



Puzzle Report

Competitive Research and Actionable Product Recommendations

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OCTOBER

2019

REVENUE DRIVERS



PUZZLE > FEATURES > NOTICES

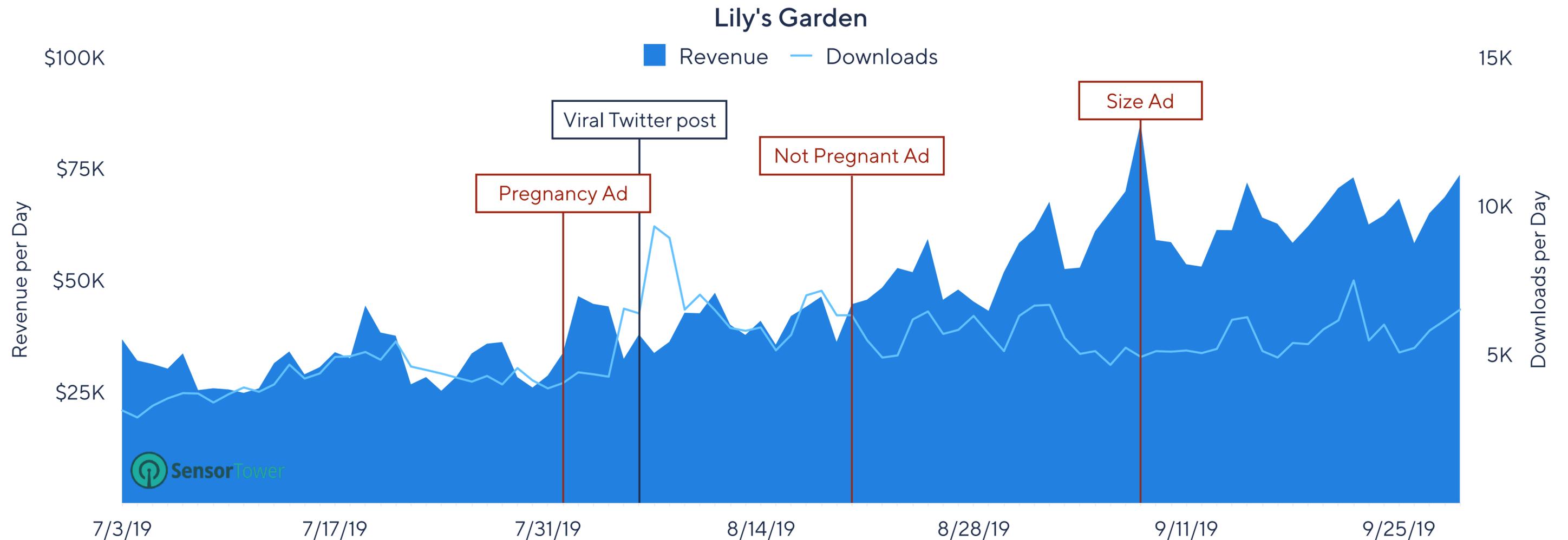
CONTROVERSIAL AD CAMPAIGNS

Ad Campaign in *Lily's Garden*

REVENUE ANALYSIS

After the release of the first *Pregnancy Ad*, *Lily's Garden's* revenue was +11% and downloads +67% WoW. Revenue and downloads continued climbing to +21% and +50% 2Wo2W after the Twitter post went viral. *Lily's Garden* was not featured on iOS during this time.

Releases
8/4-8/5 Sunflower level event
8/5
• \$11.99 Special Offer moved +1 to #5
• \$6.99 Special Offer moved +1 to #8
8/6-8/7 Flower Gathering competition event
8/6-8/7 Hot Streak challenge event
8/7 The app reached 5 million downloads (FB)



Headline and graph data is iOS U.S. only.
2Wo2W = Two weeks over two weeks.

FEATURE TEARDOWN

The ad shows Lily's boyfriend leaving her after she tells him she is pregnant. This ad went viral on Twitter.

Pregnancy Ad Details

- The ad opens with Lily looking excitedly at a positive pregnancy test (1).
 - When she tells her boyfriend, Blaine, he spits out his coffee (2).
 - The ad cuts to Blaine riding away on a scooter (3).
 - The final shot shows Lily crying as the game's title pops up (4 and [video](#)).
- A tweet about the ad has 280K likes, 76K retweets, and 11M views (5 and [Twitter](#)).

Not Pregnant Ad Details

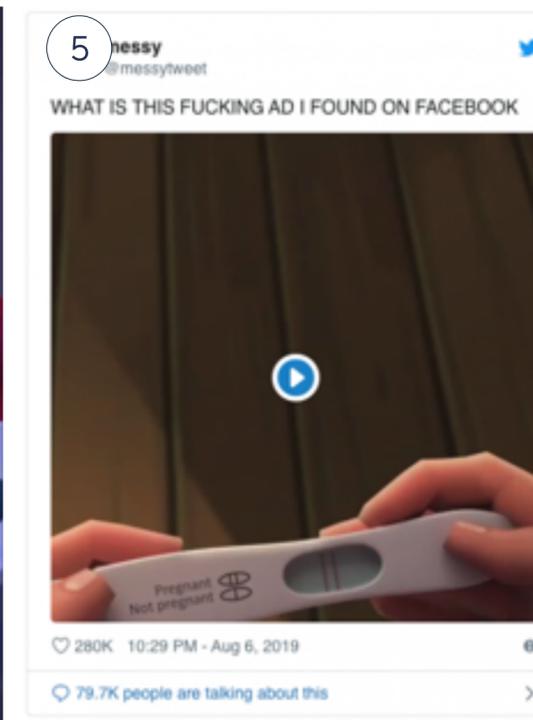
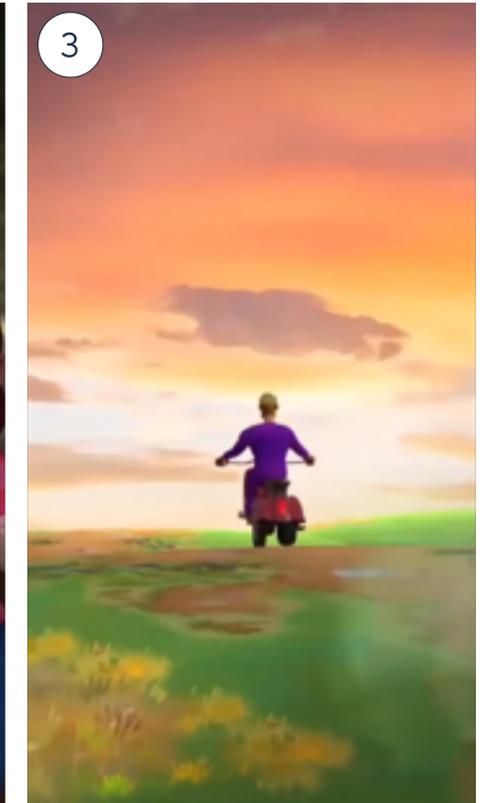
- The follow-up ad reveals a plot twist on the pregnancy ad.
- Lily smirks, wipes the fake positive line off the pregnancy test, twirls the test into her pocket, and throws a box labeled "Blaine's stuff" out into the yard ([video](#)).

