



LIQUID&GRIT

CASINO REPORT

Competitive Research and Actionable Product Recommendations

TABLE OF CONTENTS

NEW COMPETITOR	3
DAFU Casino by Grande Games	
REVENUE DRIVER	9
Game Boards with Boss Battles	
Feathers & Dragons Happy 2020! in <i>Bingo Blitz</i>	
MINI-GAME GUIDE	13
Revenue Drivers	
Trends	
Innovations	
Key Takeaways	
MARKET WATCH	21
Notable Releases I, II, & III	
APPENDIX	25
Liquid and Grit Slots Personas	
Premium Partnerships	
Casino Mechanics Taxonomy	

FEBRUARY

2020

NEW COMPETITOR

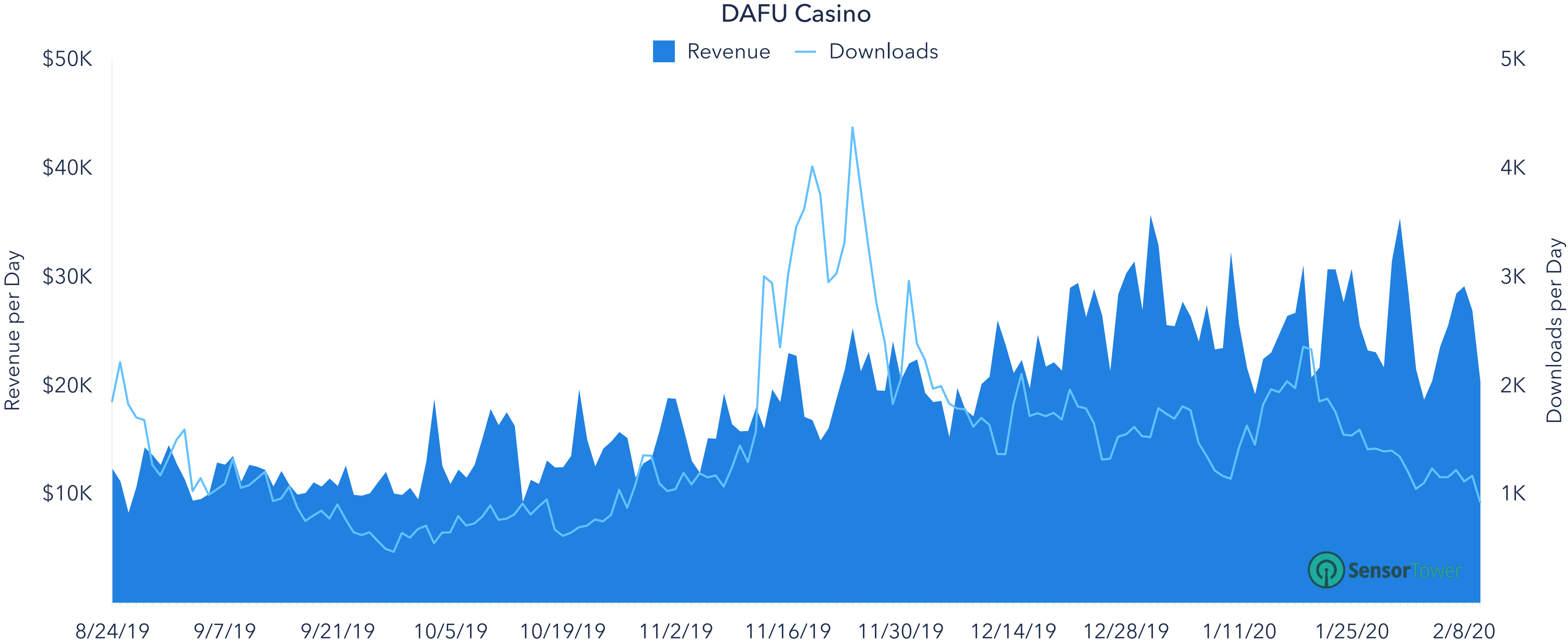


CASINO > GAME

***DAFU CASINO* BY GRANDE GAMES**

REVENUE ANALYSIS

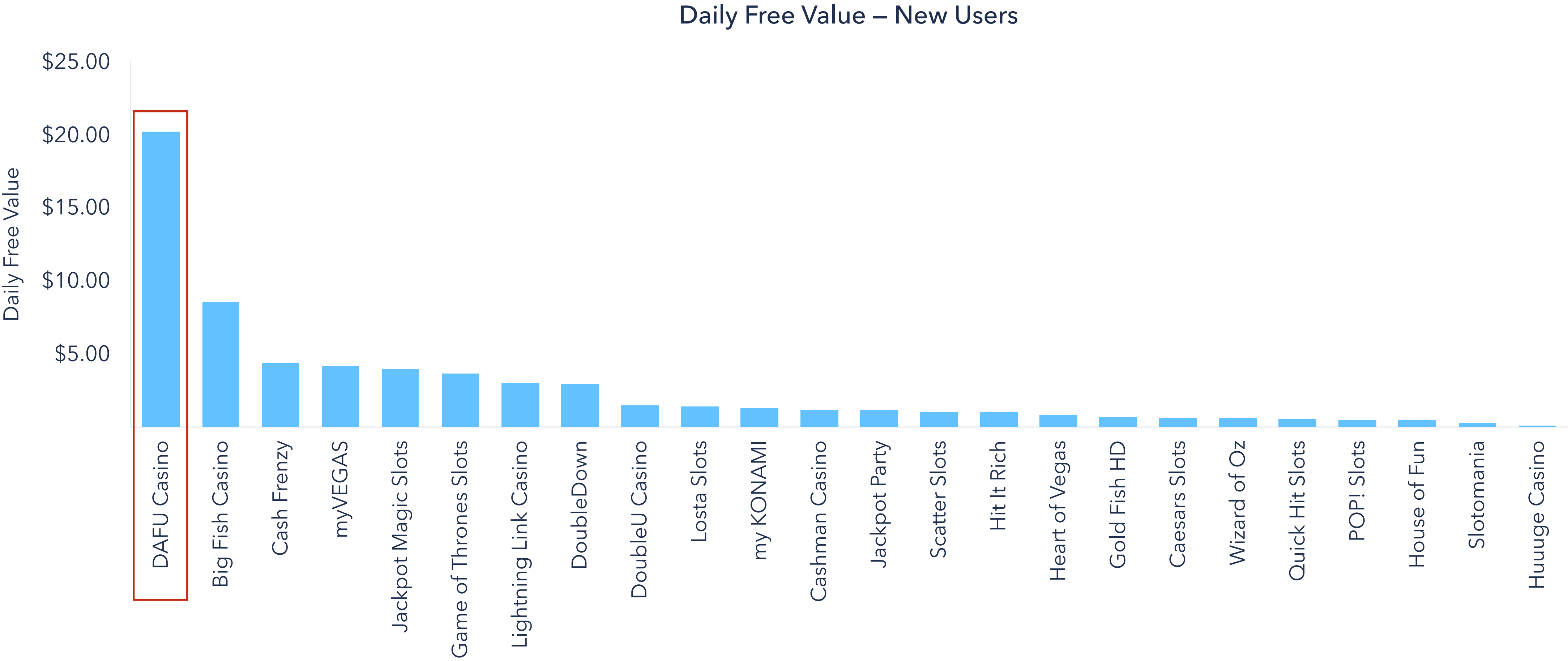
In January 2020, *DAFU Casino* averaged \$25,800 in daily revenue and 1,660 in daily downloads. The app launched in the U.S. in March 2018, but revenue began growing in September 2019.



