DIQUID&GRIT Puzzle Report

Competitive Research and Actionable Product Recommendations

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AUGUST

NEW INNOVATIONS

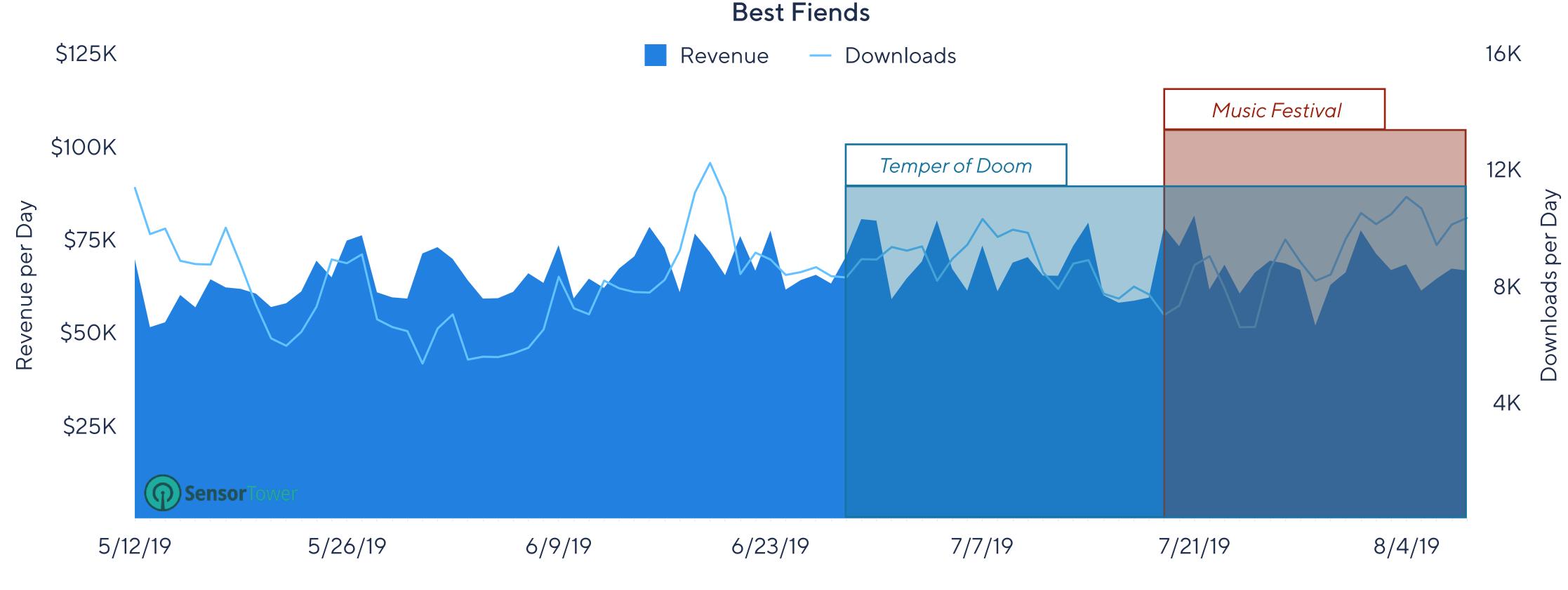


PUZZLE > EVENTS > MINI-GAMES >

PLAYABLE STORY EVENTS Temper of Doom & Music Festival in Best Fiends

REVENUE ANALYSIS

Revenue increased +6.2% WoW after *Temper of Doom* and +7.8% WoW after *Music Festival*, but did not sustain following either release. Revenue flattened 2Wo2W after *Temper of Doom,* and 3Wo3W after Music Festival.



Graph data is iOS U.S. only xWoxW = X weeks over X weeks

Releases

6/28-8/6 <u>Taco Fiesta</u> – Collection event 6/28-8/4 <u>Temper of Doom</u> – Mission event 7/19-8/4 Music Festival – Mini-Game event 7/30-8/1 Mega Gold Bundle – Sale 8/1-8/4 Buy 2 Get 1 Free Fiend Style – Sale No IAP rankings change since 7/15/19



FEATURE TEARDOWN

In the *Temper of Doom* event, players complete tasks to unlock story animations and rewards. During the Music Festival, players use hints to find lost items scattered around the app.

Temper of Doom Details

- An animation introduces the first episode of the story (video).
- Players must complete 39 tasks to fill a meter (1).
- Tasks include challenges, quests, and collections from level play, minigames, and Temper-themed content (2).
- As the meter fills, players unlock episodes with story animations (3).

