

Puzzle Report

Competitive Research and Actionable Product Recommendations

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FEBRUARY

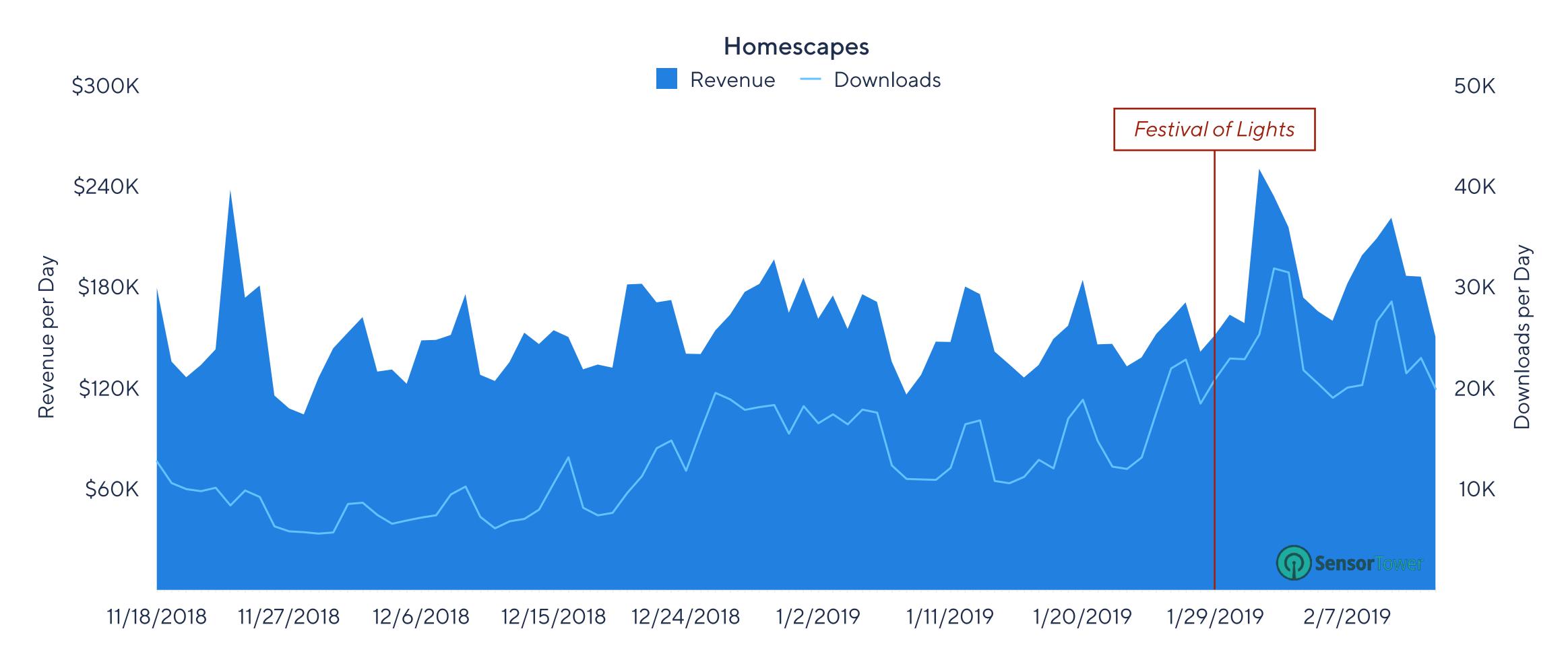
2019

REVENUE DRIVERS

CHALLENGE EVENTS

REVENUE ANALYSIS

Homescapes debuted *Festival of Lights* on 1/29/2019 ... contributing to a +30% WoW revenue spike. Downloads also increased +39% WoW during that same period.



Graph data is iOS U.S. only

FEATURE TEARDOWN

Festival of Lights is a level-based challenge event. Players use a new currency, Tickets to unlock event levels. To drive revenue, a sales bundle including Tickets was released.

Feature Details

- Tickets are a temporary currency specific to this event (1).
- Players amass *Tickets* by collecting the daily bonus, completing event and game levels, and purchasing with coins (2).
- Players spend *Tickets* to unlock event levels (3).
- Completing event levels awards coins and additional *Tickets* (4).
- An event progress bar awards boosts and custom decorations (5).
- A sales bundle was released with coins, unlimited lives, boosts, and *Tickets* (6).