Graph data is iOS U.S. only.

NEW USER ECONOMY

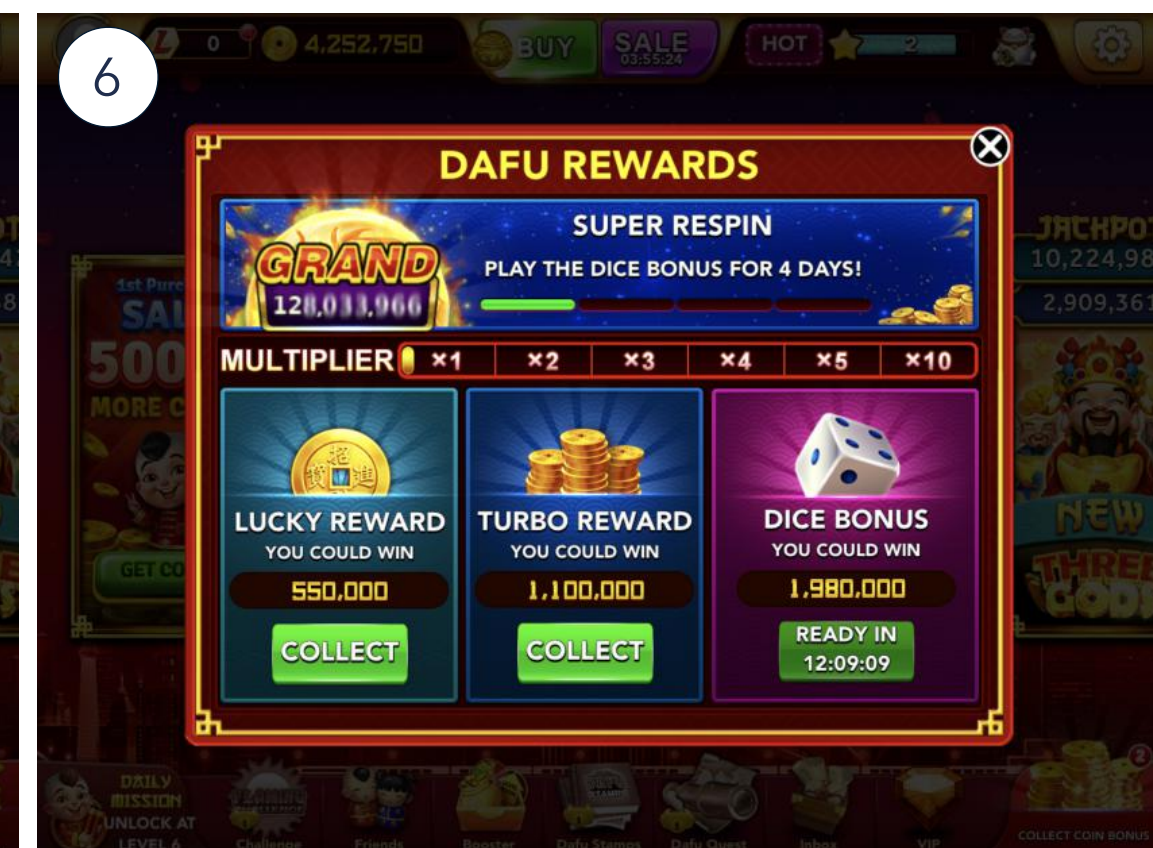
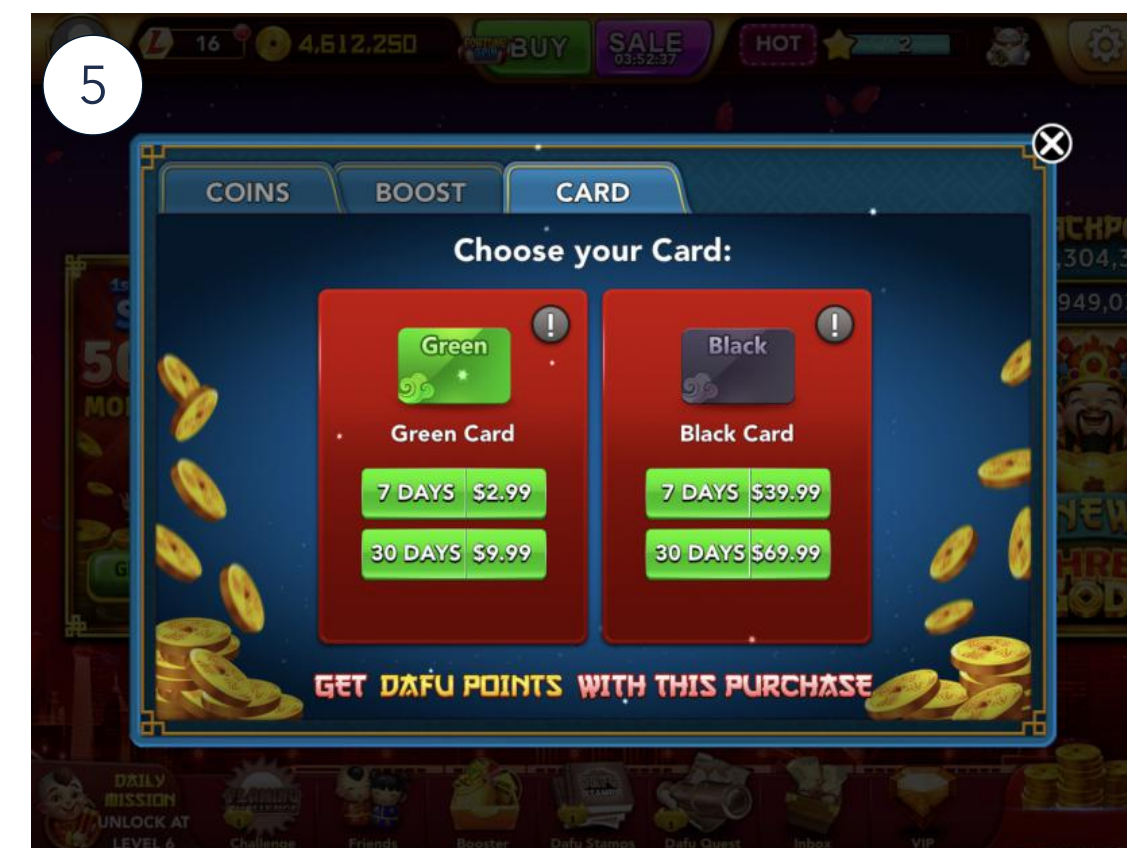
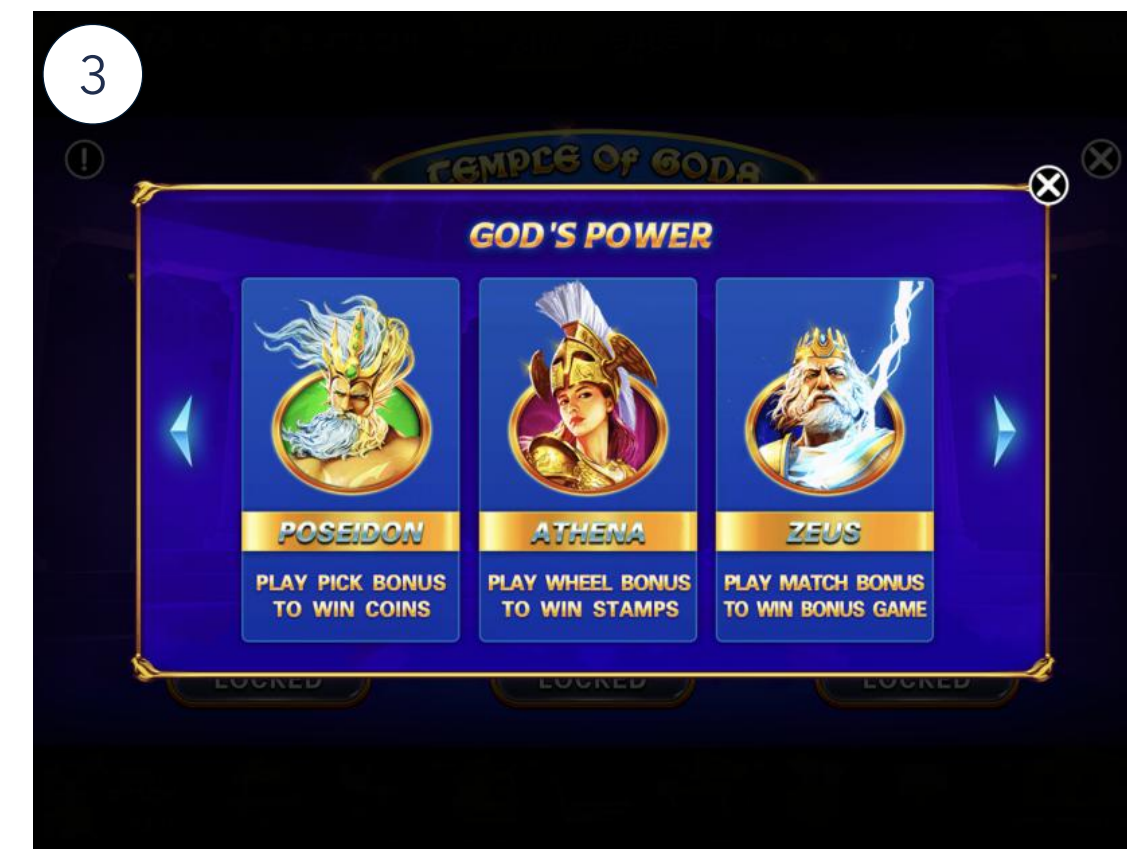
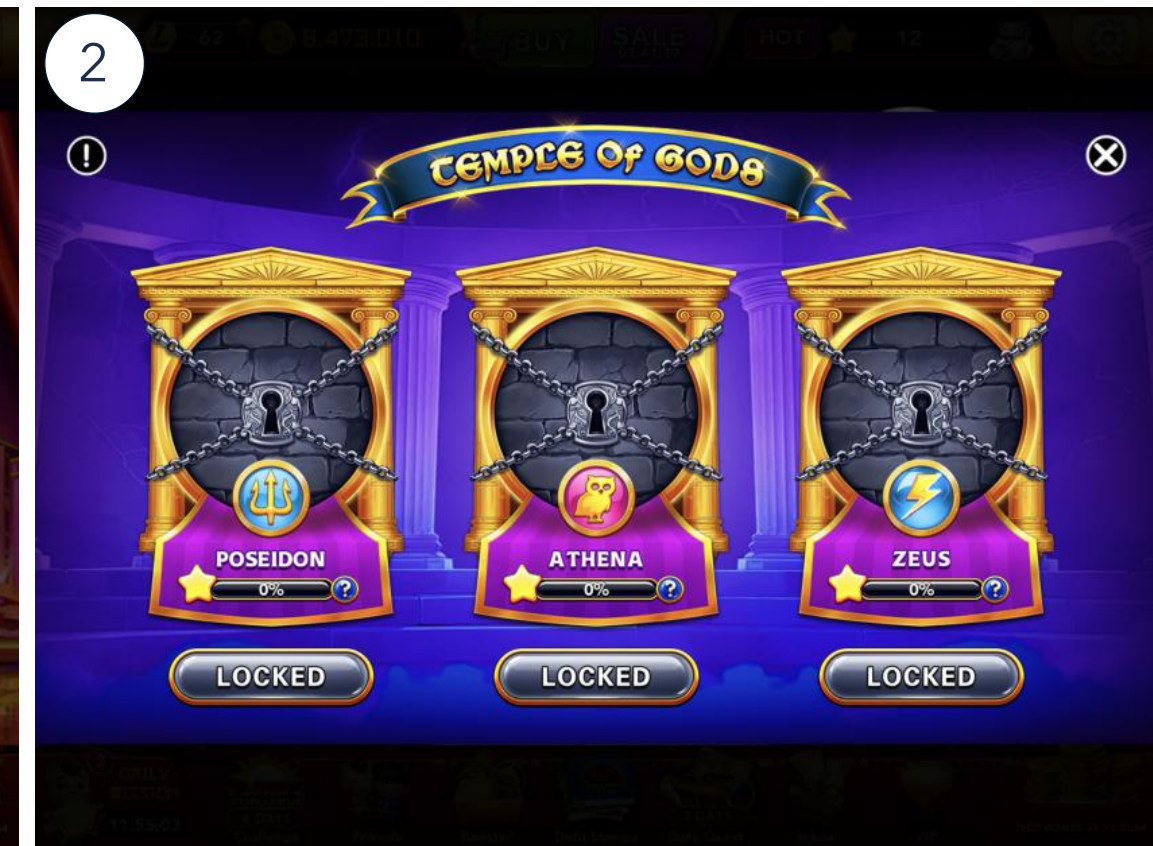
DAFU Casino gives out the most daily free value compared to other top-grossing slots apps. Of *DAFU Casino's* five bonuses, the daily bonus provides the majority of this daily value (62%). Download the full new user economy spreadsheet for casino [here](#).