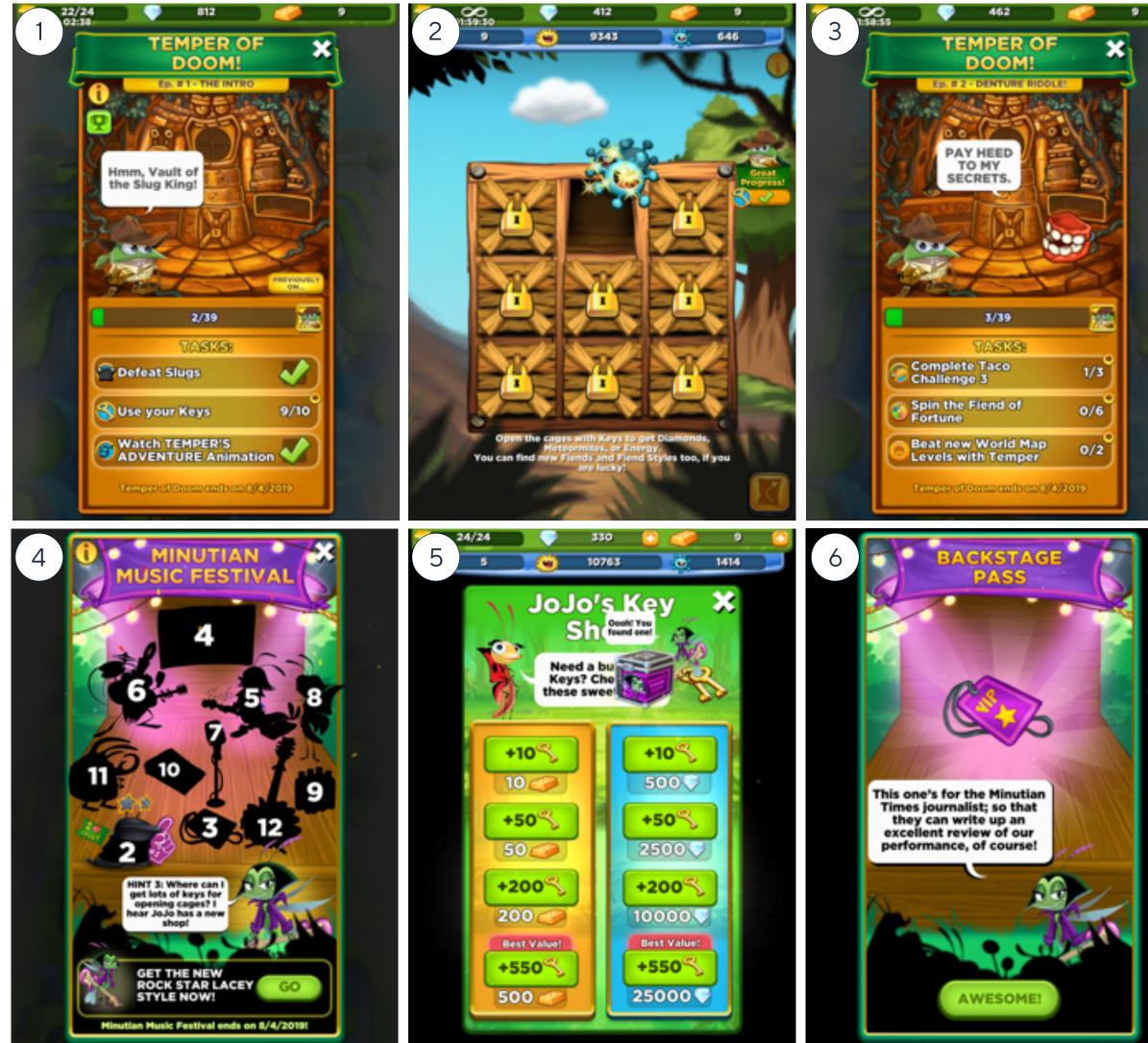
Music Festival Details

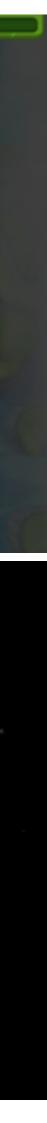
- Players read hints to find the locations of 12 lost items (4).
- The locations include features, menus, and mini-games (5 and 6).
- Players earn gold and keys for collecting all the lost items.



Feature Database > Gallery Tool

• Download screenshots and watch videos of **Temper of Doom** and Music Festival in the Feature Database's Gallery Tool.

