target. Top 10 players on the leaderboard receive rewards (2).
Wonka's World Of Candy	<u>Stargazing</u>	<u>Fill Meter Rewards</u>	Stars earned by winning a level are collected to complete a Constellation for rewards (similar to Candy Crush Saga Denize's Star Dust) (3).







APPENDIX

PREMIUM PARTNERSHIPS

Liquid and Grit partners with these premier market research and analytics companies to infuse our reports with the most relevant and detailed gaming user personas, data, and statistics available.

Quadrant Strategies

Market Research

Quadrant Strategies website

Quadrant Strategies is a market research consultancy that uses research to help the world's most prominent technology, gaming, and entertainment companies develop strategies for building their user base, increasing user engagement and spend, and strengthening their marketing and brand plans.

We do that using a range of quantitative and qualitative methodologies, including gamer segmentation and persona development, feature testing, message creation, and loyalty and engagement modeling. The work of our senior leadership goes back many years, and includes long-term engagements for console and gaming-PC hardware-makers, individual games in a range of genres, and across consoles, PCs, and mobile, and for some of the top game franchises.

Kinrate Analytics

Player Personas

Kinrate Analytics website

Kinrate Analytics offers game developers, consultants, publishers, and cloud gaming operators the best cross-platform game recommendation engine for targeted marketing, as well as a novel profiling-as-a-service solution for intelligent market segmentation and social networking.

Other services include advanced market prediction analyses for identifying emergent gaming trends, and access to unique Al-enhanced data of 140 thousand game titles and 48 million game players.

The products of Kinrate Analytics have been developed in university-led research projects in collaboration of economists, psychologists, game scholars, and data scientists.

Sensor Tower

Mobile App Store Intelligence

Sensor Tower website

Sensor Tower is relied upon by financial analysts, VCs, and publishers who need to leverage data to identify the fastest growing apps, emerging markets, and more.

Clients harness Sensor Tower's suite of app intelligence tools to...

- Evaluate app economies and app vitality
- Drive organic growth with the leading App Store
 Optimization platform
- Get the best global download and revenue estimates for the App Store and Google Play
- Discover top creatives and better shape user acquisition strategy







PUZZLE PRODUCT COUNCIL

These industry-leading puzzle experts strengthen the Product Council Insight sections included in each Puzzle Report.

Helen Grabarchuk

Co-Founder and COO of PuzzleMove Inc.

LinkedIn Profile

Helen is a level design expert. At PuzzleMove Inc., Helen develops new puzzle products for different platforms, focusing on mobile devices.

Helen spent over two years at Zynga as a puzzle content creator.

After Zynga, Helen created concepts, puzzles, testing, and puzzle content in dozens of iOS and Kindle apps.

Helen's comments can be found predominately in the Level Mechanics section.

Ryan Winterholler

President at Winterholler Enterprises Inc.

LinkedIn Profile

Ryan is a mobile games veteran with over 17 years of experience.

For the past 15 years, his focus has been managing the creation, production, and design for multiple award-winning mobile games and apps.

His last few credits include Frozen Free Fall, Maleficent Free Fall, NBA Jam, Tiger Woods PGA Tour, NBA Live/Elite, DuckTales Scrooge's Loot, and many more.

Florian Ziegler

Consultant in Mobile Gaming and F2P Systems, Monetisation, and Events

LinkedIn Profile

After over a decade of making games, Florian now advises game studios and companies on improving their game products through his own consultancy, Lava Lake Games Consultancy.

Before launching his own consultancy, Florian worked at Electronic Arts on flagship titles such as, Need for Speed: No Limits. He also spent time at King as a *Principal Designer*.

At Mind Candy, he was the *Lead Game Designer* on titles that include the mobile hit, World of Warriors. This gained an Apple's Editor's Choice Award and scaled the charts to the No. 1 game position in most major markets.

"I only hope that we never lose sight of one thing — that it was all started by a mouse."

- Walt Disney

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