Size Ad Details

- Lily jokes with a friend about Blaine's lack of size (6 and [video](#)).

Quickly find more information in the Feature Database

- See the [Ad Campaign](#) Library for more images and videos.

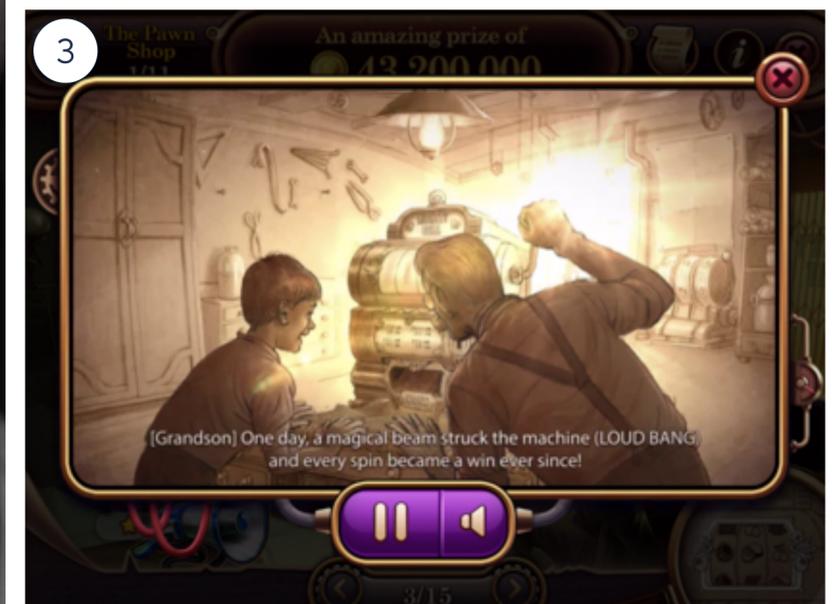


PRODUCT INSIGHTS

Test controversial ads to create online buzz. Boost virality with paid influencers. To make the in-game story more enjoyable, add quality audio narration in addition to sub-titles.

Product Recommendations

- **Use controversial causes in ads to generate virality.** The most talked about marketing campaign in 2018 was Nike's "Believe in Something" ad, which generated 8M conversations online ([source](#)) and helped to increase Nike sales by 80% YoY during Labor Day weekend ([source](#)). The ad featured football quarterback [Colin Kaepernick](#), who kneeled during the national anthem with the text "Believe in something. Even if it means sacrificing everything"(1).
- **Consider creating ads that are not directly related to the game.** Nike's "Believe in Something" ad is about standing up for your beliefs—not Nike apparel. Do not, however, show gameplay that is not in the game ([source](#)).
- **Include subtitles, use a headline, or make the story highly visual.** 92% of videos are watched on mute ([source](#)), so ensure ads can be understood without sound.
- **Boost organic virality with paid influencers.** Next Gaming hired [Lele Pons](#), a YouTuber with 15M subscribers, to drive traffic to *The Walking Dead: No Man's Land*. Pons' video generated 13M views ([video](#)). In 2014, Seriously hired [Rachel Levin](#) to help market *Best Fiends* in a video that now has nearly 12M views ([video](#)).
- **Tell stories economically by using images instead of videos.** Both *Raid: Shadow Legends*' story ([video](#) and 2) and *Caesars Slots*' event "The Always Win Machine" ([video](#) and 3) use images instead of full-length videos.



PUZZLE > EVENTS > CUSTOM DESIGN

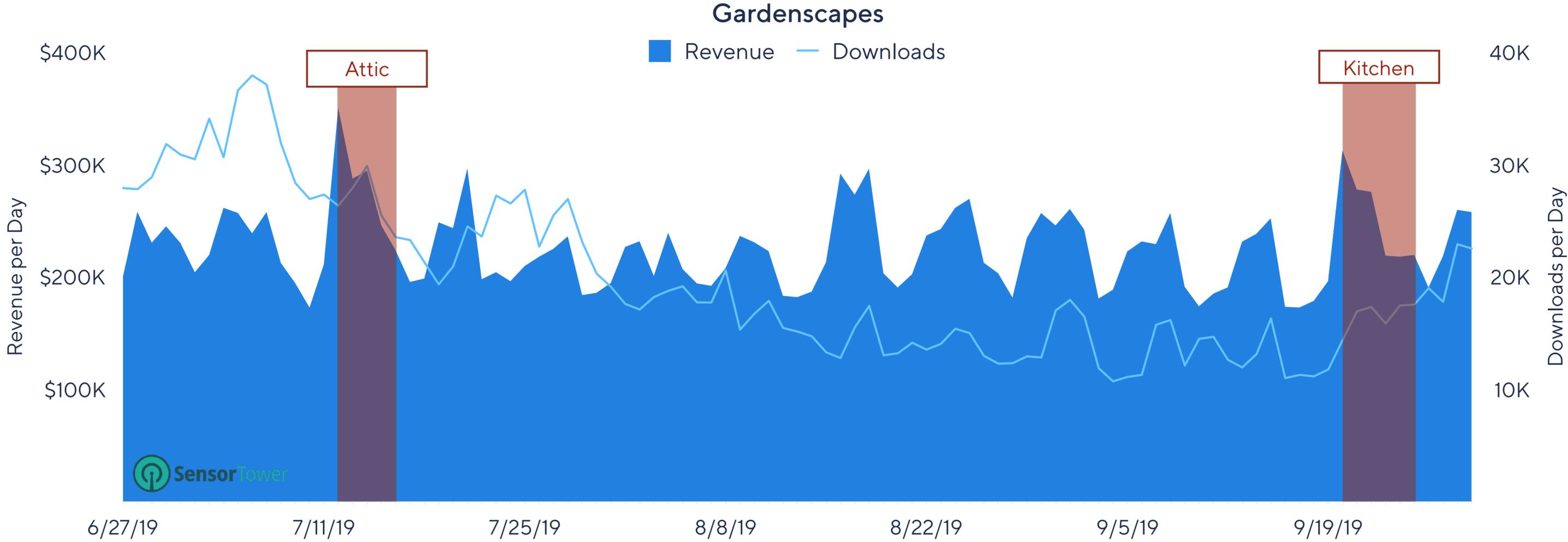
CUSTOM DESIGN EXPANSION EVENTS

Kitchen in *Gardenscapes*

REVENUE ANALYSIS

During *Gardenscapes*' release of the Attic event, revenue was +16% and downloads -21% WoW. After the release of the Kitchen event, a reskin of Attic, revenue was +19% and downloads +37% WoW.