Report References

- Event-Specific Currency in the <u>2/18 Puzzle Report</u>
- Prestiging in the 3/18 Puzzle Report
- Time-Based Coin Sinks in the 4/18 Puzzle Report

Related Features

- <u>Halloween</u> in Homescapes
- Flower Festival in Fishdom
- <u>Limited Time Challenges</u> in Home Design Makeover!













EXPERT INSIGHTS

Use event-specific currency to decrease wallets, drive revenue, and limit economy-inflation risks. Either remove the new currency post event ... or, if planning to keep the new currency in the game, limit the ongoing maintenance costs.

Product Council Insights

- Test different amounts of daily, free event-currency to determine the optimal amount for adoption and spend (1).
- Offer multiple rewards with an upgrade reward that players unlock by either watching an Ad or spending more, similar to the main gameplay choice system (2).
- Add new expansion areas with new events so players can see all the items they have earned during the event. See Matchington Mansion's Snowy Cabin as an example (3).
- Limit the currency-conversion back to the primary currency to deflate wallets post-event.
- Understand the full cost of a separate currency with both the initial development as well as future maintenance costs ... which can be material if the currency remains in the game.
- Give players enough time to fully indulge in their unlimited lives reward. Giving too little time can frustrate players and limit the value generated from the engagement boost associated with unlimited lives.





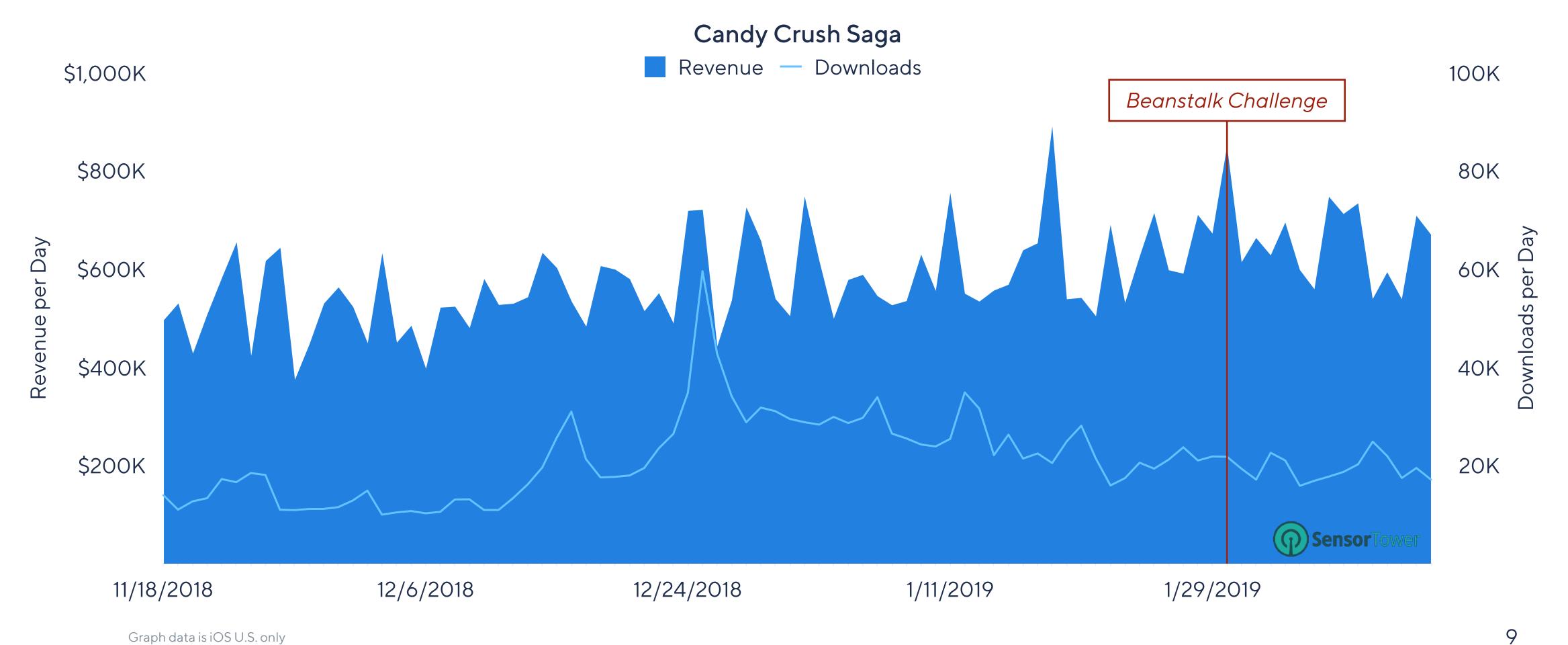




MINI-GAME EVENTS

REVENUE ANALYSIS

Candy Crush Saga's event *Beanstalk Challenge* has been a regularly-released event since September. On 1/30/2019, there were five events released ... but Beanstalk Challenge was the only one-day event released, helping to drive revenue +23% WoW for that day.



