

Competitive Research and Actionable Product Recommendations

TABLE OF CONTENTS

REVENUE DRIVERS	3
Collection Event Within Leagues	
Cooking Frenzy in Cash Frenzy	
Mini-Game Purchase Events	
Cash Match in POP! Slots	
MARKET WATCH	14
Notable Releases I & II	
APPENDIX	18
Mechanics Taxonomy	
Premium Partnerships	
L&G Slots Personas	

AUGUST 2019

REVENUE DRIVERS

CASINO > EVENTS > COLLECTIONS

COLLECTION EVENT WITHIN LEAGUES

Cooking Frenzy in Cash Frenzy

IMPACT ANALYSIS

Revenue was up +1.6% WoW and +15.6% Wo2W after the release of the *Cooking Frenzy* event. Revenue spiked before *Cooking Frenzy* due to the end of the *Quest Frenzy Golden Summer Season 5*. A burst of downloads in July increased the revenue impact of the events.

Releases

7/25–8/5 Quest Frenzy Golden Summer Season 5 – Quest event

7/25–8/5 <u>Lightning Race</u> – Tournament event

7/25-8/1 Cash Journey - Mini-game event

7/31 Repeat Wins Plus — Purchase event

7/31 <u>Lucky Funny Kitties</u> — Content (machine)

7/31 (Last day) Amazing Stamps 2nd Album – Collection feature

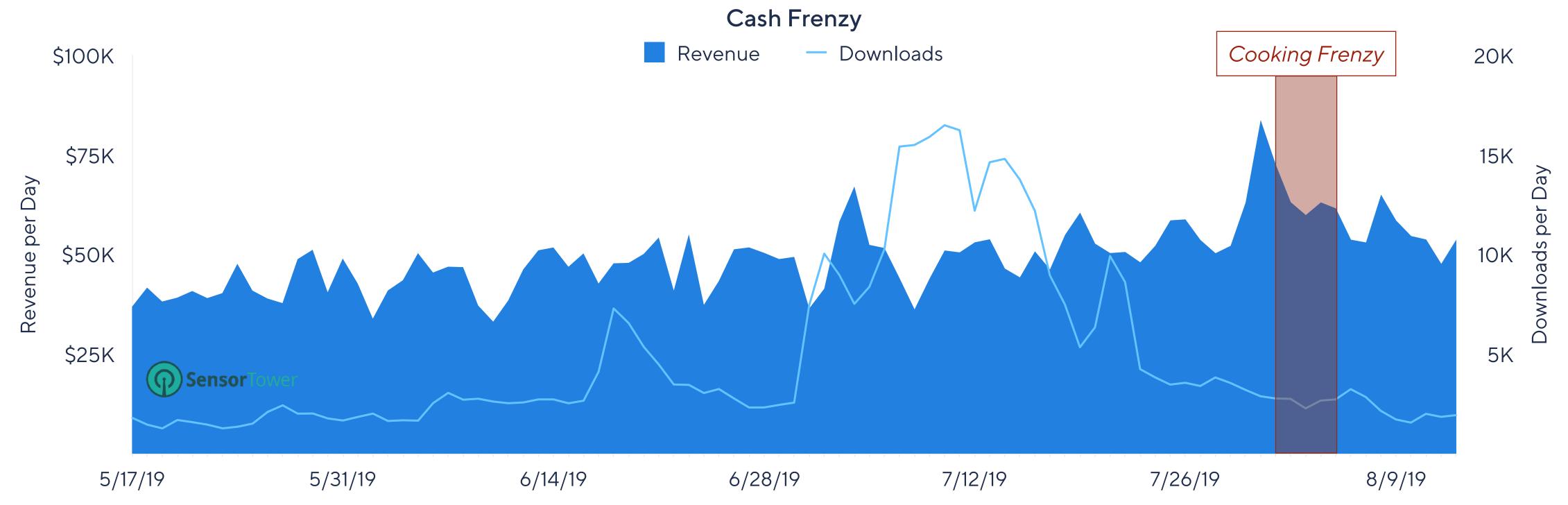
8/1–8/5 Cooking Frenzy – Collection event

8/2 Mia's Beer Hall — Content (machine)

8/3 Cooking Frenzy — Prize booster event (Facebook)

8/5 Amazing Stamps 3rd Album — Collection feature

8/5 House Party — Quest event



FEATURE TEARDOWN

Players spin to collect ingredients and tools to complete dishes. Completing dishes awards chef caps and coins. Each chef cap fills a challenge meter, moves players along a prize map, and ranks players on a league leaderboard.