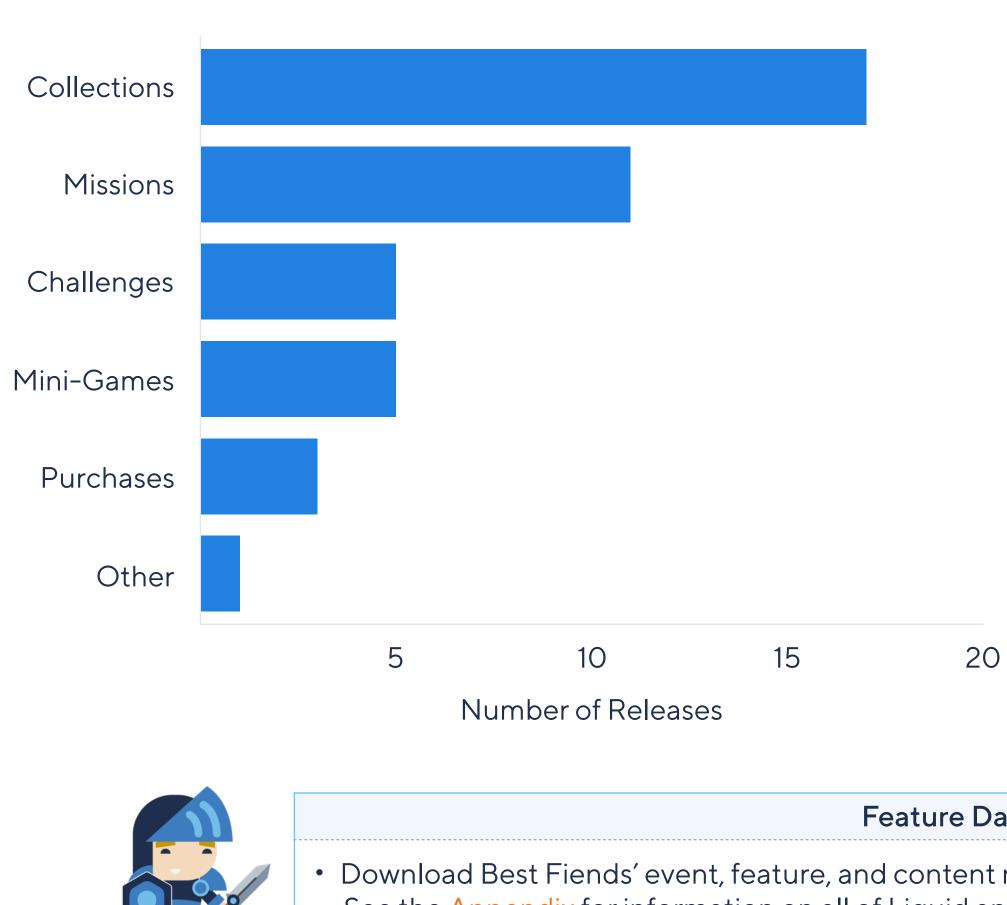




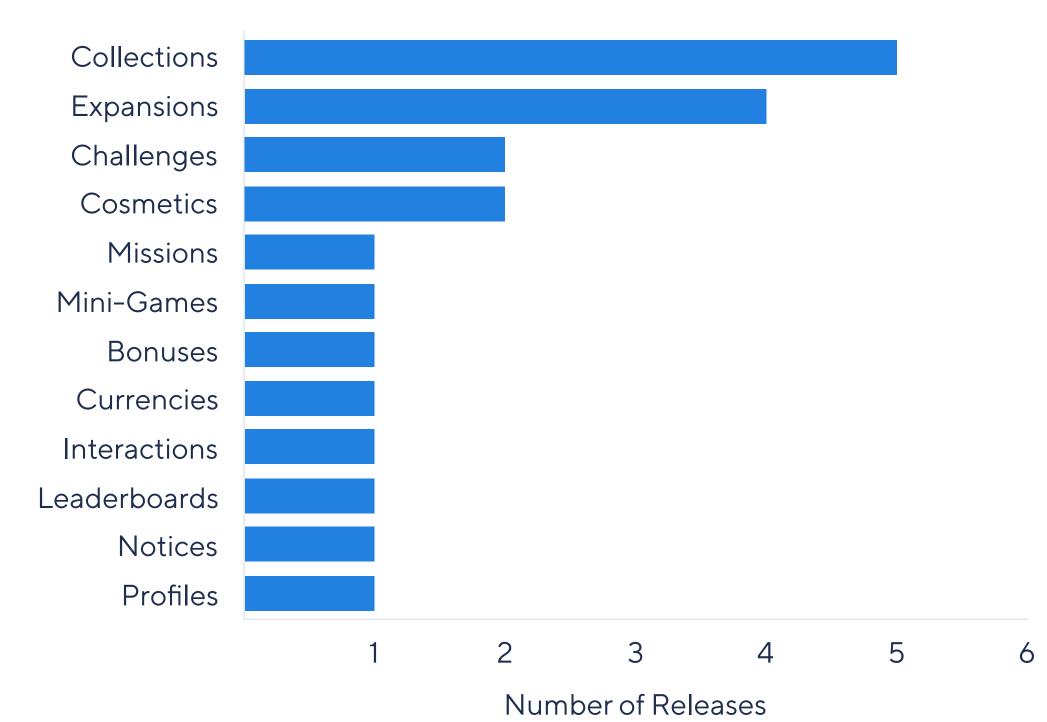




Best Fiends invests heavily in collections—both in new events and features—and uses mission events to drive engagement towards collection features.



Event Investments: Best Fiends



Feature Investments: Best Fiends

Feature Database > Data Tool

Download Best Fiends' event, feature, and content release data using the <u>Data Tool</u> in the <u>Feature Database</u>.
See the <u>Appendix</u> for information on all of Liquid and Grit's mechanic categories.



PRODUCT INSIGHTS

Add strong storylines and short movies to features and events to capture market share from nongaming, movie-based entertainment apps.

Product Recommendations

- Video Player & Editor apps account for 15% of time spent on apps (according to <u>App Annie</u>). To increase engagement, understand what non-gaming apps your players use and add similar entertainment (1 and 2).
- Target mindfulness apps with marketing about mobile games' ability to relieve stress after work. A recent <u>study</u> found that digital games may be a more effective way to recover mentally after work than mindfulness apps.
- Release smaller events to drive engagement to larger ones. Best Fiends uses collection events, like <u>Wildflower Festival</u>, to drive engagement to mission events, like <u>Mother's Day Picnic</u> (3).

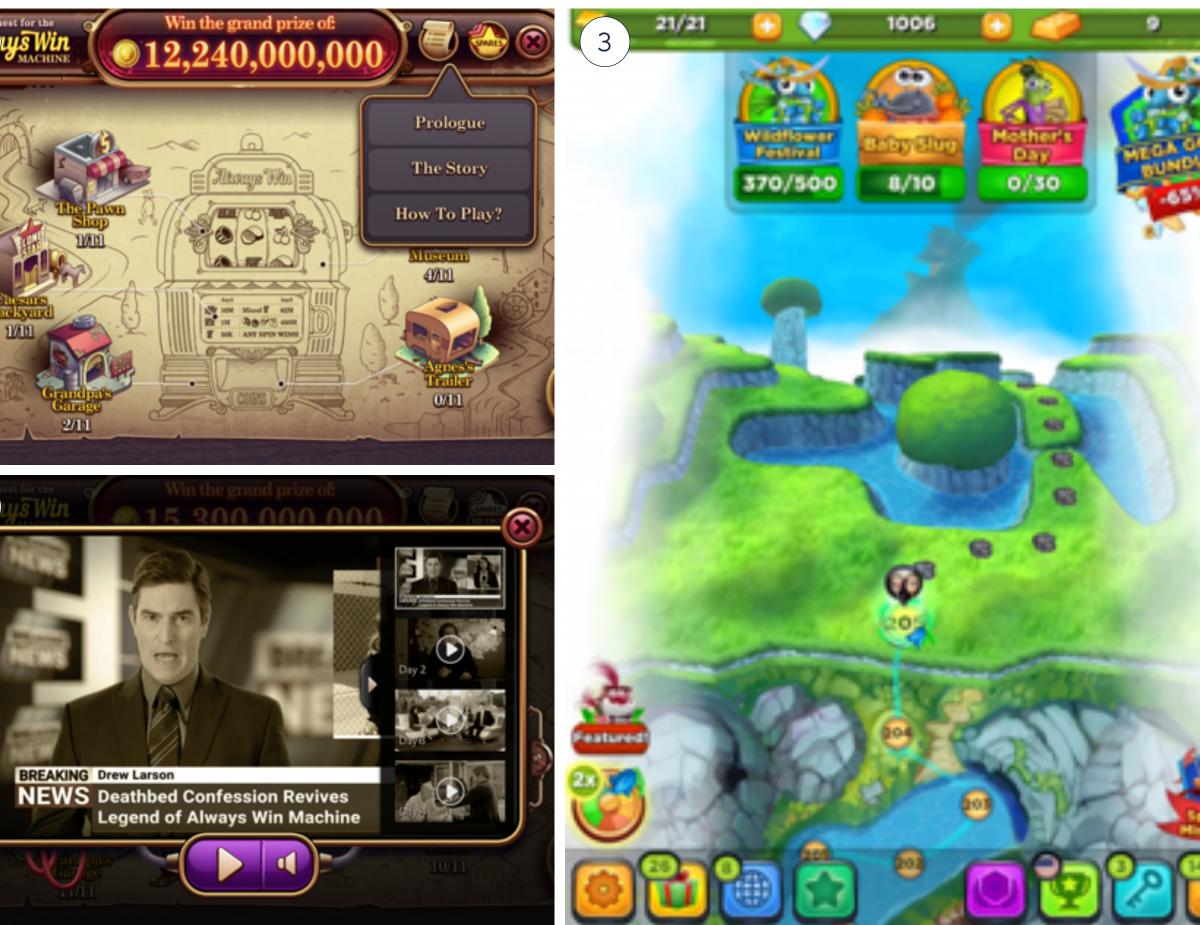
Player Insights

• Use stories to help certain player types escape everyday life. Escapist Emily turns to games, and most likely Video Player apps as well, to reduce worries.