FEATURE TEARDOWN

The Beanstalk Challenge is a mini-game that players progress along by completing pick'em bonuses. After each pick'em, players have the option to quit and collect or risk it for more.

Feature Details

- Players are awarded a free *Beanstalk Challenge* each day and can purchase more plays with *Gold Bars* (1).
- To advance, players choose one of five Flowers (2).
- Four of the Flowers contain boosts. One Flower is a Troll (3).
- If a boost is selected, players may claim their rewards and quit or pick again (4).
- If the *Troll* is selected, all the rewards are lost (5).
- Players can spend *Gold Bars* to continue their play. The cost to continue scales up as players progress (6).

Report References

- Re-Skinnable Mini-Games in the 2/18 Casino Report
- Deal or No Deal on Retention Bonuses in the 10/17 Casino Report

Related Features

- Tower of Fortune Update in Angry Birds 2
- Mr. Snappy's Garden in Candy Crush Saga
- Winning Streak in POP! Slots (Casino)













EXPERT INSIGHTS

Due to the success of this feature in Candy Crush Saga and Angry Birds 2 (*Tower of Fortune*), consider investing in a more involved feature with additional functionality and design.

Product Council Insights

- To thrill players who like to gamble, add a 'Deal or No Deal' mechanic right after a purchase. Immediately post-purchase, players *feel* the stakes are high when risking newly-purchased currency (1).
- Add checkpoints (like in Who Wants to be a Millionaire) to push players further and incentivize more risks ... since the cost of failure will be less extreme with checkpoints.
- Showcase the larger prizes that players can win along the progression. See the <u>Festival of Lights</u> example earlier in this report (2).
- Consider releasing this mechanic as a permanent feature, like Angry Birds 2's *Tower of Fortune* (3).



Click here for more information in the Feature DB







LEVEL MECHANICS

NEW LEVEL DESIGNS I

Cookie Stack in Homescapes

• Three adjacent matches or boost activations break apart a *Cookie Stack* and scatter three *Cookies* across the board for level collection goals (1 & 2).

Product Council Insights

- This mechanic burns a lot of moves to activate and later hunt for Cookies.
- For difficult levels, place the *Stacks* in bigger groups to form a 'Dig through' effect ... or in several separate, hard-to-reach areas in combination with other obstacles.

Bubblegum in Candy Crush Friends Saga

- After four adjacent matches or boost activations, a *Bubblegum* hazard explodes, removing a 3 x 3 square of pieces from the board (3 & 4).
- Note: This mechanic was identified in YouTube videos only. The official name is not yet released by King.