Feature Details

- Players begin by selecting a dish. Each dish varies in difficulty (1).
- Players then spin to collect ingredients and tools (items) to complete the dish (2).
 - Higher bets increase the frequency of the items.
- Collecting all the items awards coins and chef caps.
- Each chef cap fills a challenge meter.
- Completing the challenge meter advances players along a prize map (3).
- The Chef Master Leaderboard ranks players based on chef caps collected (4).
- At the end of each season, the top players win prizes and advance to a higher division. The bottom players move to a lower division ($\frac{5}{2}$).



Feature Database > Gallery Tool

• Download screenshots and watch videos of <u>Cooking Frenzy</u> in the Feature Database's <u>Gallery Tool</u>.











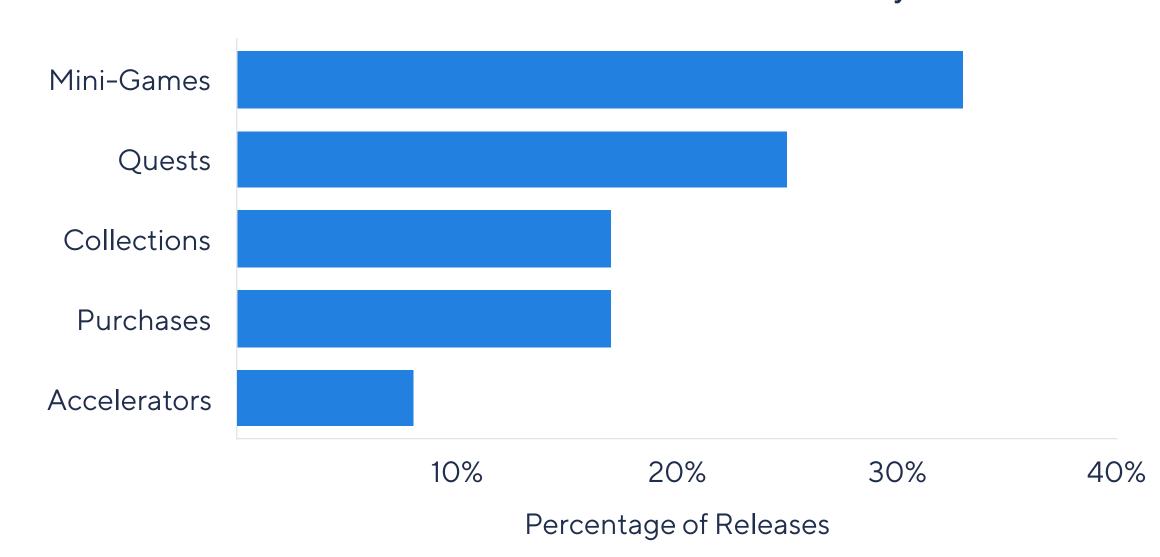
ROADMAP DATA

Mini-games and quests are Cash Frenzy's key event investments. The largest feature investments are in bonuses, collections, rewards, and challenges.