APP TEARDOWN

DAFU Casino employs an interlocking feature structure: challenge seasons unlock a competition; collections unlock and upgrade bonuses; and a VIP lounge adds more content, challenges, and purchases.

- **Challenges**
 - In each season, players complete challenges to earn event currency and level up.
 - Additional challenges are available as part of the [DAFU Lounge](#) VIP feature (1).
- **Collections**
 - Players collect [stamps](#) from spins, purchases, challenges, gifts, or leveling up.
 - Certain stamps fill meters to unlock three different gods (2).
 - Each god awards a unique power that players can upgrade (3).
 - Completing stamp books awards coins.
- **Competitions**
 - Reaching level 6 of the [Flaming Challenge](#) feature unlocks a competition (4).
 - The top 50 players receive rewards.
- **Purchases**
 - The Green Card costs \$2.99 for 7 days and \$9.99 for 30 days.
 - The Black Card costs \$39.99 for 7 days and \$69.99 for 30 days (5).
- **Retention Bonuses**
 - A daily dice bonus increases for each successive day it is claimed ([video](#)).
 - A bonus multiplier increases as players spin (6).
- **Rewards**
 - [DAFU Lounge](#) contains exclusive content, purchase offers, rewards, boosts, and challenges for pass holders.
- Go to the [Feature Database](#) to see more features.



APP COMPARISON

DAFU Casino and *Cash Frenzy* offer similar feature sets. Although *Lotsa Slots* lacks a number of features, it is the only app with clubs.