Product Council Insights

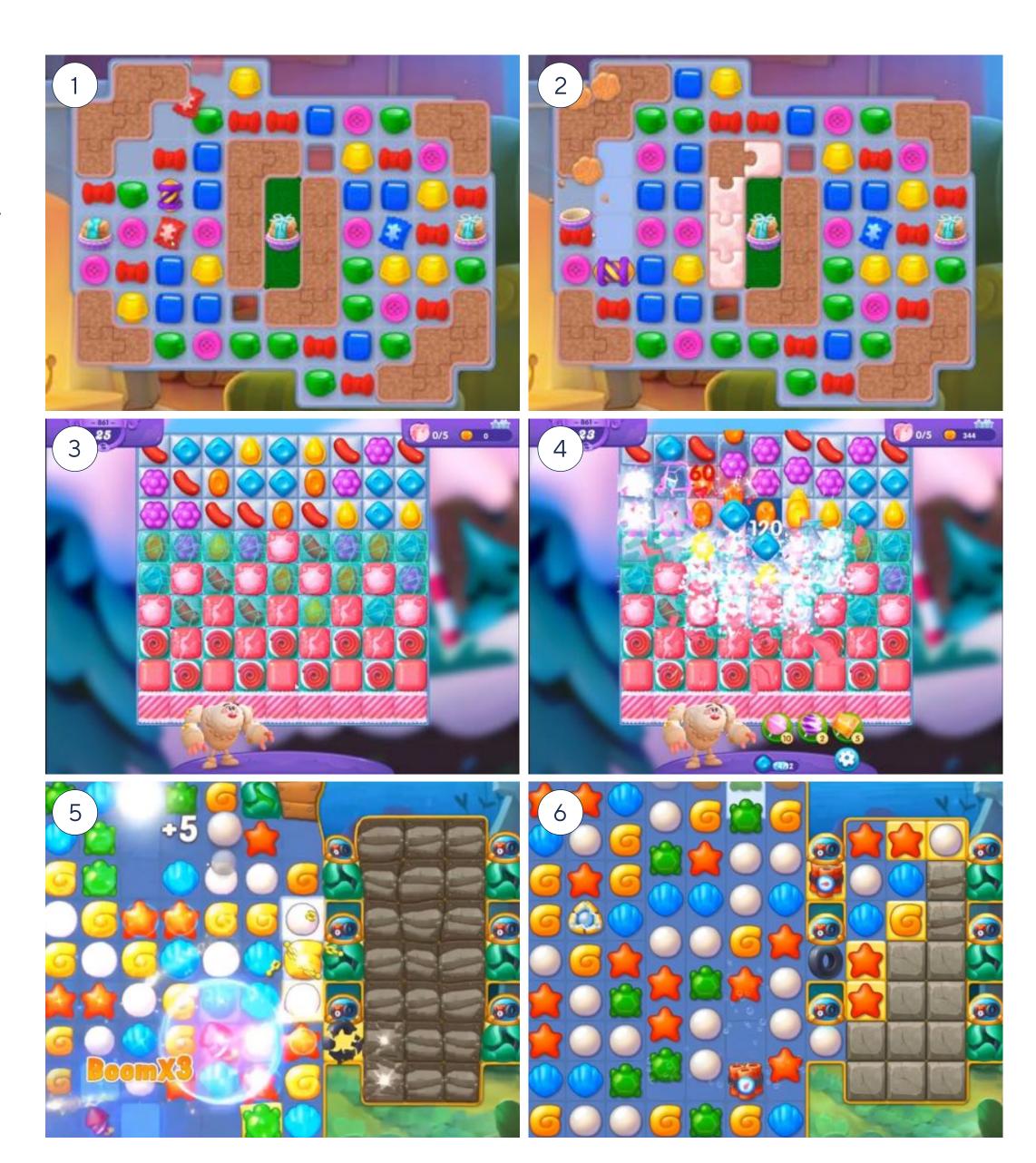
• This is a rewarding mechanic that acts as an obstacle at first ... but once unlocked, becomes a boost by exploding the surrounding cells.

Water Lilies in Fishdom

• Consecutive, adjacent matches and boosts open a *Water Lily*, which may contain pieces, boosts, or other elements. If consecutive matches are not made, the *Water Lily* will reset (5 & 6).

Product Council Insights

• Good mechanic for creating hard, to extremely hard, levels ... depending on the number of *Lilies* and their location on the board.



NEW LEVEL DESIGNS II

Ice Cream Scoops in Cookie Jam

- Matches adjacent to an *Ice Cream Scoop* cause colored *Syrup* to appear on the *Ice Cream Scoop*, which is removed with a second adjacent match of the same color (1).
- Note: This mechanic was identified in YouTube videos only.

Rainbow Bomb in Best Fiends

• This is an upgrade to *Fiend Karma's Cross Bomb*, which clears pieces in horizontal and vertical directions. *Rainbow Bombs* can be triggered by making link matches with pieces of any color (2).

Hearts and Pink Converters in Best Fiends

• New pink, valentine *Heart* level pieces with associated *Converter* pieces (3).

Pink Area Bomb in Best Fiends

• Reskin of Best Fiends' Area Bomb for new, pink Heart level pieces.

Pink Cross Bomb in Best Fiends

• Reskin of Best Fiends' Cross Bomb for new, pink Heart level pieces (4).

Hearts in Charm King

• New holiday-themed *Heart* level pieces (5).

Teddy Bears in Charm King

• New holiday-themed *Teddy Bear* level pieces (6).



MARKET WATCH

1/1/19 - 1/31/19

NOTABLE RELEASES I

App	All Videos/Images	Specific Video/Image	Description
Candy Crush Soda Saga	<u>Episode Race</u>	<u>Race</u>	Tournament event with leaderboard and prizes based on completing levels and episodes before other players
Gardenscapes	Redecoration Update	<u>Redecoration</u>	Players can now change custom design items for free
Angry Birds 2	<u>Hat Vendor</u>	<u>Hat Purchase</u>	Event allowing players to use <i>Black Pearls</i> to purchase <i>Hats</i> which are required to participate in a related adventure event (1)
Panda Pop <u>Boss Raid</u> <u>Collectir</u>		Collecting Water Balloons	Team tournament event in which players collect Water Balloons during level play to fill a meter to defeat an event Boss. Rewards are based on number of Water Balloons contributed (2)
Disney Emoji Blitz	<u>Series Boxes</u>	<u>Series III Box Purchase</u>	New purchasable collection of <i>Boxes</i> that contain <i>Emojis,</i> which were previously awarded from <i>Gold Box</i> draws (3)
	<u>Jam City Notice</u>	<u>In-Game Notice</u>	In-app announcement of Jam City's takeover of Disney Emoji Blitz