Additional References

- Review examples of storylines and videos in Casino and RPG. Strong examples include Caesars Slots' <u>The Always Win Machine</u> (1 and 2), Raid: Shadow Legends' <u>Game Introduction</u>, and AFK Arena's <u>Origin Story and Game Introduction</u>.
- Time spent on Video Player & Editor apps has increased 125% over two years, whereas games has only increased 30%. Overall app usage increased 50% in two years. Find more information in, "The State of Mobile Games in 2019 and Beyond" by <u>App Annie</u>.







PUZZLE > EVENTS > COLLECTIONS >

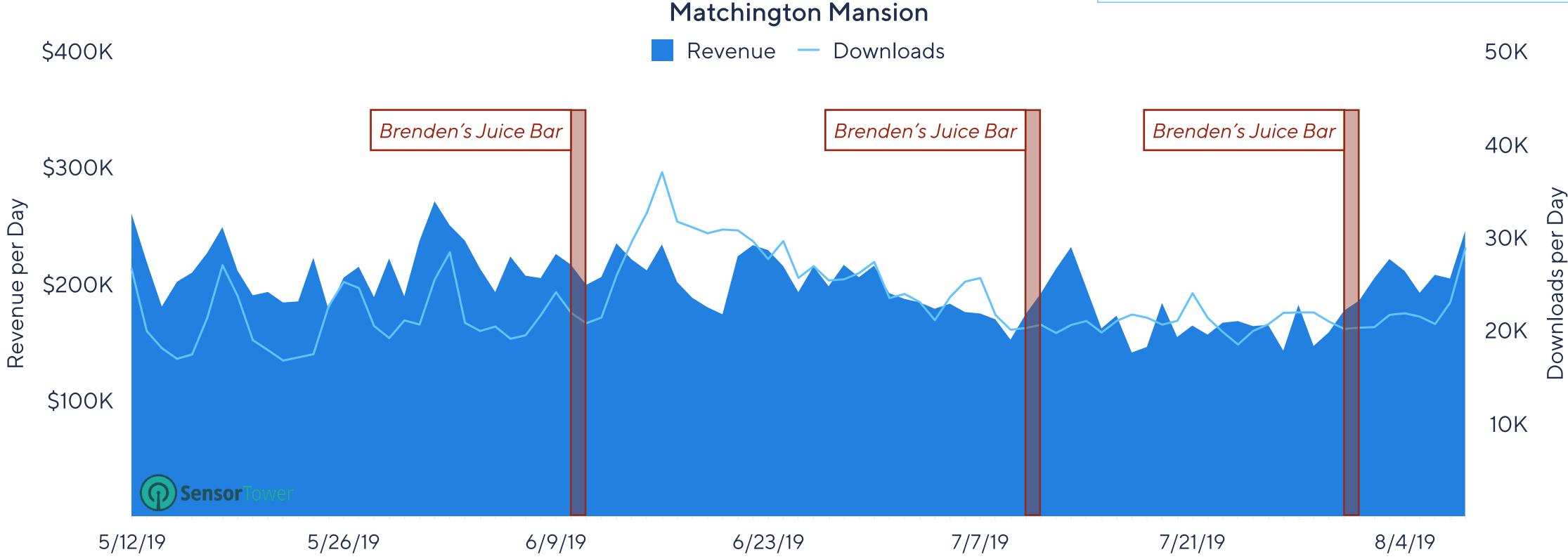
STOREFRONT MECHANICS

Brenden's Juice Bar in Matchington Mansion



REVENUE ANALYSIS

Although revenue was up +1.2%, +10.2%, and +24.4% WoW after the three releases of *Brenden's Juice Bar* event, the revenue impact is undetermined because there were many events, sales, and content released at the same time.



• Brenden's Juice Bar events ran for two days only starting on 6/10/19, 7/10/19, and 7/31/19

Releases 7/29-7/30 <u>Tea Time Sale</u> – Sale 7/29-7/30 Lucky Streak – Challenge event 7/30 Board Game – Mini-Game event 7/31-8/1 Brenden's Juice Bar – Collection event 7/31-8/1 Grandfather Clock Sale – Sale 8/2-8/5 <u>Secret Beach</u> – Custom Design event 8/2 Good Neighbor Deal – Sale 8/3-8/4 Package Sale – Sale 8/5-8/6 Lucky Streak – Challenge event



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FEATURE TEARDOWN

Players complete levels to collect elements to fulfill juice orders for customers. Completed orders fill a meter that awards players at three different points.

Details

- Players complete levels to collect different elements (1).
- Players use the elements to fulfill customers' orders (2).
- Fulfilling an order awards coins and advances players along a meter.
- The meter awards players unlimited lives and boosts at three different milestones.
- Players earn special rewards by completing certain orders within a time limit (3).

Additional Information

• Download screenshots and watch videos of Brenden's Juice Bar in the Feature Database's Gallery Tool.