Feature	<i>DAFU Casino</i>	<i>Cash Frenzy</i>	<i>Lotsa Slots</i>
Accelerators	Yes	Yes	Yes
Banks	Yes	Yes	No
Bonuses	4 days, daily, 5 hrs, 2 hrs, & 15 mins	3 days, daily, 15 hrs, 3 hrs, & 15 mins	4 days, daily, 5 hrs, & 1 hr
Clubs	No	No	Lotsa Clans
Challenges	Flaming Challenge	Blazing Challenge	No
Collections	DAFU Stamps	Amazing Stamps	Lucky Stamps
Competitions	Hot Rank (challenge)	Divisions (event)	Stamp Gurus (collection)
Mini-Games	Lucky Piggy	Lucky Smash	No
Missions	Daily Mission	Daily Mission & Mission Pass	Clan Missions (club)
Notices	No	Events & Offers	No
Purchases	Accelerators, Stamp Card, & Drip Offers	Accelerators & Stamp Card	Stamp Card
Rewards	Tiered VIP Program & DAUFU Lounge <ul style="list-style-type: none">Lounge Points ChallengesFantastic Pet Home (pet collection)	Tiered VIP Program & Diamond Lounge <ul style="list-style-type: none">Build Your Dreams (city collection)	Tired VIP Program & High Rollers Club <ul style="list-style-type: none">No collection

REVENUE DRIVER



CASINO > EVENTS > MINI-GAMES

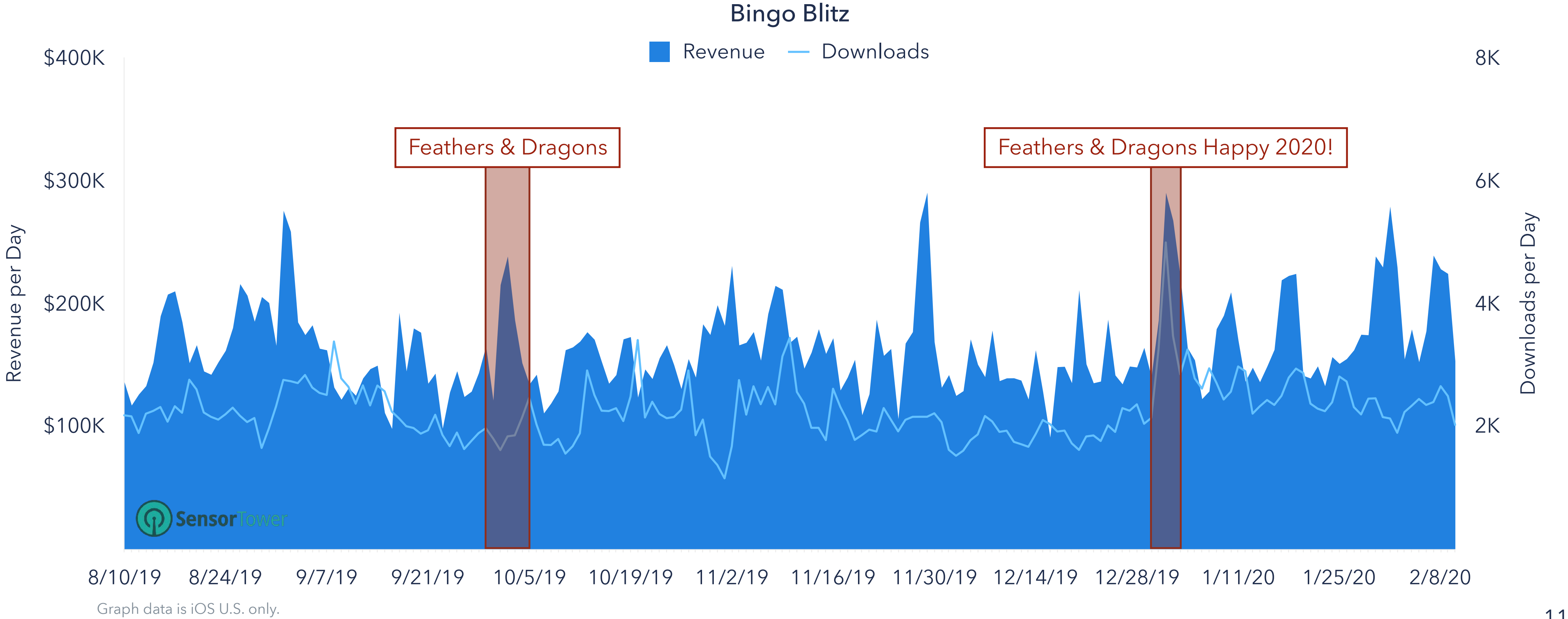
GAME BOARDS WITH BOSS BATTLES

Feathers & Dragons Happy 2020! in *Bingo Blitz*

REVENUE ANALYSIS

Bingo Blitz's revenue was +48% and downloads were +63% 5Do5D during the Feathers & Dragons Happy 2020! event. The initial release of Feathers & Dragons saw revenue +33% WoW.

Releases
12/13-ongoing: Blitz's Gourmet collection feature
12/30-1/3: Feathers & Dragons Happy 2020! mini-game event
• 9/29-10/5: Feathers & Dragons initial release
1/1: \$0.99 Boosts – Tier 1 IAP moved +1 to #6
1/2: Doctor Whom expansion feature



FEATURE TEARDOWN

Players earn dice by collecting champagne glasses from bingo cards. Dice rolls move players on a game board to defeat a series of dragons.

Details

- Players daub champagne spaces on bingo cards to collect champagne glasses (1).
- Champagne glasses fill a meter that awards an increasing number of dice (2).
- Players roll dice to move on a game board (3 and [video](#)).
- Board spaces award currency, boosts, additional dice, or feathers.
- Feathers reduce a dragon's health meter (4).
- Reducing the dragon's meter to zero defeats the dragon.
- Players defeat a series of five dragons to earn currency and prizes (5).

Additional Information

- See the [Feathers & Dragons Happy 2020!](#) and [Feathers & Dragons](#) Libraries for more images and videos.