Releases	
9/19	Golden Cup competition feature (end of all levels)
9/19-9/22	Bumper Crop competition event
9/19-9/22	Magic Hats challenge event
9/20-9/25	Kitchen custom design event
• 7/12-7/16	Attic custom design event (first release)
9/20-9/22	Scrumptious Sale sale event
9/20-9/22	Team Chest club event
9/20-9/22	First Time's a Charm challenge event



Headline and graph data is iOS U.S. only.
WoW = Week over week.

FEATURE TEARDOWN

This custom design event lets players earn items and permanently unlock an expansion area. Players must complete levels to finish the new kitchen in order to keep it.

Details

- The kitchen event is available for five days (1).
- During the event, players beat levels to earn tickets (2).
- Tickets are used to purchase decorations for the kitchen (3).
- Players can customize the color and style of the decorations (4).
- Completing the renovation awards boosts and permanently unlocks the room (5 and 6).

Quickly find more images and videos

- See the [Kitchen](#) and [Attic](#) Libraries for more images and videos.



ROADMAP DATA

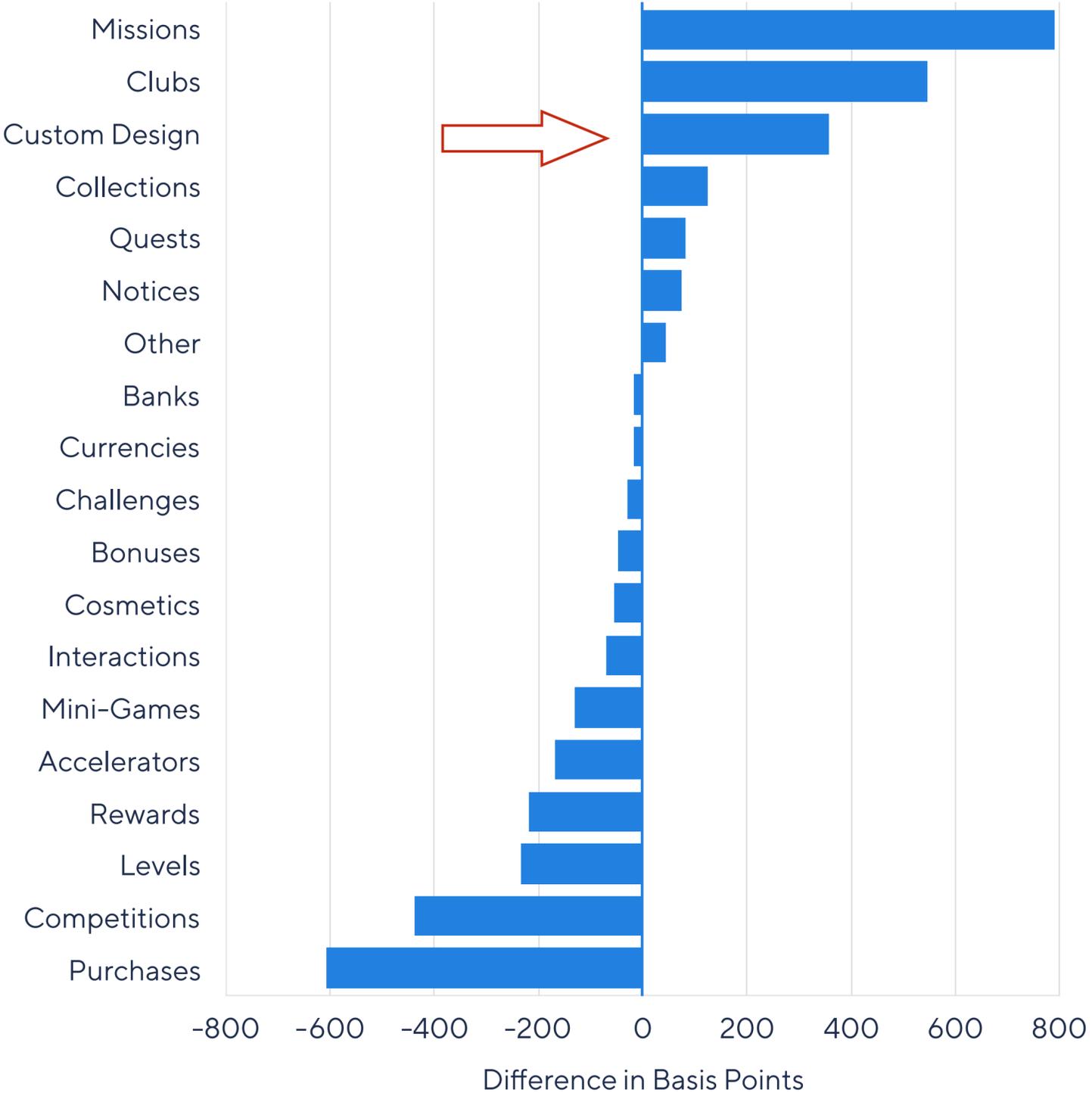
In 2019, the 15 highest-grossing puzzle apps have increased their investment in custom design events by 357 basis points YoY (see graph). *Fishdom*, *Gardenscapes*, and *Matchington Mansion* have all added expansion areas to their custom design events (see table).

Details

- *Matchington Mansion* (11 events), *Fishdom* (6 events), *Gardenscapes* (4 events), and *Homescapes* (4 events) have released the most custom design events.
- *Homescapes* has not released any custom design expansion events in 2019.