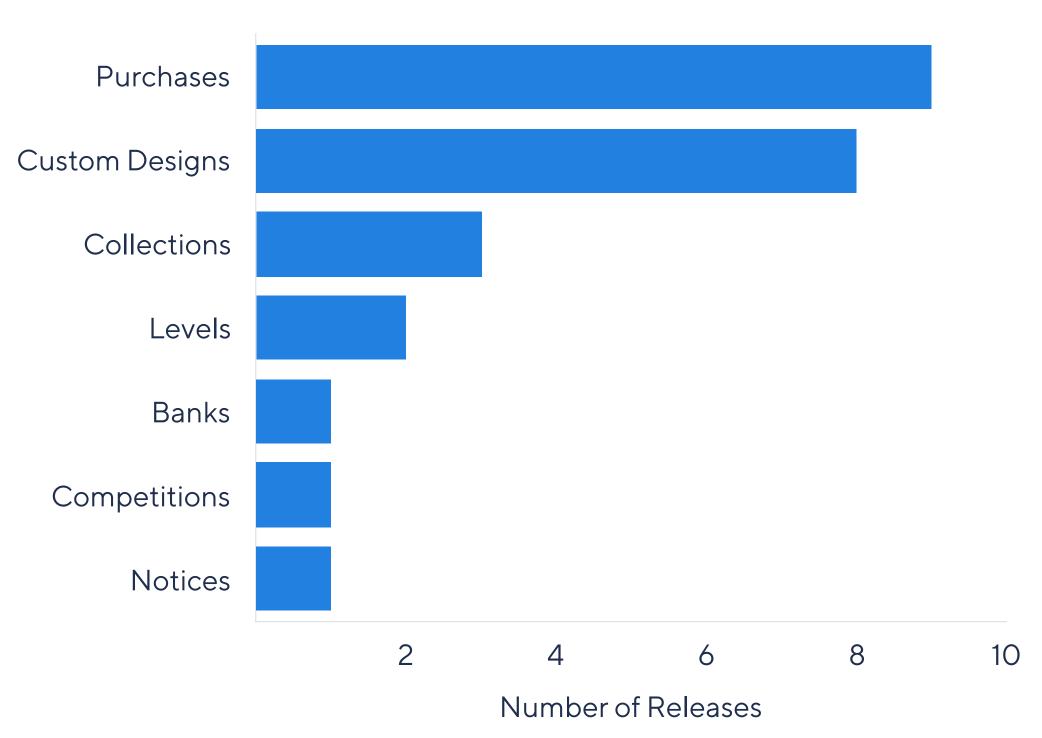


ROADMAP DATA

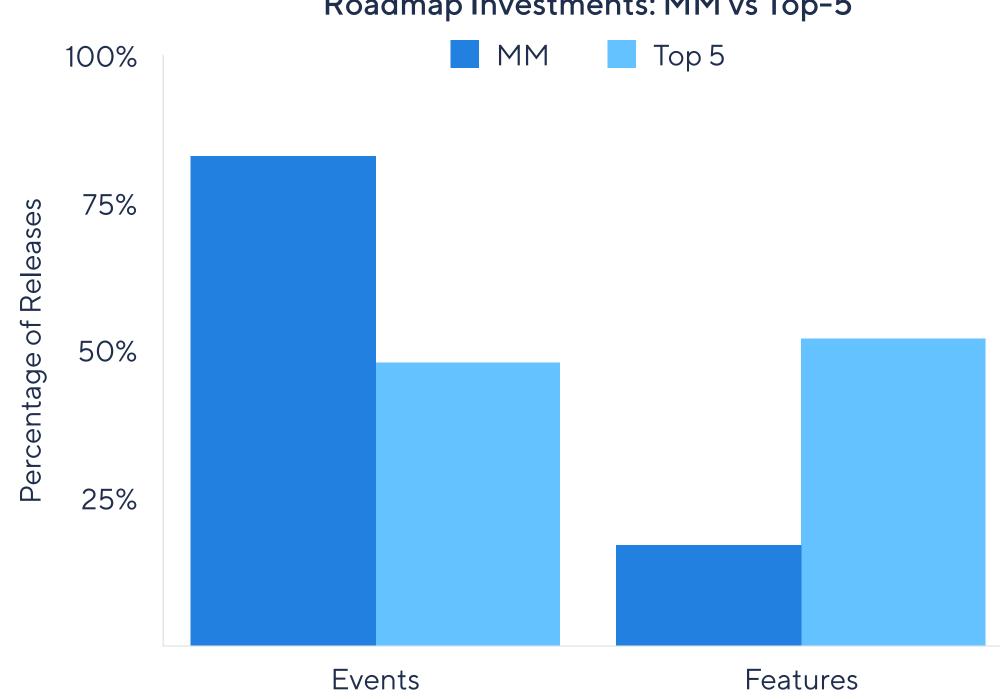
Custom design events are a top product investment for Matchington Mansion (MM) in 2019. Compared to other top-grossing Puzzle apps, MM invests much more in events.

Data Insights

- 22% of MM's total events released in 2019 are custom design events (2 in 2018 and 8 already in 2019).
- Purchase events are MM's largest event investment in both 2019 and 2018. MM has released 9 purchase events in 2019 and 6 in 2018.
- 83% of MM's non-content releases are events. In comparison, the top-5 grossing apps invest 48% in events.



Event Investments: MM's



Roadmap Investments: MM vs Top-5



PRODUCT INSIGHTS

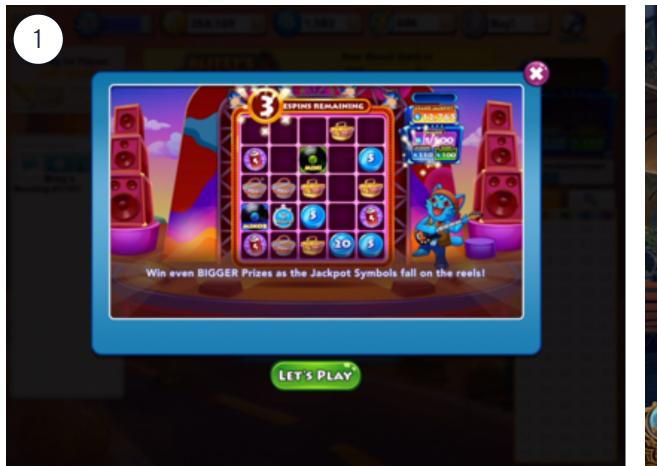
Take advantage of other genres by implementing simplified versions of their core mechanics in short mini-games.

Product Recommendations

- earn rewards, progress, and participate in events (see image 2 and Seeker's Notes' Puzzle Features Library).
- the app, learning the meta-game, and hitting pinch points.
- Library).

Additional References

- Use the Gallery Tool to see events by category by game. For more on Matchington Mansion, go to Purchase Events or Custom Designs Events.