MINI-GAME GUIDE



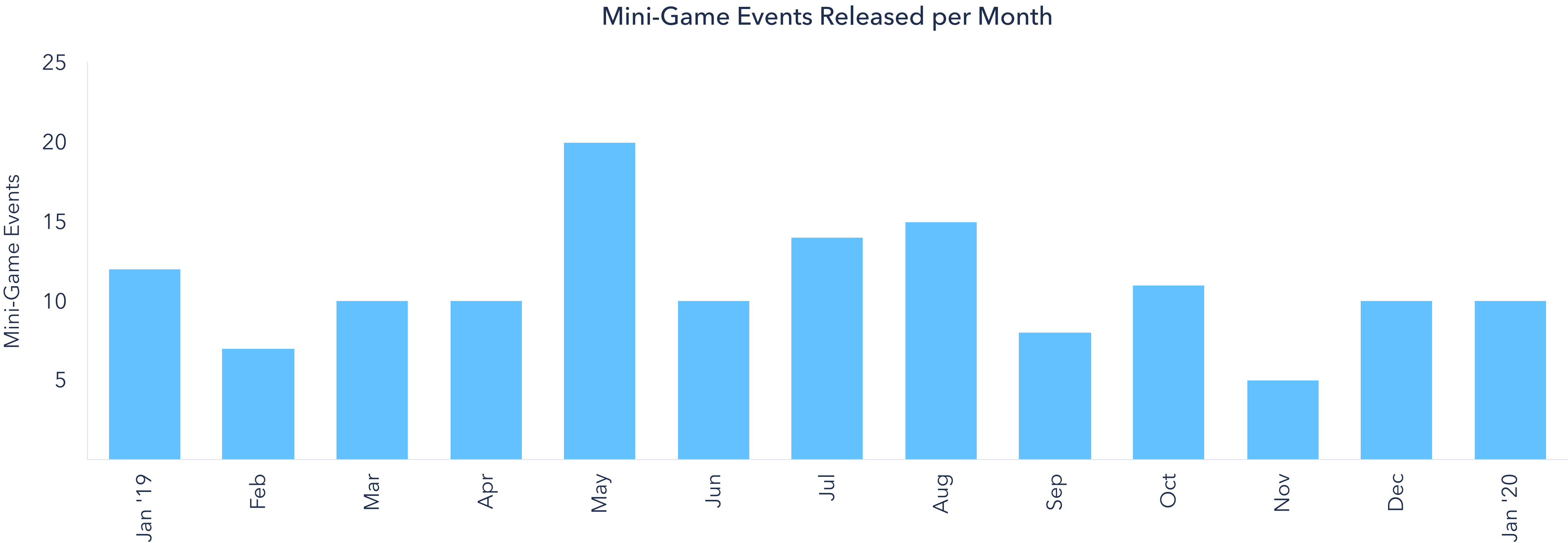
MINI-GAME REVENUE DRIVERS

This mini-game guide is broken into four parts: Revenue Drivers, Trends, Innovative Mechanics, and Key Takeaways. Notably, four of the top five mini-game revenue drivers are from *Bingo Blitz*.

Genre/Subgenre	App	Feature/Event	Revenue Boost
Casino/Bingo	<i>Bingo Blitz</i>	Feathers & Dragons Happy 2020!	+48% 5Do5D
Casino/Bingo	<i>Bingo Bash</i>	Goblin' Candies	+40% WoW
Casino/Bingo	<i>Bingo Blitz</i>	Liberty N' Roll	+40% 5Do5D
Casino/Bingo	<i>Bingo Blitz</i>	Green Beans	+41% 2Do2D
Casino/Bingo	<i>Bingo Blitz</i>	Pick-A-Diamond	+26% WoW avg. for 2 events
Casino/Slots	<i>POP! Slots</i>	Mini Pops	+32% and +24% WoW for closing releases, +2% avg. for event duration
Casino/Slots	<i>Caesars Slots</i>	Thirst for Riches	+13% WoW
Puzzle/Match-3	<i>Best Fiends</i>	Minutian Music Festival	+8% WoW
Puzzle/Match-3	<i>Candy Crush Saga</i>	Beanstalk Challenge	+23% 1Do1D

MINI-GAME TRENDS

Mini-games were the second most popular event type for casino apps in 2019.¹ The number of new mini-game events released in 2019 peaked in May but remained relatively stable throughout the year. Apps released an average of 1 mini-game every 2 months, with a median rate of 1 every 4.8 months. *Scatter Slots, Slotomania, Caesars Slots, Bingo Blitz, and POP! Slots* released the most mini-games.²



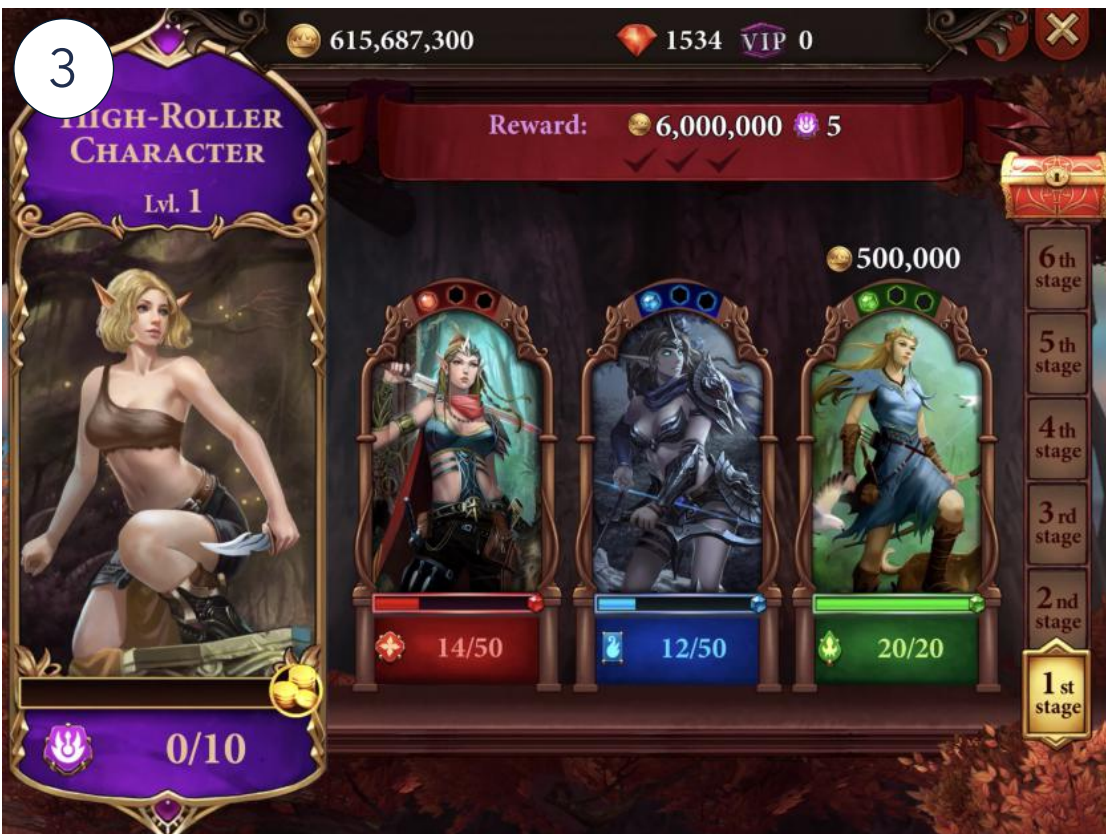
¹ [January 2020 Casino Report](#), p. 18

² [January 2020 Casino Report](#), p. 19

CROSS-GENRE MINI-GAMES

Mini-games with mechanics from other popular genres add novelty for current players and can draw in new players from those genres.

App	Feature/Event	Innovation
Caesars Slots and Slotomania	Aria's Treasure Hunt and Red's Temple Chase	<ul style="list-style-type: none">• Players spin a wheel to move through a platformer-inspired level (1).• Levels end in boss battles with damage determined by wheel spins.
Caesars Slots	Columbus Strike	<ul style="list-style-type: none">• Players collect bombs to attack ships (video).
POP! Slots	Mini Pops*	<ul style="list-style-type: none">• A mini-stepper awards gems (video).• Players spend gems to decorate mini-areas (2).
Scatter Slots	Scatter Tower	<ul style="list-style-type: none">• Players collect runes to power up heroes (3).• Certain heroes require runes from premium slots.• Powering up all heroes completes the stage.
Best Fiends	Minutian Music Festival*	<ul style="list-style-type: none">• A scavenger hunt gives hints to items hidden throughout the app.
Fairway Solitaire	Gopher Derby	<ul style="list-style-type: none">• Players bet on a gopher race (video).
Bingo Bash	Fast Keno!	<ul style="list-style-type: none">• Keno scores advance cart racers on a track.