App	Custom Design Events	Custom Design Expansion Events
<i>Fishdom</i>	Flower Festival (8/10/17)	Days of Summer (7/17/19)
<i>Gardenscapes</i>	Easter Collection (8/11/19)	Attic (7/12/19)
<i>Matchington Mansion</i>	It's Halloween (10/27/18)	Snowy Cabin (1/19/19)

Shift in Event Investments: Top 15 Puzzle Apps



PRODUCT INSIGHTS

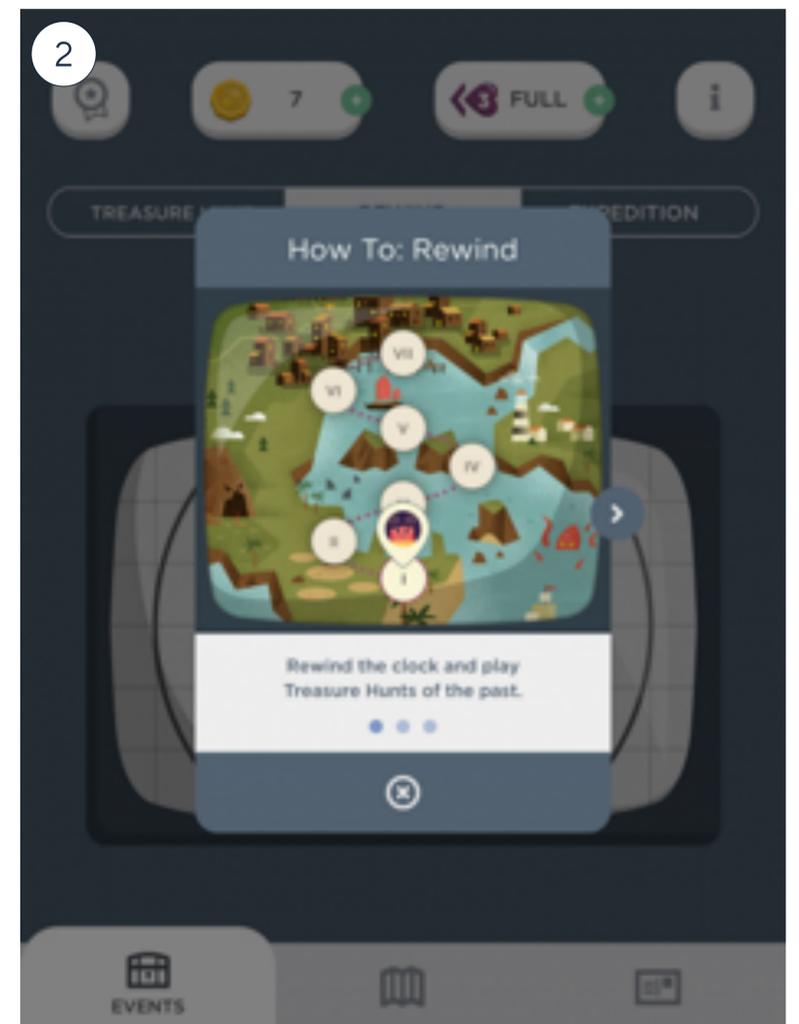
Unlock more content for highly-engaged players to increase the event's engagement. Then, trigger a pay-to-obtain option to drive revenue.

Product Recommendations

- **Allow players to unlock unfinished expansion areas from previous events ... after completing the current event's area.** *Matchington Mansions'* new custom design event, [Collect Light Bulbs](#), gives players another chance to complete past expansion areas once they have cleared the most recent event's content (1).
- **Offer an IAP that lets players pay to obtain the area towards the end of the event.** This way, players who have a fear of missing out, but do not have the time to complete the levels, can pay to complete the area. According to research, "Fear of missing out was indeed related to greater engagement with Facebook at key times in the day" ([source](#)). Towards the end of *Homescapes'* [William's Birthday](#) event, players can purchase bundles to help them complete the event's content ([image](#)).
- **Boost the appointment mechanic with a sense of urgency by adding negative consequences.** For instance, in *Gardenscapes'* kitchen, if a player loses three levels in a row, the kitchen could incur water damage. In *Farmville*, players have to wait x amount of time to grow a crop but have to harvest the crop before 2.5x time elapses, at which point the crop dies (e.g., a crop that takes 8 hours to grow will wither after $2.5 \times 8 = 20$ hours).
- **Use event-specific lives and currencies to reduce the risk of economic inflation.** In *Two Dots'* [Daily Quests](#), players can replay old map areas using event-specific lives. Completing an unfinished map awards prizes and collectibles, while re-completing a finished map ranks up a medallion (2 and [Quest Mastery Wiki](#)).

Contact us for more information

- Email [support](#) to find out more about this event system.



IN SOFT LAUNCH



PUZZLE > GAMES

MANOR MATTERS BY PLAYRIX

- **Soft Launch:** 9/25/19
- **Countries:** Canada, Great Britain, and Australia

APP TEARDOWN

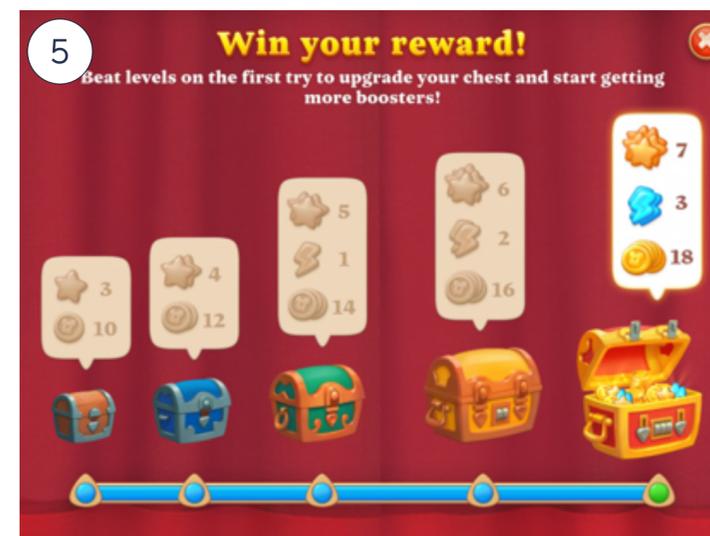
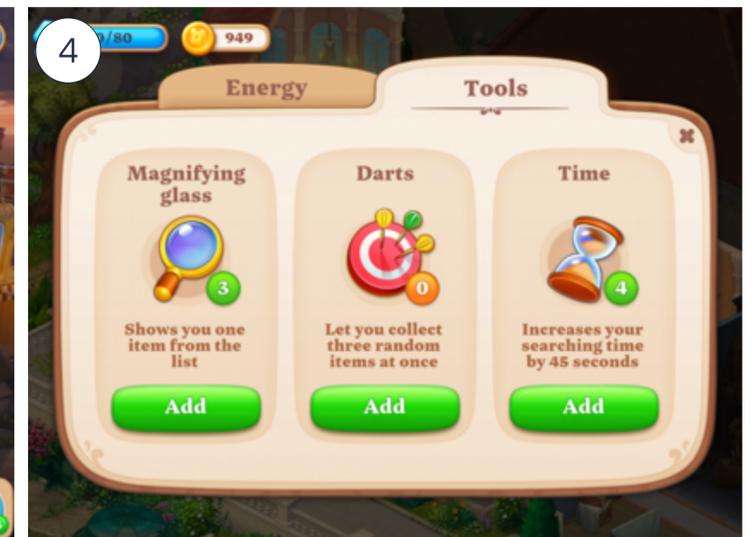
This app combines hidden object levels and custom design tasks with a number of modes, rewards, and boost mechanics.