• Leverage gameplay from other genres with overlapping players. In Bingo Blitz, a top-grossing Casino app, revenue increased +38% WoW after the release of a simplified slots machine in a bingo room (see image 1 and the Simplified Slots Machine Wiki Page). In top-grossing Hidden Object apps, players can play match-3 puzzle mini-games to

• Simplify and shorten mechanics from other genres. This gives players the best part of another genre while removing all the barriers of starting a new game-downloading

• Matchington Mansion adopts mechanics from several genres. In Matchington Mansions' Secret Beach event, players build a custom design area using a mechanic inspired by Casual, Sims-style apps. Players can decorate buildings, once they are complete (see image 3). This mechanic is also in Home Design Maker (see Fourth of July Patio

• Review the Spring Bundle purchase event that was a revenue driver in the April 2019 Puzzle Report. See the Engagement Bonus Bundle Wiki Page for details.





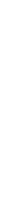




















IN SOFT LAUNCH



FARM HEROES CHAMPIONS BY KING

Soft Launch: 11/20/18 **Countries:** Brazil, Great Britain, and Mexico





APP TEARDOWN

In Farm Heroes Champions, players progress by completing match-3 levels to unlock chapters in a story. Boosts, clubs, and challenges are core features (clubs and challenges are similar to features in Toon Blast).

App Details

- Boosts are heavily integrated into the app. Players can choose boosts before playing a level, select boosts while playing a level, and create boosts by matching pieces during level play. Unlocking an in-level boost awards unlimited use of that boost for the level (1 and video).
- Clubs are similar to the trending club features in Puzzle. In Farm Heroes Champions' Teams, which is categorized as a clubs feature, players request and send lives—similar to Toon Blast's <u>Teams</u> (2).
- The two main challenge features reward players for completing levels. <u>Star Crate</u> requires players to earn stars by completing levels, which is similar to Toon Blast's <u>Star Chest</u> (3). <u>Hunter</u> <u>Crate</u> asks players to complete a number of levels, which is similar to Toon Blast's <u>Toon Chest</u>. Both mechanics are also seen in Playrix's Wildscapes (currently in soft launch).

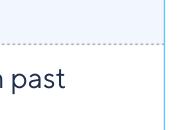
Additional Insights

• Review all the insights on club features from Puzzle and Casino. See <u>Clubs with Sharing Lives</u>, Club Features and Releases, and Clubs Chests with Leaderboards Wiki Pages for the analysis of clubs in Puzzle, and the <u>Club Feature</u> Wiki Page for clubs in Casino.

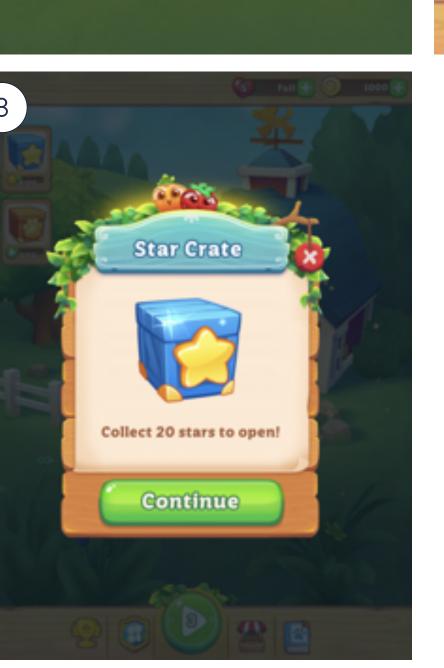


Feature Database > Wiki Tool

• Review all the previously-released Revenue Drivers from past Reports using the <u>Wiki Tool</u> in the <u>Feature Database</u>.











LEVEL MECHANICS



NEW LEVEL DESIGNS I

Flowerpots in Homescapes

- Players grow flowers by making matches and activating power-ups.
- Once every flower is fully grown, all flower pots disappear (1).

Bunnies in Gardenscapes

- Hidden bunnies are gradually revealed as players make matches or activate power-ups next to a bunny's hiding place.
- Players must uncover and collect all bunnies to complete a level.

Dishwasher in Toy Blast*

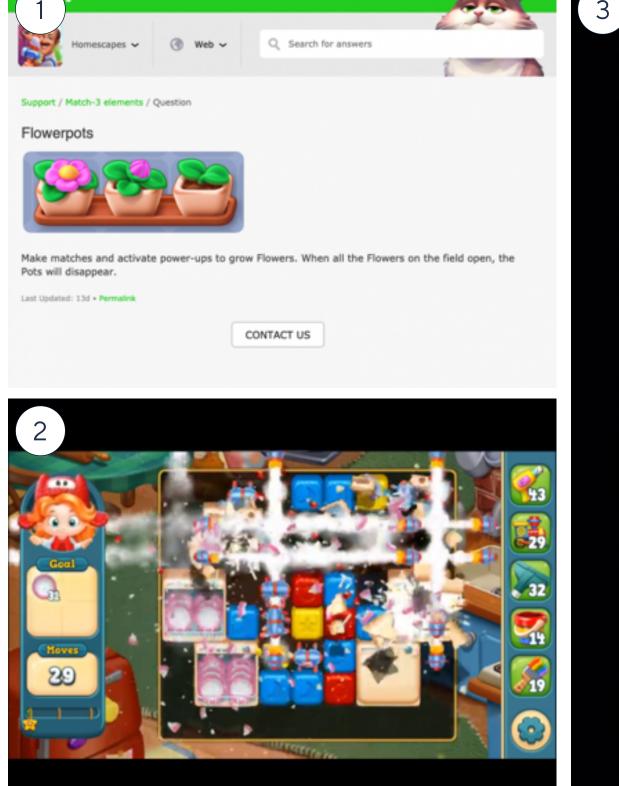
- Players open dishwashers by hitting them with specific power-ups.
- Once opened, each dishwasher contains plates.
- Players collect plates by making matches on adjacent positions (2 and <u>video</u>).