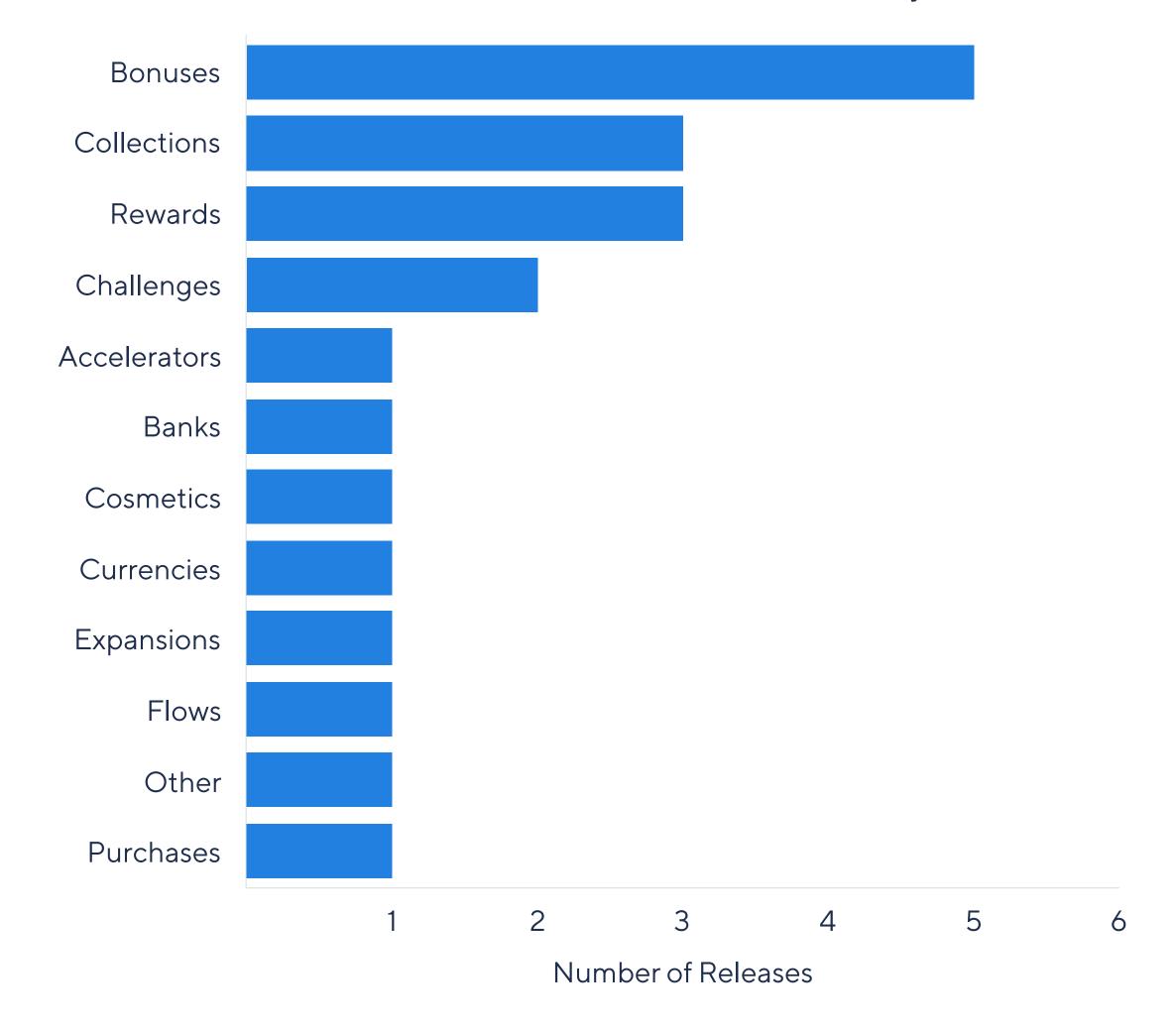
Roadmap Details

• The event data is from 2019, and the feature data is from 2018—when the app was launched in the U.S.—and 2019.

Event Investments: Cash Frenzy



Feature Investments: Cash Frenzy





Feature Database > Data Tool

- Download Cash Frenzy's 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.

DESIGN INSIGHTS

Cash Frenzy combines proven mechanics—released quickly with rapid development—that appeal to a broad group of player personas during growth phases.