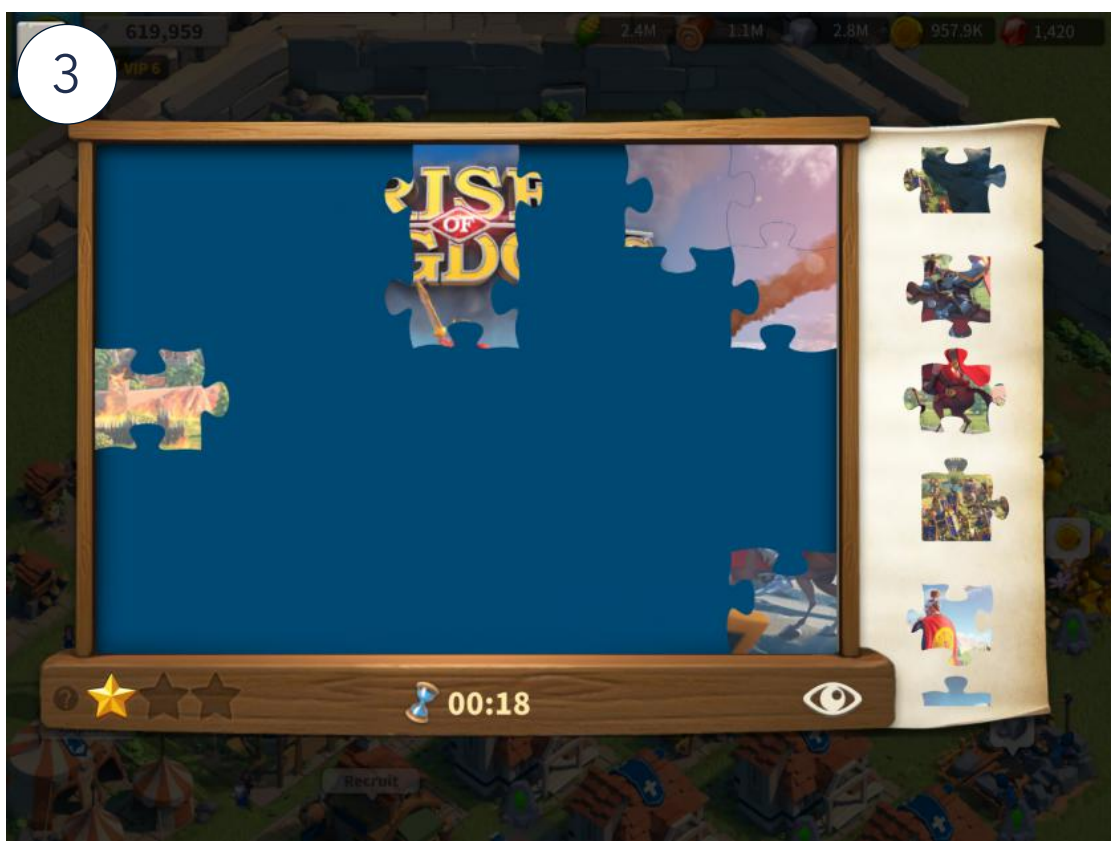


*Revenue driver

BOARD GAME MINI-GAMES

Board game mini-games benefit from unique movement mechanics, boss battles, and social components. Consider board games *not* based on movement as well, like trivia, puzzles, and word games.

App	Feature/Event	Innovation
House of Fun	Hive of Fun	<ul style="list-style-type: none">• Players choose a position and spin a wheel to move on a board (1).• Landing on the grand prize completes the level.• Falling off the board ends the mini-game.
Caesars Slots and Bingo Blitz	Thirst for Riches * and Feathers & Dragons Happy 2020! *	<ul style="list-style-type: none">• Certain spaces on the board damage a boss.• Defeating the boss completes the level.
Scatter Slots	Heroes of Scatterland	<ul style="list-style-type: none">• Players collect and upgrade hero cards.• Hero cards are used to conquer land on a map (2 and video).
Summoners War	Halloween Candy Event	<ul style="list-style-type: none">• Players complete missions to advance on a board and collect candy.• Certain spaces require players to gift candy to their friends.
Rise of Kingdoms	Sharp Eyes & Quick Hands	<ul style="list-style-type: none">• Players manually assemble puzzle pieces for rewards (3).
Quick Hit Slots	Quick Hit Trivia Nights	<ul style="list-style-type: none">• Themed trivia questions award prizes.

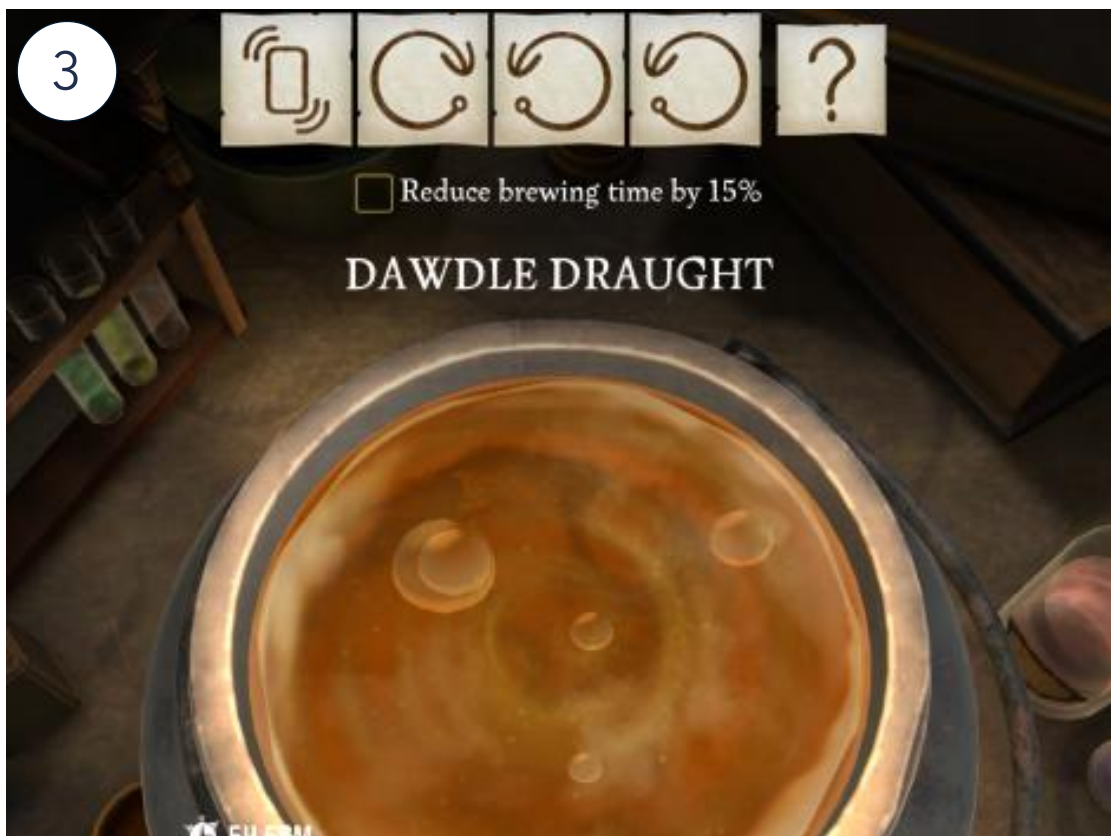


*Revenue driver

SKILL-BASED MINI-GAMES

Skill-based mini-games give players a greater sense of control. Look to arcade and carnival classics for inspiration.