NOTABLE RELEASES II

App	All Videos/Images	Specific Video/Image	Description			
Bricks n Balls	<u>Treasure Hunt</u>	<u>Treasure Hunt Levels</u>	Players beat maps with one life to receive <i>Chest</i> Rewards (1)			
Matchington Mansion	<u>Snowy Cabin</u>	Snowy Cabin Intro	Custom design event where players must complete the renovation to keep the expansion area			
Pet Rescue Saga	ı e Saga <u>Special Challenge</u> <u>Challenge Level</u>		Players earn a mystery prize for each <i>Star</i> won on a designated level (2)			
Wonka's World of Candy	<u>Master Chocolatier</u>	End of Levels	Feature for players who have completed all main map levels			
	Wonkavision AR Mode	<u>Wonkavision</u>	Special augmented reality mode added, allowing players to decorate using miniatures. Players can share photos and videos of their decorations (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 helps the world's most prominent companies navigate their most pressing brand and communications challenges by conducting market research to understand how people think, form habits, and make choices.

Quadrant Strategies employs a wide range of quantitative and qualitative methodologies across a full range of audiences, from broad customer audiences to the most elite public policy and financial decision makers around the world.

Beyond the research itself, Quadrant Strategies regularly conducts ideation sessions, war-gaming exercises, and implementation workshops in client engagements.

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 Expert 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.

PLAYER MOTIVATIONS

Understand emotional motivations to generate growth. The most impactful features are those that trigger strong, positive emotional responses.

"Most companies segment their markets by customer demographics or product characteristics and differentiate their offerings by adding features and functions. But the consumer has a different view of the marketplace. She simply has a job to be done and is seeking to 'hire' the best product or service to do it. Jobs aren't just about function—they have powerful social and emotional dimensions." - Clayton Christensen, co-author of <u>Jobs to be Done</u> framework

To create new innovations, focus on the emotional jobs that people want to accomplish. This is very applicable to our industry, where there is little practicality about playing a non-paying casino game. Therefore, we have to know the emotional drivers of our players.

Liquid and Grit has formulated key player motivations.

Player Emotional Motivations

- Achieve Players who want to accomplish a goal
- Thrill Players who want the excitement and stress of taking a risk
- Surprise Players who want to uncover an unknown, see new opportunities, and try new things
- Awe Players who want to experience quality production value
- Flow Players who want to get into the zone and escape
- Relationship Players who want to connect with other people
- <u>Association</u> Players who want to identify with something for familiarity and comfort
- Ownership Players who want to have things belong to them
- Create Players who want to be creative and produce something

PUZZLE PERSONAS

	Stealthy Steve	Friendly Fran	Destructive Derek	Adventuring Adrian	Prospecting Polly	Daring Dan	Gathering Grace
Gender	76% male	72% female	73% male	55% male	78% female	69% male	71% female
Mean age	31.6	40.8	37.8	31.5	42.3	39.6	45.3
Highest preference(s)	Assault	Care and Manage	Manage	Journey	Journey and Coordinate	Assault and Coordinate	Coordinate
Lowest preference(s)	Care	Assault	Care	Manage and Care	Assault and Care	Journey and Care	All except Coordinate
Likes	Stealth, strategy, being the protagonist, skill progression, and exploration	Befriending non- playable characters (NPCs), creating an avatar, skill progression, and city or village handling	Strategy, city or base construction, and large-scale handling of NPCs	Creating an avatar, skill progression, being the protagonist, exploration and secrets, and befriending NPCs	Collecting Rare Items and treasures, exploration, skill progression, and tile matching	Racing, explosions, and stealth	Tile matching, platforming, and collecting <i>Rare</i> <i>Items</i>
Dislikes	Rhythm mechanics and pet training	Killing, war, weaponry, and explosions	Theft, illegal activities, stealth, retreating, and rhythm mechanics	Racing, sports, tile matching, instruments, dancing, and pet training	Theft, explosions, and retreating	No strong dislike for any particular mechanic	Killing, theft, destruction, and war

"Disneyland will never be completed. It will continue to grow as long as there is imagination left in the world."

- Walt Disney

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