Details

- **Energy:** Players receive one unit of energy every two minutes.
 - Each level costs 10 energy.
 - Energy is awarded for completing levels.
 - Players can purchase additional energy from the store (1).
- **Tasks:** Beat hidden object levels to earn stars.
 - Stars are used to complete custom design tasks (2).
- **Modes:** Hidden object levels are completed in different modes.
 - Silhouette mode shows items as silhouettes instead of words (3).
 - Additional modes are unlocked as players progress.
- **Tools:** Players can purchase three in-level boosts from the store (4).
- **Chest Rewards:** Reward chests improve if players maintain a first-try win streak (5).
 - Upgrades reset when players fail to beat a level on the first try (6).

Readily available information online

- This app is similar to Jam City's *Vineyard Valley* ([June 2019 Puzzle Report](#)) and WhaleApp's *Hidden Hotel: Miami Mystery* ([deconstruct](#)).
- Go [here](#) to see more features of *Manor Matters*.



LEVEL MECHANICS



NEW LEVEL DESIGNS I

Eleanor – Best Fiends

- This new character has a special ability that blows up nine blocks in a plus shape (1).

Musketeer Lapoleon – Best Fiends

- Players unlock this variant of an existing character by completing the Three Musketeers event.
- Musketeer Lapoleon has a +50 attack boost and a bomb that blows up 12 surrounding blocks (2).

Racer Tantrum – Best Fiends

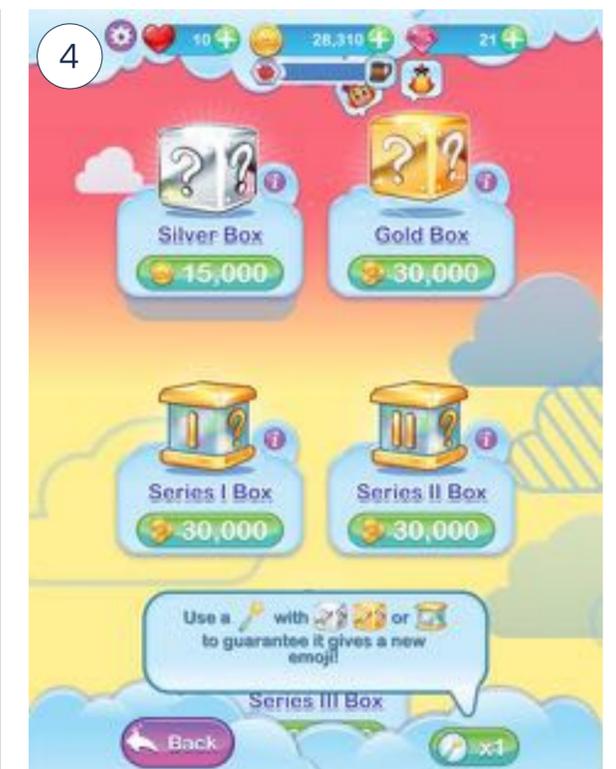
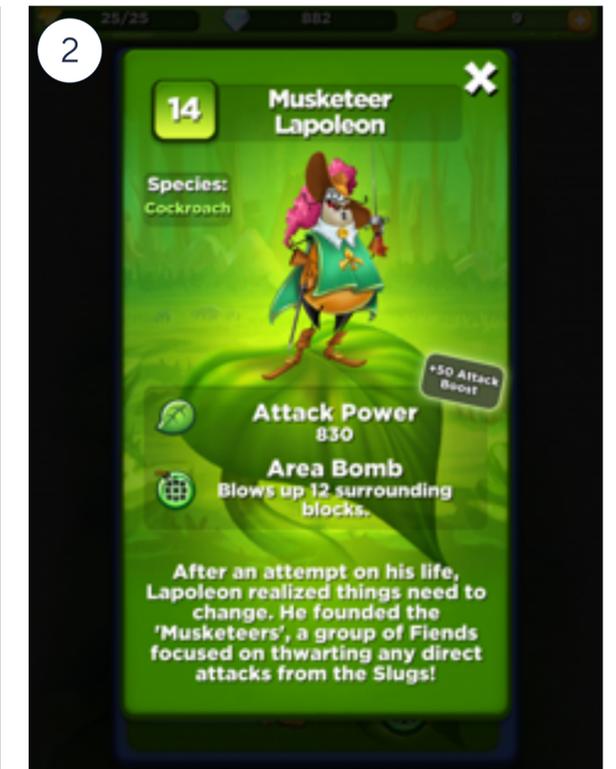
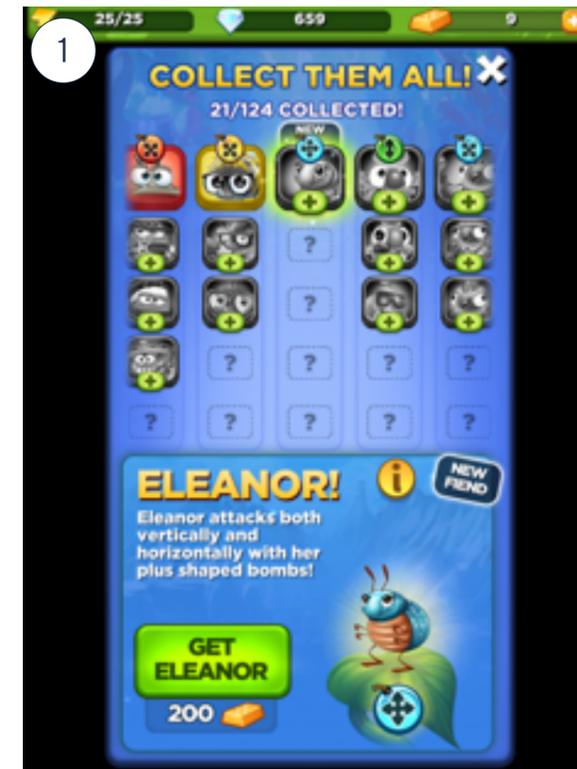
- Racer Tantrum, a variant of an existing character, is awarded for completing the Super Sale Race event.
- Racer Tantrum has a +50 attack boost and a bomb that blows up 9 blocks in a vertical column (3).