Product Recommendations

- Maintain strong design discipline when releasing safer bet features. Cash Frenzy's feature designs use proven mechanics to create reliability. *Cooking Frenzy's* difficulty options are from Slotomania's <u>SlotoQuest</u>, and the cooking mechanic is from Slotomania's <u>Tasty Bakery</u> (1).
- A strong product roadmap combines both safer, proven mechanics with riskier, innovative ones. A product roadmap—like a well-managed financial portfolio—should contain a range of high- to low-risk investments. The roadmap's combined risk is determined by the company's overall product strategy.
- Adding features from other genres is a trend in the highest-grossing Puzzle and Casino apps. The cooking event and ingredient collections are similar to the upgrade mechanics in cooking apps like Diner DASH Adventures (2).
 - Bingo Blitz increased revenue +38% WoW after the release of a simplified slots machine in a bingo room (see the <u>Simplified Slots Machine</u> Wiki Page).
 - Matchington Mansion released the <u>Brenden's Juice Bar</u> event, a storefront mechanic in a match-3 app (see the <u>August 2019 Puzzle Report</u> for details of this event).

Player Insights

• Target several user personas when user growth is a higher priority than revenue. Cash Frenzy's downloads spiked in July. To help retain this large group of installs, Cash Frenzy's events cater to a broad base of player types: Cooking Frenzy's mini-games target Money Mikes, the challenge systems target Daydreamer Denises, and leagues and leaderboards target Fame Franks.

Wiki Tool References

• Consider layering mission events on top of collection features. Bingo Showdown saw a +10% WoW increase in revenue after its <u>Wanted</u> event was released on top of an existing collection feature. See the <u>Customized Collection Sets</u> Wiki Page for details of this event, which is structured similarly to *Cooking Frenzy*.