Blue Fizz in Candy Crush Friends Saga*

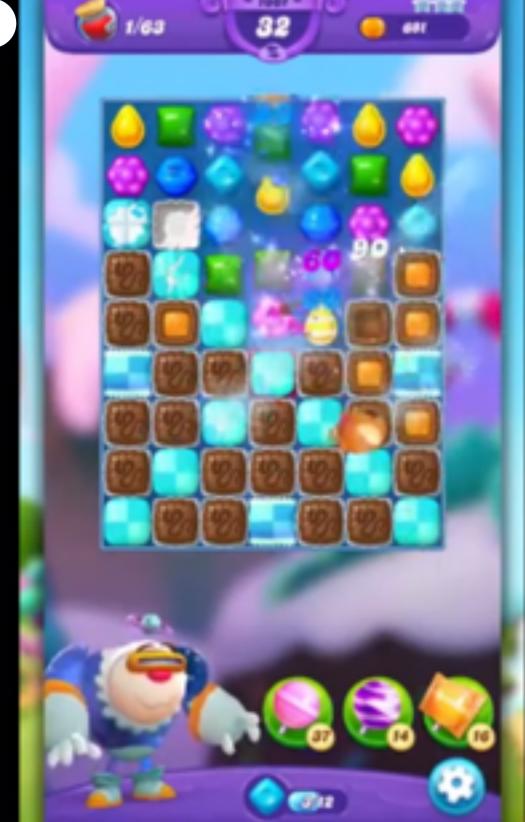
- Blue Fizz pieces have up to four layers.
- Players must remove each layer by making matches next to *Blue Fizz* pieces or by hitting them with power-ups.
- When triggered, Blue Fizz damages all diagonal pieces for two spaces (3 and <u>video</u>).

Water Rocket in Fishdom

- Players charge water rockets by matching corresponding colors.
- Fully charged water rockets explode, destroying or damaging every tile in their row.



ΝΓΙΧ





^{*} Level mechanic found on YouTube or fan sites.

NEW LEVEL DESIGNS II

Iceberg in Fishdom

- Icebergs are indestructible objects that freeze one adjacent piece each turn (1 and <u>video</u>).
- Frozen pieces can be covered in up to two layers of ice.
- Players remove layers of ice by making matches with the ice or by hitting them with power-ups.

<u>Rock Star Lacey</u> in Best Fiends

- *Rock Star Lacey* can be unlocked as part of the <u>Music Festival</u> (2).
- Players charge *Lacey's* special meter by linking green pieces.
- Once charged, *Lacey* enchants four pieces with multipliers.
- Each enchanted piece counts as three pieces when collected.

Treasure Hunter Temper in Best Fiends

- Players unlock *Treasure Hunter Temper* as part of the *Temper of Doom* event (3).
- Linking green pieces fills *Temper's* special meter for his *Horizontal Bomb*.
- When triggered, the *Horizontal Bomb* blows up nine pieces in a row.

Wildebeest in Disney Emoji Blitz

- Players try to collect wildebeests before they attack by activating powerups.
- When wildebeests attack, they take away one health per turn (4).
- The round ends when players lose all their health.







7/1/19 - 7/31/19



NOTABLE RELEASES I

Арр	Library	
Candy Crush Saga	<u>Garden Party</u>	 In anticipation of the release of le 1K, 2K, 3K, and 4K.
Homescapes	<u>William's Birthday</u>	 Players beat levels and complete Stickers can be used to purchase Buying decorations fills a meter t
	<u>Attic</u>	 Players match pieces flagged wit Players spend the event currency Completing the renovations with content permanently.
Gardenscapes	<u>Gardener's League</u>	 Players beat levels to earn gold s At the end of the event, the team

Description

level 5K, any player level 10 or above can play levels

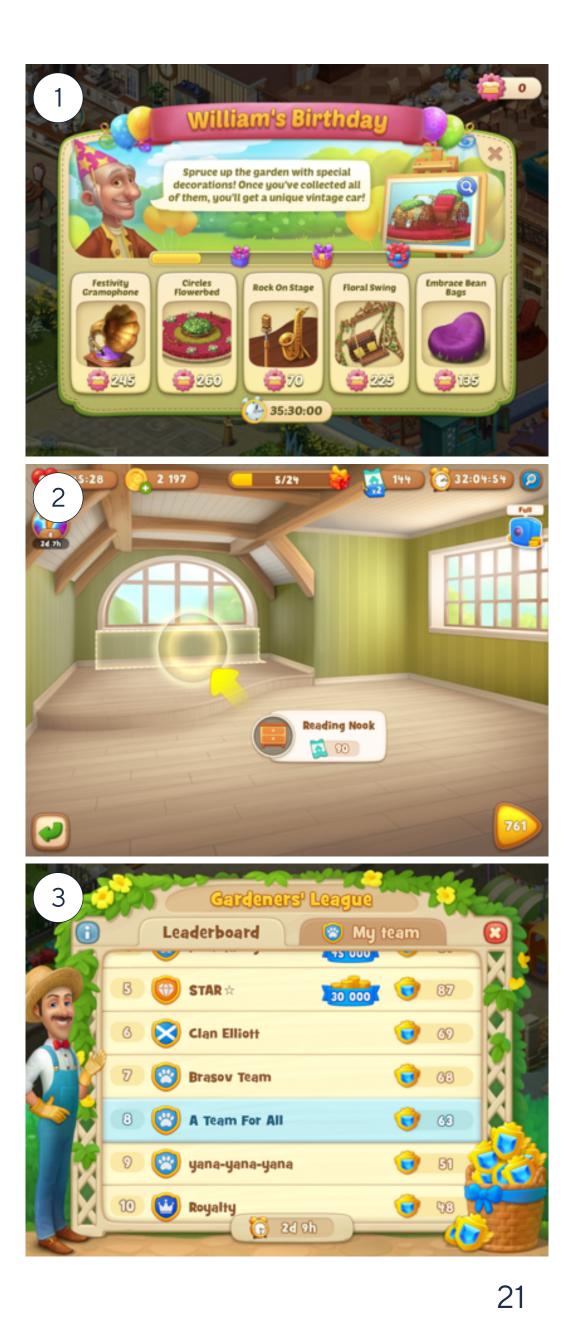
te challenges to earn stickers.

- se special decorations.
- [•] that rewards players at 3 different milestones (1).

rith ticket labels to collect event currency.

- cy to renovate a limited-time area (2).
- thin the event's time limit allows players to keep the

shields for their team. m with the most shields splits a prize (3).