Magic Wand – Disney Emoji Blitz

- Players can use this new item on any mystery box to guarantee that the mystery box awards a new emoji (4).

Mary Poppins – Disney Emoji Blitz

- Players make matches and activate power-ups to collect Mary Poppins emojis and fill a meter.
- Filling the meter causes Mary Poppins to fly across the board and randomly carry away other emojis (video).



NEW LEVEL DESIGNS II

Water Buckets – *Homescapes*

- Water buckets are surrounded by water that players must clear by making matches and activating power-ups.
- Once all the water is gone, water buckets can be removed by making an adjacent match.

Light Bulbs – *Lily's Garden*

- Each bush has 10 light bulbs (1).
- Light bulbs turn on each time an adjacent tile is removed with a match or a power-up (video).
- Turning on all 10 light bulbs removes the bush.
- Eliminating all bushes completes the level.

Lanterns – *Lost Island Blast Adventure*

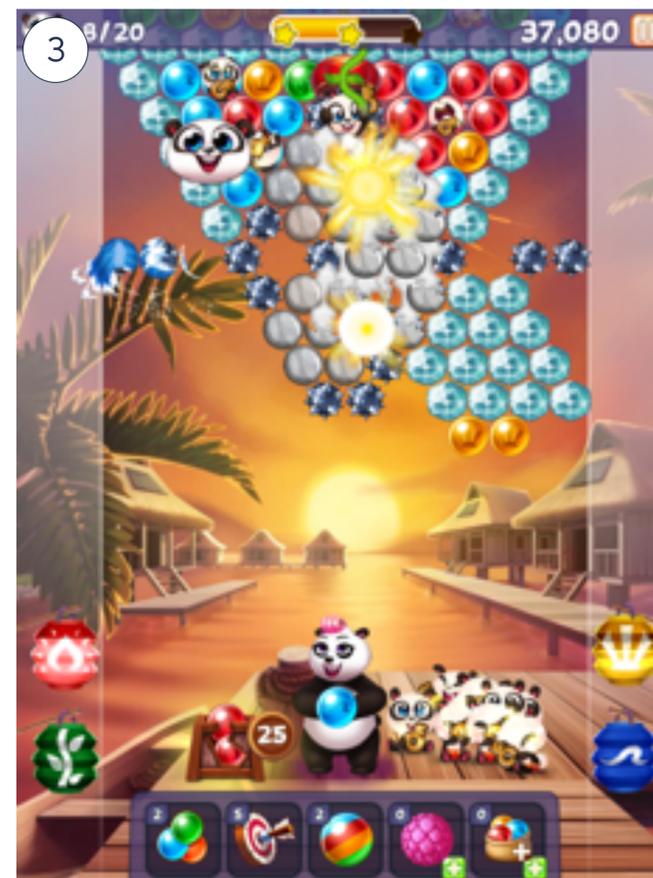
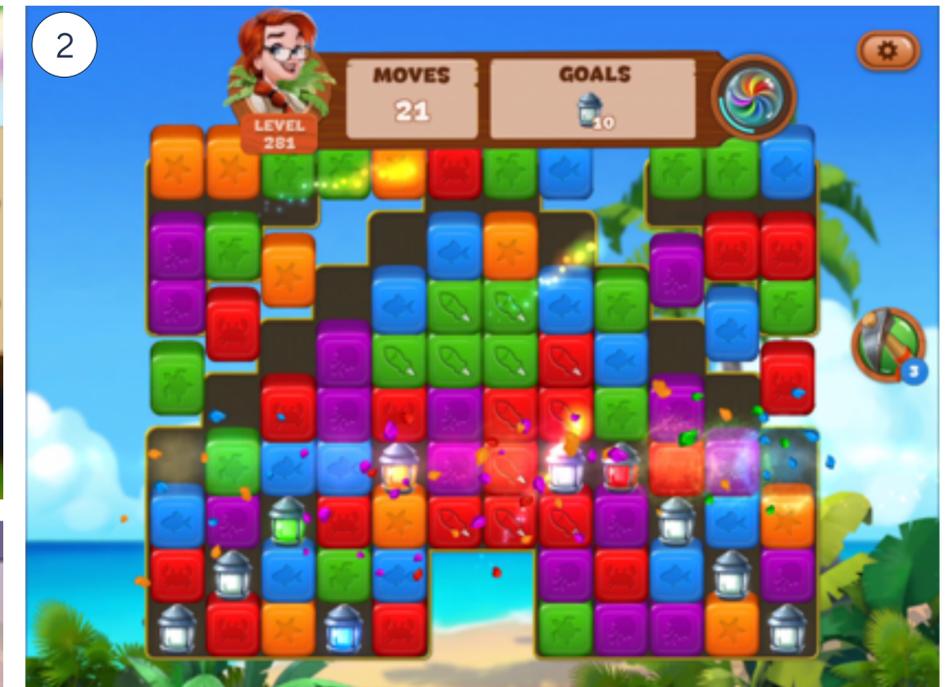
- Players light lanterns by matching adjacent tiles.
- The lantern's light turns the color of the matched tiles (2).
- Lit lanterns are collected by matching them with tiles of the same color (video).

Super Sun Bubble – *Panda Pop*

- Popping a Super Sun Bubble pops all surrounding bubbles (3).

Frog – *Solitaire Grand Harvest*

- The frog can block any card with a lily pad icon.
- Each turn, the frog jumps to a different card with a lily pad (4 and video).