CASINO > EVENTS > PURCHASES

MINI-GAME PURCHASE EVENTS

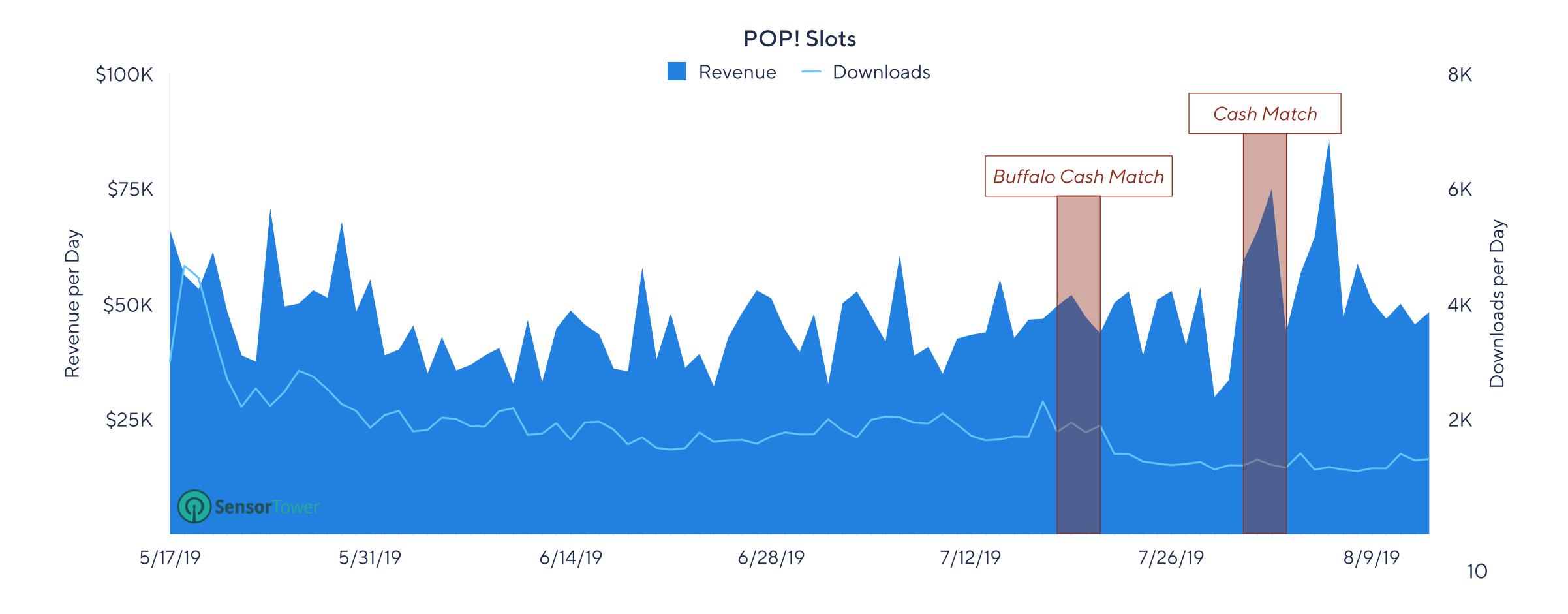
Cash Match in POP! Slots

IMPACT ANALYSIS

Revenue increased +4.8% WoW after the first release and +48.1% WoW after the second release of a new post-purchase mini-game in POP! Slots. During the second release, a premium-content machine was also launched.

Releases

7/31 <u>Aztec Mystery</u> — Content (machine)
7/31 <u>Cash Match</u> — Mini-game event
8/5—8/6 <u>POP! Birthday Sweepstake Party</u> — Mini-game event
No IAP changes since 6/13/19



FEATURE TEARDOWN

Players activate a *Cash Match* mini-game by purchasing chips. During the mini-game, players flip tiles to match three of the same animal to win additional chips. Some larger packages offer guaranteed jackpot wins.

Feature Details

- During the event, players who purchase chips activate a Cash Match mini-game.
- The Cash Match jackpots increase based on the package purchased.
- Depending on the event, certain higher-priced packages have a guaranteed jackpot (1).
- During the mini-game, players flip tiles to match three of the same animal (2).
- The game automatically picks a tile for the player after 10 seconds (video).
- Different animals award different jackpot sizes.
- When players match two tiles for either of the two largest jackpots, a message pops up: "One more for the big match!" ($\frac{3}{2}$).
- Matching three tiles of the same animal wins a jackpot ($\frac{4}{2}$ and $\frac{5}{2}$).



Feature Database > Gallery Tool

• Download screenshots and watch videos of <u>Cash Match</u> and <u>Buffalo Cash Match</u> in the Feature Database's <u>Gallery Tool</u>.