App	Feature/Event	Innovation
Gardenscapes	The Big Race	<ul style="list-style-type: none">• Players control a scooter to dodge obstacles (1 and video).
Fishdom	Go for Gold!	<ul style="list-style-type: none">• Players launch and pilot a submarine to collect gold (video).
Fire Emblem Heroes	Tap Battle	<ul style="list-style-type: none">• Players tap enemies in an arcade-style rhythm game (video).
Bubble Witch 3 Saga	AR Spell Battle	<ul style="list-style-type: none">• Players shoot spells at AR enemies (2 and video).
Candy Crush Saga	Facebook Camera Effect	<ul style="list-style-type: none">• Players catch AR candies in their mouths (video).
Harry Potter: Wizards Unite	Potions	<ul style="list-style-type: none">• Players collect ingredients to make potions.• A series of mystery phone gestures boosts potions (3 and video).
Piggy GO - Clash of Coin	Raids	<ul style="list-style-type: none">• Players steal gold by stopping a moving meter on a target area.• Players can watch ads to slow down the meter or enlarge the target.
Fairway Solitaire	Whack-a-Gopher!	<ul style="list-style-type: none">• A whack-a-mole game.
Epic Seven	Operation Find Arky!	<ul style="list-style-type: none">• A three-card monte game.



PICK'EMS AND SCRATCH CARDS

Progression mechanics and meaningful player choices enhance pick'ems and scratch cards.

App	Feature/Event	Innovation
Piggy GO - Clash of Coin	GO Jackpot	<ul style="list-style-type: none">This four-card pick'em includes a Deal or No Deal mechanic and whammies (video).Players can spend in-game currency or watch ads to keep playing after a whammy (1).
Bingo Blitz	Pick-A-Diamond *	<ul style="list-style-type: none">Scratch cards award gems that advance players on a prize map (2).
AFK Arena	Box of Fortunes	<ul style="list-style-type: none">Hero-based scratch cards have guaranteed hero rewards.Players can switch between cards for different heroes (3).
Slotomania	Holey Moley	<ul style="list-style-type: none">Players pick doors to reveal prizes or moles.Moles advance players to the next level.
AFK Arena	The Celestial Isles	<ul style="list-style-type: none">After finding a grand prize, players can choose to progress to the next level or keep picking.



*Revenue driver

KEY TAKEAWAYS

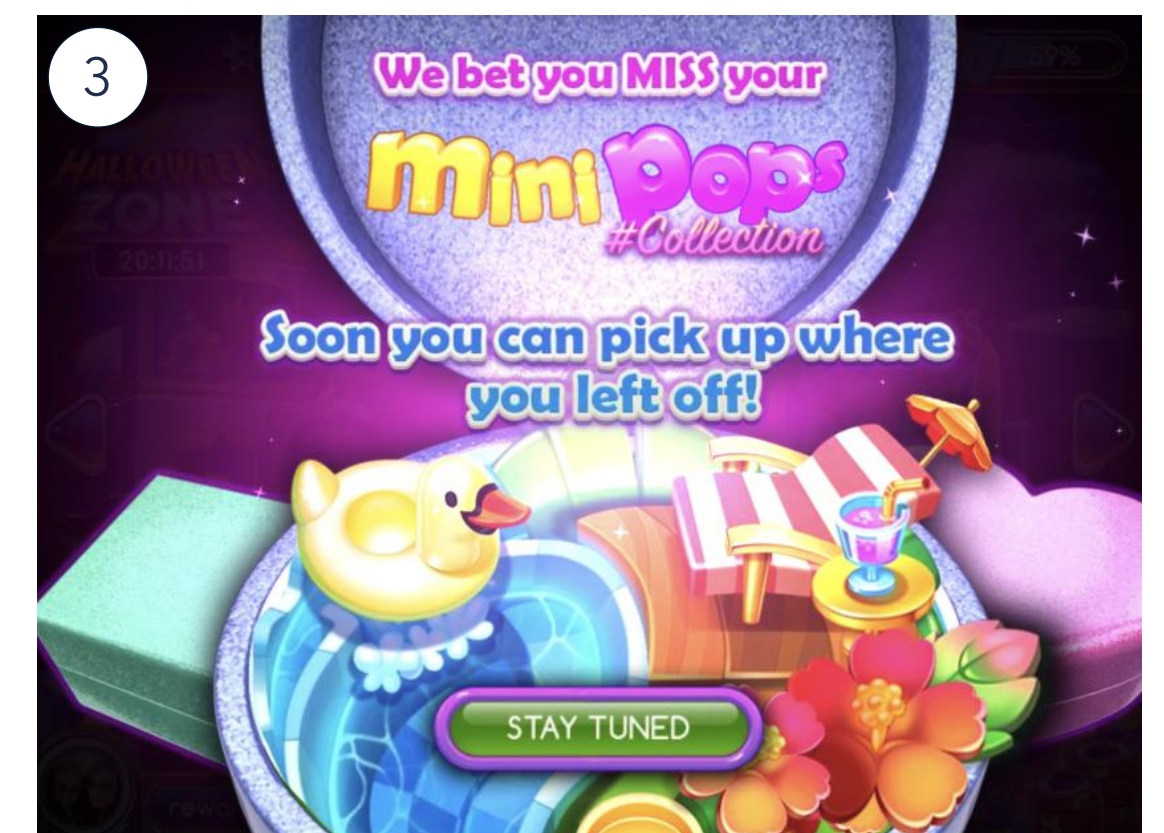
Mini-games add variety and excitement to the base game, with one caveat: they disrupt the normal flow of play. Ensure that this disruption is welcome –and not annoying–by making it easy to get started, tailoring challenges to players' skills, and providing meaningful progressions.

Expert Insights

- **Use familiar mechanics based on popular game genres or real-world systems.** Skip long tutorials when possible. Recognizable mechanics with clear visual language explain themselves. Mini-games should be a treat—not a chore (1).
- **Scale mini-game difficulty to match player knowledge.** Keep new mechanics simple, but don't be afraid to increase mini-game complexity as players gain experience. Balancing a mini-game's difficulty with players' skill progression encourages pleasurable cognitive flow.³
- **Drive revenue with IAP offers—or rewarded ads—that help players complete mini-games.** Seven of our nine revenue drivers included purchase offers to accelerate progression (2). Generate revenue outside the store, too: incentivized advertisements (also known as rewarded ads) are a growing trend. One study found that users are 27% more likely to convert when rewarded for watching an ad.⁴
- **Maintain player progress across multi-release events.** Mini-game events are often released as part of a series. Increase retention by allowing players to earn ranks that carry over between related mini-game events for better rewards (3).

Additional Information

- See the full mini-game mechanic summary in a new section within the [Wiki Tool](#).



³ [Cognitive Flow: The Psychology of Great Game Design](#)

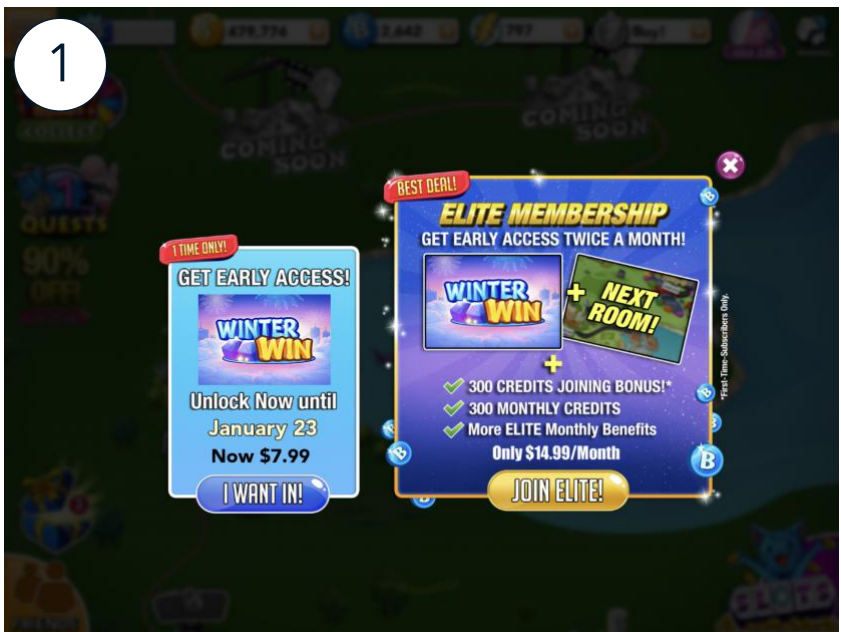
⁴ [Incentivized Advertising: Treatment Effect and Adverse Selection](#), p. 27