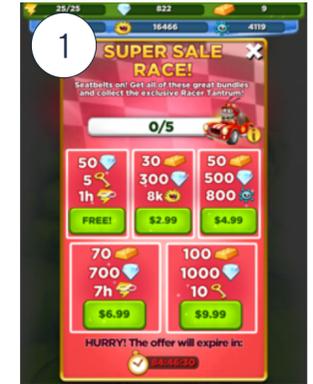


MARKET WATCH



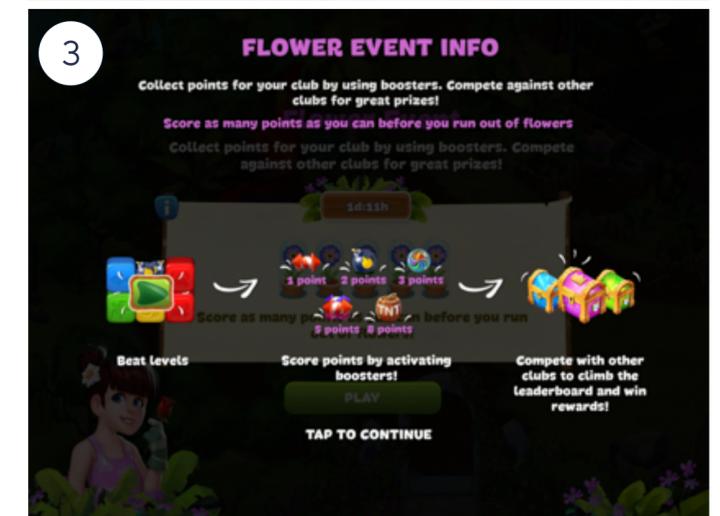
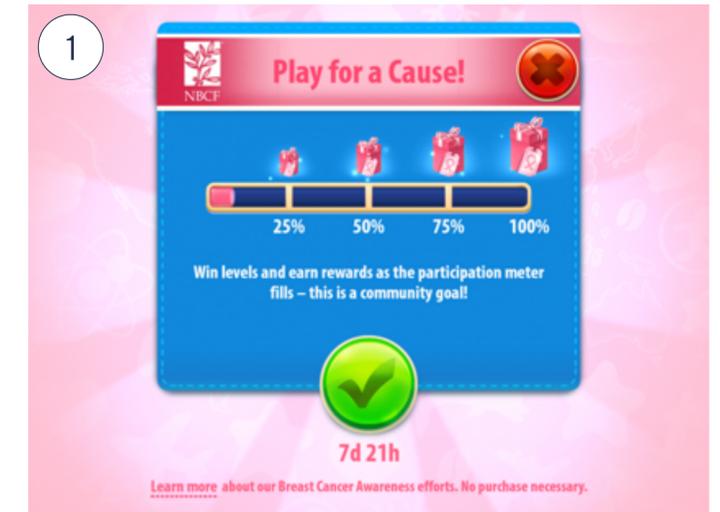
NOTABLE RELEASES I

App	Library	Description
Best Fiends	Super Sale Race purchase event	<ul style="list-style-type: none"> • Purchasing all five bundles before time expires unlocks an exclusive character (1). • The first bundle is free; the next four range from \$2.99 to \$9.99.
Cookie Jam	Stamp Card purchase event	<ul style="list-style-type: none"> • Players earn a stamp for every \$2 spent in the store (2). • Five stamps complete a tier and unlock a reward. • Completing the third and final tier unlocks an exclusive pet costume.
Disney Emoji Blitz	Gaston's Hunt for Love collection event	<ul style="list-style-type: none"> • This month-long event includes a series of limited-time mission events. • Completing missions awards rose tokens that fill a meter (3). • Filling the meter awards prizes at eight different tiers.
Gardenscapes	The Big Race mini-game event	<ul style="list-style-type: none"> • Players ride scooters to collect flowers while avoiding obstacles (4). <ul style="list-style-type: none"> • Races cost batteries that are awarded for completing levels. • Players must collect 80 flowers to qualify for the leaderboard. • Avoiding all obstacles doubles the number of flowers collected.



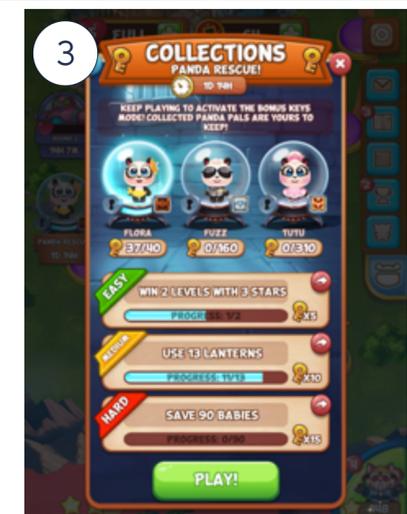
NOTABLE RELEASES II

App	Library	Description
Gardenscapes	Golden Cup competition feature	<ul style="list-style-type: none"> This event is only for players who have completed all available levels. Players replay levels to collect cups and rank on a leaderboard. The competition ends and players' cup counts reset when new levels are released.
Gummy Drop	Play for a Cause club event	<ul style="list-style-type: none"> This game vs. game event raises money for the Breast Cancer Foundation. Players compete to increase the total playtime for their chosen game. Players earn community awards for reaching milestones at 25%, 50%, 75%, and 100% increases (1).
Lost Island Blast Adventure	Challenges challenge feature	<ul style="list-style-type: none"> Players complete challenges to earn a soft currency called challenge points. Challenge points can be used to purchase event-exclusive booster packs (2). Players cannot have more than 100 challenge points at any time. Booster packs in the store are refreshed every 24 hours.
	Flower Event club event	<ul style="list-style-type: none"> Players activate boosters within levels to earn points for their clubs. Bigger boosters are worth more points (3).



NOTABLE RELEASES III

App	Library	Description
Matchington Mansion	Collect Light Bulbs custom design event	<ul style="list-style-type: none"> • Players can return to uncompleted rooms from previous events. • Players beat levels to fill a meter, earning light bulbs and reward bundles (1). • Light bulbs can be used to purchase decorations for a room. • Completing a room unlocks the next room. • Players keep completed rooms permanently.
	Teams club feature	<ul style="list-style-type: none"> • Players can form teams that are ranked based on their level (2). • Team members can request and send lives. • Team custom decoration events, like a poolside BBQ, are expected.
Panda Pop	Panda Rescue collection event	<ul style="list-style-type: none"> • Players complete challenges to collect keys (3). • Collecting keys unlocks reward bundles and three event-exclusive pandas. • Pandas appear in levels. • Challenges can be skipped with purchasable currency.



Quickly review all features and events

- Filter the [Library Tool](#) by month and year to see all the new releases.