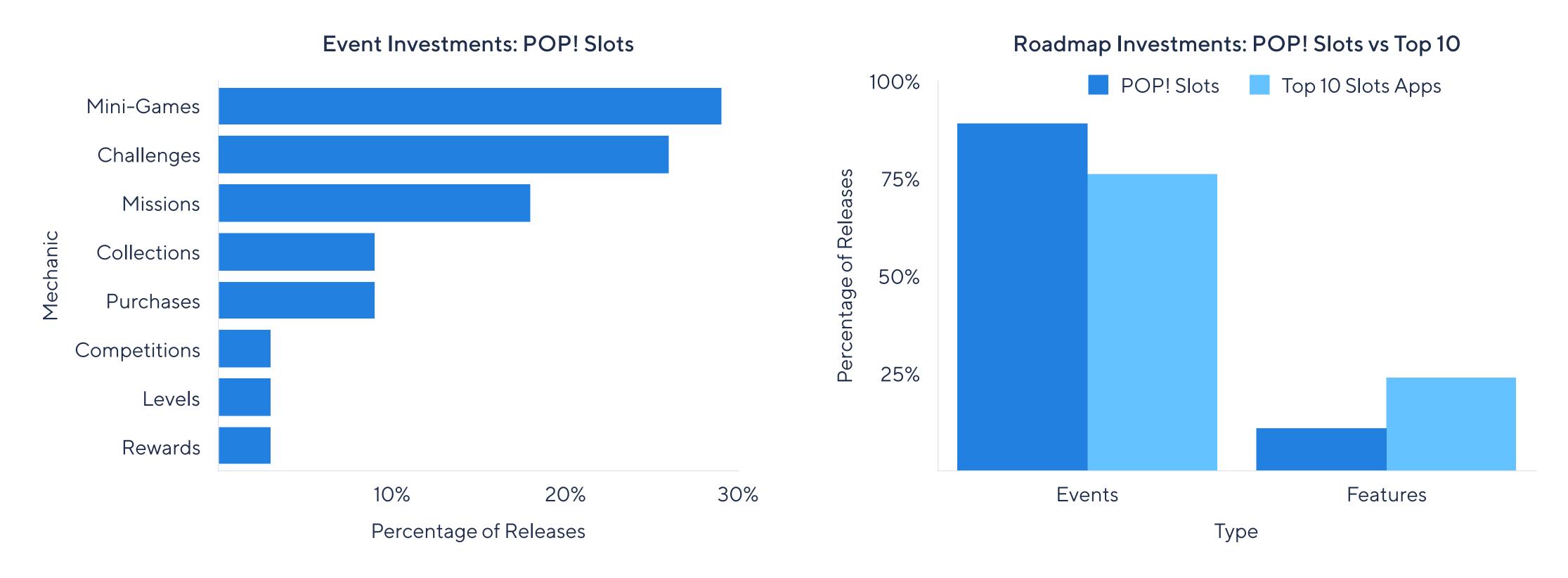


ROADMAP DATA

POP! Slots' most frequently released event mechanic is mini-games. Compared to the 10 highest-grossing slots apps, POP! Slots invests more heavily in events than features.

Roadmap Details

- POP! Slots has released a total of 34 new events in 2019.
- Mini-game events were also POP! Slots' most frequently released event mechanic in 2018.
- 27% of new Playtika events use this mechanic (data not shown).



DESIGN INSIGHTS

Add risk to post-purchase mini-games to produce thrilling moments that emulate real-world gambling.

Product Recommendations

- Design the mini-game with some potential to lose. The thrill of gambling is created by the potential to win big combined with the risk of losing. By making the mini-game win-only, the upside is muted, and the experience can become dull after a few plays.
- Add a progress bar with decision points to let players opt-in to more risk. Consider the progression in Who Wants to Be a Millionaire: players can win nothing in the beginning, choose to take more risks at specific steps, and win a floor amount at certain steps (see table for details).
- Attach an engagement bonus to reduce purchasers' wallets. If the engagement bonus is achieved, reward an additional mini-game play. Review the Engagement Bonus Bundle Wiki Page on Matchington Mansion's implementation of an engagement bonus with a purchase.

Player Insights

• Post-purchase mini-games appeal most to *Money Mikes*, who are motivated primarily by profit. After a purchase, virtual currency is closely tied to the feeling of profit (since real money was just exchanged for virtual currency). *Money Mikes* play for the experience of making money and getting rich, so post-purchase is an ideal time to offer a potential-to-win big mechanic.

Wiki Tool References

• For inspiration on dynamic mini-game designs, review Bingo Bash's mini-game with elements of skill, luck, and engagement ... and Bingo Blitz's slot machine with a respins mechanic. Check out the Bingo Collect and Progress Mini-Games Wiki Page for Bingo Bash's mini-game (+41% 2Wo2W in revenue) and the Simplified Slots Machines Wiki Page for Bingo Blitz's mini-game (+38% WoW in revenue).



Feature Database > Wiki Tool

• Review all the previously-released Revenue Drivers using the Wiki Tool.

'Who Wants to Be a Millionaire' Design

Question	Value	If Loss	Option
1	\$100	\$0	
2	\$200	\$0	
3	\$300	\$0	
4	\$500	\$0	
5	\$1,000	\$1,000	Stay or risk
6	\$2,000	\$1,000	
7	\$4,000	\$1,000	
8	\$8,000	\$1,000	
9	\$16,000	\$1,000	
10	\$32,000	\$1,000	Stay or risk
11	\$64,000	\$32,000	
12	\$125,000	\$32,000	
13	\$250,000	\$32,000	
14	\$500,000	\$32,000	
15	\$1,000,000	\$32,000	