MARKET WATCH



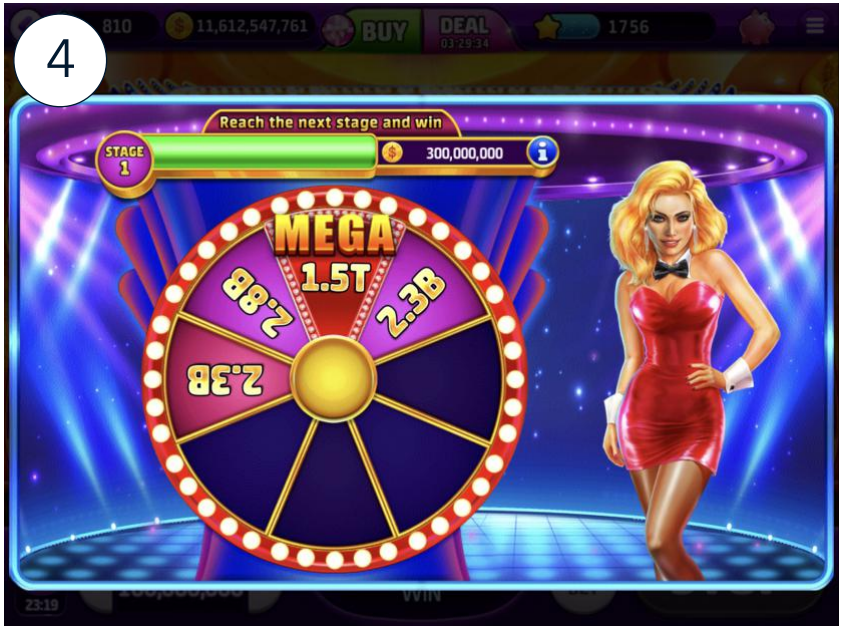
NOTABLE RELEASES I

App	Library	Description
Bingo Blitz	Elite Membership Update purchase feature	<ul style="list-style-type: none">Bingo Blitz Elite subscribers now get early access to two rooms per month (1).Other benefits include extra credits, spins, tournament rounds, boosts, and an elite frame.
Cash Frenzy	Sailors Dream mini-game event	<ul style="list-style-type: none">Players spin to collect compasses and fill a meter.Compasses move a boat in a random direction on a map (2 and video).Landing on a whirlpool teleports the boat to a random position.Landing on the golden island completes the map.
	Slot Blast Booster accelerator feature	<ul style="list-style-type: none">This boost doubles payouts for its duration.A bundle targeting first-time players also includes a leveling boost.
DoubleDown	Bingo Challenge Beta mini-game event	<ul style="list-style-type: none">Players spin to earn calls on a 3 x 3 bingo card (3 and video).Players can customize background themes, cards, and daubers.
House of Fun	HoF Doors collection event	<ul style="list-style-type: none">Players collect keys by filling a meter, making purchases, or winning challenges.Keys open doors.Choosing the correct door advances players to the next room (4 and video).Progressing through all rooms awards the grand prize.



NOTABLE RELEASES II

App	Library	Description
House of Fun	Legends Valley collection feature	<ul style="list-style-type: none">• Players collect chests to fill a meter.• Filling the meter triggers a pick'em mini-game.• Pick'ems contain items that players must collect to decorate an area (1 and video).• Players earn rewards for each collected item and completed area.
Jackpot Party	Honey Bucks currency feature	<ul style="list-style-type: none">• Players complete challenges to collect Honey Bucks and boosts.• Boosts speed up or increase the value of timed prizes.• Players can spend Honey Bucks to instantly unlock timed prizes or activate 24-hour previews of locked slots (2).
Lotsa Slots	Scratch & Win mini-game event	<ul style="list-style-type: none">• Scratch cards unlock every 15 minutes (3).• More spins add higher multipliers to cards.
	Ca\$h Back + purchase event	<ul style="list-style-type: none">• All purchases award cash back on non-winning spins for 1 hour.• Purchases of \$19 and under award 3% cash back; purchases over \$19 award 6%.
Slotomania	Trillionaires Factory other feature	<ul style="list-style-type: none">• Wins from free spins are added to a wheel with eight spaces (4 and video).• Filling all eight spaces awards a wheel spin.• The wheel resets after each spin.• Adding wins to the wheel fills a jackpot meter.• Filling the meter awards a jackpot and advances players to the next stage.



NOTABLE RELEASES III

App	Library	Description
Slotomania	Lucky Spin Offer purchase event	<ul style="list-style-type: none">• Coin purchases of \$9.99 or more award a spin on a mini-stepper with multipliers (1).• Multipliers of 4x or below award bingo cards.• Multipliers greater than 4x award wild bingo cards.
	Worldwide Album collection feature	<ul style="list-style-type: none">• Players complete challenges to collect Ace cards.• Ace cards award spins on a mini-stepper with guaranteed wins (2 and video).• Each Ace card fills a meter for additional mini-stepper spins.
Wizad of Oz Slots	Ruff Retreat quest event	<ul style="list-style-type: none">• Players complete challenges to progress through a story (3).• Completing the story awards a grand prize.
WSOP	Chinese Spring Festival competition event	<ul style="list-style-type: none">• Players earn an event-exclusive bracelet by winning three tournaments or by completing all Spring Festival missions (4).

Quickly review all features and machines

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



APPENDIX



LIQUID AND GRIT SLOTS PERSONAS

Participants from the U.K. and U.S. (N=1,299) were surveyed about their mobile gaming use. The data produced five personas with distinct patterns of 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.

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 personas, data, and statistics available.

Sensor Tower	Kinrate Analytics	Quadrant Strategies
<p>Mobile App Store Intelligence</p> <p>Sensor Tower website</p> <p>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.</p> <p>Clients harness Sensor Tower’s suite of app intelligence tools to:</p> <ul style="list-style-type: none">▸ 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.	<p>Player Personas</p> <p>Kinrate Analytics website</p> <p>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.</p> <p>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.</p> <p>The products of Kinrate Analytics have been developed in university-led research projects in collaboration with economists, psychologists, game scholars, and data scientists.</p>	<p>Market Research</p> <p>Quadrant Strategies website</p> <p>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.</p> <p>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.</p>



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

Family	Definitions
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 the app (e.g., scratch cards)
Missions	A linear set of tasks that players must accomplish
Notices	Feature or product announcements
Other	Miscellaneous features and outliers
Profiles	A player's setup, profile, settings, and controls
Purchases	Anything to do with spending money on items in the app
Quests	Completing tasks to progress along a map or map-like mechanic
Rewards	Any reward players receive for engagement or spend (other than those in the bonuses family)

“An expert is a person who has made all the mistakes that can be made in a very narrow field.”
– Niels Bohr

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