NOTABLE RELEASES II

Арр	Library	
Fishdom	<u>Team Chest</u>	 As part of a team, players complet Teams who collect 400 crowns b
Solitaire Grand	<u>60 Minute Mania</u>	 Players receive 1 challenge every Completing 3 challenges awards
Harvest	<u>Red Truck Payback</u>	 During the event, players who m The payback returns any booster
Cookie Jam	<u>Pet Costumes</u>	 Players beat levels to collect toke collection is <u>Pets</u>). Players spend tokens to unlock of the second to
Solitaire TriPeaks	<u>Friends Center</u>	 Players can request coins from fr Up to 5 friends can respond to each

Description

lete levels to earn crowns. before the end of the event unlock a chest (1).

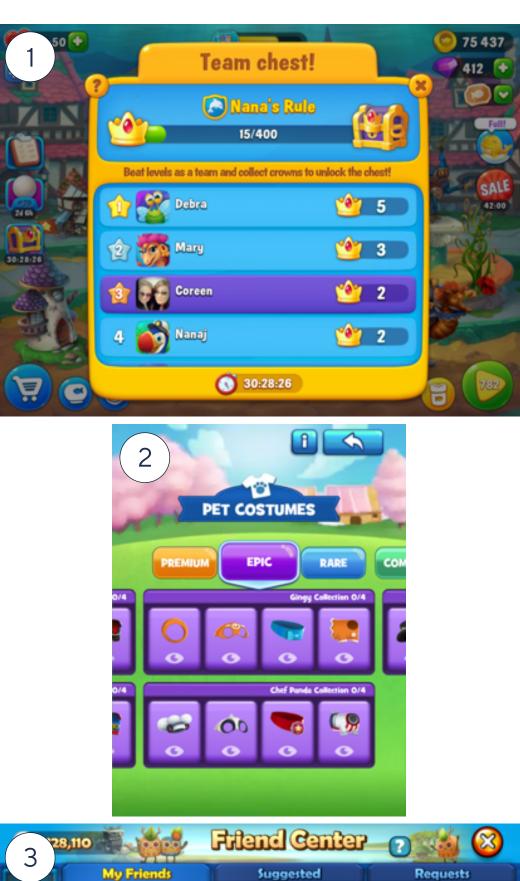
ry hour, for 24 hours. ds gold coins and boosts.

nake a purchase unlock a 1-hour payback. ers used during the previous hour.

kens for this secondary collection (the primary

common, rare, and epic costumes for their pets (2).

friends every 4 hours (3). each request.







NOTABLE RELEASES III

Арр		Library	
Home Desig		<u>Piggy Bank</u>	 Players beat levels to add gems t Extra gems are added for any un Once the bank contains 400 or r The bank can hold a max of 600
Makeover		<u>Leagues</u>	 During level play, players collect Players who finish in the top tier a bottom tier are demoted to lowe
Pet Rescue Sa	aga	<u>Teams</u>	 During each 2-week season, play to earn prizes based on their tota
Breakout A	рр		Players clear levels by matching
Dr. Mario Wo by Nintend		<u>Dr. Mario World</u>	 Players select doctors and assista Every doctor and assistant has a Versus mode allows players to co Players are ranked in tiers based



Feature Database > Data Tool

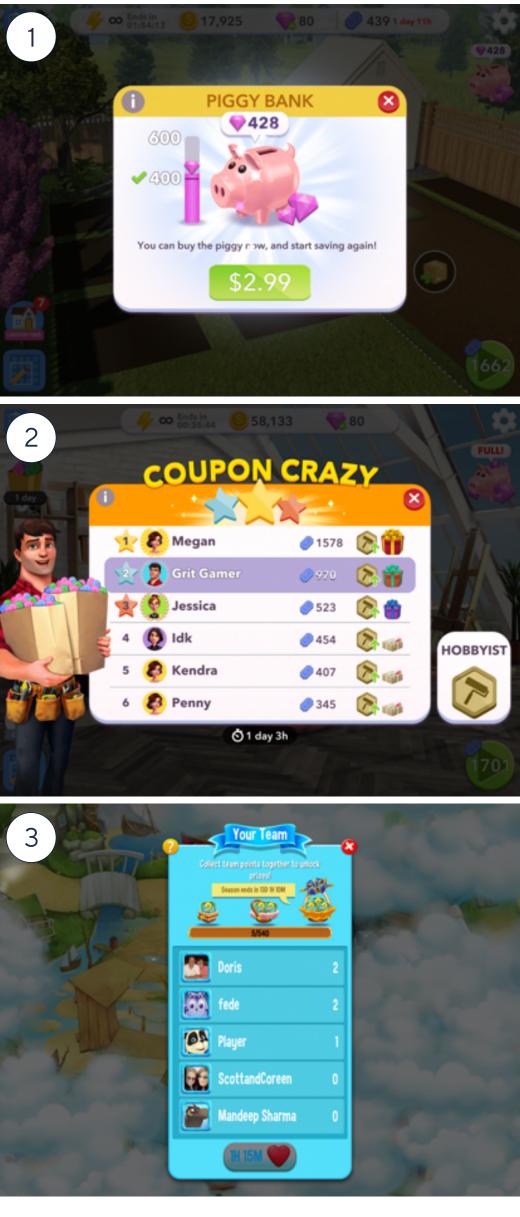
Review all the recent releases using the **Data Tool** in the **Feature Database**.

Description

- to the piggy bank.
- nused turns.
- more gems, players can buy all the gems for \$2.99.) gems (1).
- coupons and are ranked on the leaderboard.
- are promoted to higher leagues, while players at the er leagues (2).
- ayers beat levels, log in daily, and complete episodes tal team points (3).
- capsules with viruses.
- tants from a collection of characters.
- unique skill.
- compete head to head.
- on battle points.







UTILIZE L&G'S TOOLS

capabilities. A benchmarking Matrix tool is coming soon!









- 1. Reference all Liquid and Grit's insights
- 2. Find and download previous Reports





SLACK REPORTS





Uncover new puzzle trends and understand competitor investments with Liquid and Grit's tools and

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

3. Uncover revenue driving features from other genres

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

2. Start a team conversation about new designs and innovations 3. Quickly review the Report's Executive Summary



APPENDIX



MECHANICS TAXONOMY

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

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



PREMIUM PARTNERSHIPS

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 longterm 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.



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.



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.

Kinrate Analytics

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







"I could never convince the financiers that Disneyland was feasible, because dreams offer too little collateral."

-Walt Disney

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