APPENDIX



MECHANICS TAXONOMY

Family	Definitions
Accelerators	Increases the power, impact, or efficiency of play
Banks	Saves a % of spend that can be unlocked later
Bonuses	Free bonuses given to players (e.g., retention or W2E)
Challenges	Players must play, complete, and win
Clubs	A group accomplishing goals or competing with other groups
Collections	A set of items players collect (often for a completion prize)
Competitions	Players competing against other players
Cosmetics	Improvements or updates to the app or a feature
Currencies	Changes to currencies, economies, stores, and items
Custom Design	Options to customize the look
Expansions	Additional rooms, worlds, play modes, VIP lounges, etc.
Flows	Specific flows, like the NUX, ratings, and surveys

Family	Definitions
Hazards	Level elements/blockers that increase difficulty
Interactions	Any social feature with direct or indirect interaction
Leaderboards	Stand-alone leaderboards
Levels	Anything to do with leveling
Mini-Games	Smaller, shorter games within a game (e.g., scratcher cards)
Missions	A linear set of tasks that players must accomplish
Notices	Feature or product announcements
Other	Miscellaneous features and outliers
Profiles	Related to a player's setup, profile, settings, and controls
Purchases	Anything to do with purchases
Quests	Completing tasks to progress along a map or map-like feature
Rewards	Any reward players receive for engagement or spend (other than the bonuses family)

UTILIZE L&G'S TOOLS

Uncover new puzzle trends and understand competitor investments with Liquid and Grit's tools and capabilities. Our new Matrix Tool is now live!



DATA TOOL

1. Find new trends using the Data Tool's categorization.
2. Benchmark your app's output against competitors.
3. Export data as a .csv to do more in-depth analysis.



WIKI TOOL

1. Reference all Liquid and Grit's insights.
2. Find and download previous reports.
3. Uncover revenue-driving features from other genres.



LIBRARY TOOL

1. Watch videos to understand animations and flows.
2. Download images to use as design templates and spec references.
3. Check out level-locked machines and features.



MATRIX TOOL

1. Benchmark the features in your app against specific competitors.
2. Find opportunities in the market for your app's growth.
3. Design a new app concept using features inspired by different games.

PUZZLE PERSONAS

Using the motivational buckets developed by Liquid and Grit in partnership with Kinrate Analytics, five distinct puzzle personas emerge: Gamer Gary, Escapist Emily, Trainer Tracy, Challenger Chris, and Casual Carol.

L&G Puzzle Personas

- **Gamer Gary:** This player is a hardcore gamer who is not afraid to spend money on any gaming platform. Relative to other players, this player's strongest motivation is *Engrossment*. He gets immersed in the game world, identifies with the characters, and relates to other players.
- **Escapist Emily:** This persona invests a decent amount of time playing puzzle games and is not afraid to spend money. Games are therapeutic for her in that they reduce negative feelings and make worries more bearable (the motivational bucket *Escape*). She also likes to be social, interact with friends, and participate in group events. In terms of personality traits, she shows a much higher score on *anxiousness/agitation* and lower score on *outgoing/social*.
- **Trainer Tracy:** This is the largest, most frequently female, and oldest player group. She does not spend a lot of money on games. Relative to other players, her motivation is *Utility*, most often in the form of beneficial impacts to her brain. She shows the highest preference towards word puzzles, memory puzzles, mazes, and riddles. She is sometimes unsure if games are worth it. Based on her personality, she is more likely to be *diligent/obligatory*.
- **Challenger Chris:** This player spends the most amount of time playing puzzle games, lots of time playing non-puzzle games, and lots of money—but not as much on F2P games. He is motivated by *Challenge*—he plays to relax, to achieve an objective, and to avoid boredom. He has the highest preference for logical problem solving, in-depth understanding, and thinking outside the box. Challenger Chris is also likely to be *diligent/obligatory*.
- **Casual Carol:** She is younger, spends the least amount of money, and dedicates limited time to puzzle games. She sometimes plays to forget real-life problems and make her own decisions. Her motivational bucket is *Boredom*, and she has a lower score for *curiosity/imagination*.

PUZZLE PERSONAS: FEATURES AND THEMES

- **Gamer Gary, relative to the other personas, enjoys competitive features like arenas, tournaments, and leaderboards.** He also enjoys mini-games. Surprisingly, missions or quests are not his favorite, likely because they do not involve other people. He also enjoys fictive qualities such as story, anime style, and game music. His favorite themes are realism, mystery, and fantasy/sci-fi.
- **Themes are important to Escapist Emily. She uses fantasy, mystery, and realistic styles to get away from the real world.** She also enjoys good music, art, and humor. She does not like leaderboards or tournaments, likely because of the negative feelings losing can produce.
- **Trainer Tracy wants a realistic and believable game because her goal is not to play but to improve.** Competitive elements like leaderboards can help her better herself, and she is interested in impressive physics—likely to help sharpen her mind. Surprisingly, she is not interested in missions or quests, perhaps because they are too gamey. She also appreciates a good mystery.
- **Challenger Chris enjoys interesting themes while he completes missions or quests.** However, the themes should not be too realistic. He understands he is playing a game and wants it to look and feel different from real-life. He appreciates some humor, hidden objects, and mini-games. He enjoys mystery—likely because of the solvable challenge—and fantasy.
- **Casual Carol has a weak preference towards features or themes relative to other personas.** She does not care for artistic style, impressive physics, mini-games, or hidden objects. She wants her games to be realistic.

Table: Comparative motivations for playing puzzle games across the five player personas.

	Gamer Gary	Escapist Emily	Trainer Tracy	Challenger Chris	Casual Carol
Cartoonish style	1.2	0.7	-1.4	-0.2	-0.3
Tournaments	1.8	-0.4	-0.6	-0.3	-0.4
Arenas	1.8	-0.3	-0.5	-0.4	-0.5
Retro or pixel graphics	1.8	-0.4	-0.4	-0.4	-0.6
Leaderboards	1.7	-0.8	-0.2	0.0	-0.8
Interesting theme	-0.4	0.3	-0.7	1.6	-0.8
Missions or quests	0.5	0.0	-1.1	1.4	-0.8
Anime/manga style	1.6	0.3	-0.8	-0.3	-0.8
Humor	1.4	0.2	-1.0	0.2	-0.9
Good and mood-appropriate music	1.4	0.5	-0.9	-0.2	-0.9
Fascinating story	1.6	0.0	-0.7	0.0	-1.0
Realistic and believable style	1.5	0.1	0.2	-0.8	-1.0
Hidden objects	1.4	0.2	-0.5	0.2	-1.3
Mini-games	1.4	0.2	-0.5	0.1	-1.3
Point-and-click style	1.5	0.0	-0.3	0.0	-1.3
Impressive and authentic physics	1.4	0.3	-0.2	-0.1	-1.4
Artistic style	0.9	0.6	-0.5	0.5	-1.5

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 AI-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



“Over at our place, we're sure of just one thing: everybody in the world was once a child. So in planning a new picture, we don't think of grown-ups, and we don't think of children, but just of that fine, clean, unspoiled spot down deep in every one of us that maybe the world has made us forget and that maybe our pictures can help recall.”

– Walt Disney

LiquidandGrit.com



Brett.Nowak@LiquidandGrit.com