MARKET WATCH

7/15/19 — 8/14/19

NOTABLE RELEASES I

Арр	Library	Description		
Slotomania	<u>Tasty Lucky Spin</u>	 Each purchase awards a bag of ingredients that players can use to complete recipes (1). This is an update to the <u>Lucky Spin</u> post-purchase mini-game. 		
	2019 Collection The Majestic Album	 Once per day, a character offers players entry to a pick'em mini-game. Players pick three Sun Coins to win collection cards and coin prizes (2). Players can use gems to buy extra picks. 		
Caesars Slots	<u>Dragon Run</u>	 During this timed mini-game, players spin a wheel to advance across a board, collecting shields and coin prizes (3). Players keep spinning until they win a coin prize. Additional spins can be purchased before entering the mini-game. If the timer runs out and players have not collected enough shields, a dragon knocks them back a number of spaces. Completing a board awards a prize, resets the timer, and advances players to the next board. 		
Huuuge Casino	<u>Huuuge Pass</u>	 During the event, players progress through a series of missions to earn rewards (4). Players can upgrade to a <i>Huuuge Pass</i> for bigger and more frequent rewards. 		









NOTABLE RELEASES II

Арр	Library	Description		
Heart of Vegas	<u>HoV Sticker</u> <u>Album</u>	 Players spin slot machines to fill a meter. Filling a meter awards a sticker in an album (1). Completing an album page awards a prize. 		
Scatter Slots	<u>Scatter Tower</u>	 During base play, players collect orbs to earn charms and fill up characters' power meters (2). Filling all characters' meters advances the player to the next set of characters. Special high-roller characters can only be powered up with premium spins. 		
Bingo Pop	<u>Lucky Pets</u>	 Players spend tickets or play bingo to collect pets and complete sets of pets (3). Players earn rewards for each pet collected. Collecting multiples of the same pet (up to five) increases that pet's level. Leveling up a complete set of pets earns bigger rewards. Players can bring a pet into the base game for a boost. 		
Bingo Party	52 Lucky Cards	 During this event, playing bingo fills a meter. Each full meter awards a playing card. When the event ends, players earn prizes based on the number of cards collected. 		
	Bingo Quest Flowing <u>Kingdom</u>	 Players complete a series of challenges to earn rewards. Players can now purchase an upgraded pass for bigger and more frequent awards, similar to Huuuge Casino's Huuuge Pass (4). 		



Feature Database > Data Tool

• Review all the recent releases using the <u>Data Tool</u> in the <u>Feature Database</u>.









UTILIZE L&G'S TOOLS

Uncover new casino trends and understand competitor investments with Liquid and Grit's tools and capabilities. A benchmarking Matrix tool is coming soon!



DATA TOOL

- 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.





- 1. Reference all of 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.



SLACK REPORTS

- 1. Read the reports in any Slack channel.
- 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 often with time intervals	
<u>Challenges</u>	Goal-oriented tasks for players to complete.	
<u>Clubs</u>	A group of players 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 game or a feature	
<u>Currencies</u>	Changes to currencies, economies, stores, and items	
<u>Expansions</u>	Additional rooms, worlds, play modes, VIP lounges, etc.	
<u>Flows</u>	Specific flows, like the new user flow, ratings, and surveys	

Family	Definitions		
<u>Interactions</u>	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 the app (e.g. scratch 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>	A player's setup, profile, settings, and controls		
<u>Purchases</u>	Anything to do with spending money on items in the app		
<u>Quests</u>	Completing tasks to progress along a map or map-like mechanic		
<u>Rewards</u>	Any reward players receive for engagement or spend (other than in the bonuses family)		

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.







L&G SLOTS PERSONAS

1,299 participants from the U.K. and U.S. were surveyed about their mobile gaming use. The data produced five personas with distinct patterns of game choices, slots preferences, and playing habits.

	Demographics*				
	Fame Frank	Money Mike	Daydreamer Denise	Gambler Gail	Sensation Serena
Size	21%	22%	27%	19%	11%
Women	50%	51%	66%	60%	55%
Age	32 mean / 30 median	34 mean / 32 median	35 mean / 34 median	35 mean / 33 median	35 mean / 32 median
Education	3.5	3.3	3.5	3.2	3.3
Money Spent	4.2	4.9	3.5	5.4	5.8
Play Time	5.0	4.5	5.0	4.9	6.5











^{*} The education, money spent, and play time numbers represent the relative value of each category compared to other player personas.

"Thinking is the hardest work there is, which is probably the reason why so few engage in it."

Henry Ford



 $\underline{Brett.Nowak@LiquidandGrit.com}$

