



SLOTS DESIGN REPORT

Competitive Research and Data Insights for Slots Designers

TABLE OF CONTENTS

HEADLINE MACHINES 3

Interactive Story Progression

 SlotoStories Get Me a Prince in *Slotomania*

 Product Insights

Golf Mini-Game

 Shaq 9 in *myVEGAS*

SLOTS TRENDS 10

Fill Meter and Collection Investment

Fill Meter and Collection Releases by App

Progression Bonus Investment

Progression Bonuses by App

MARKET WATCH 15

Notable Releases

APPENDIX 18

Liquid & Grit Slots Personas

Premium Partnerships

NOVEMBER

2020

HEADLINE MACHINES



Machines with unique features or fresh combinations of established mechanics



CASINO > CONTENT > SOCIAL

Interactive Story Progression

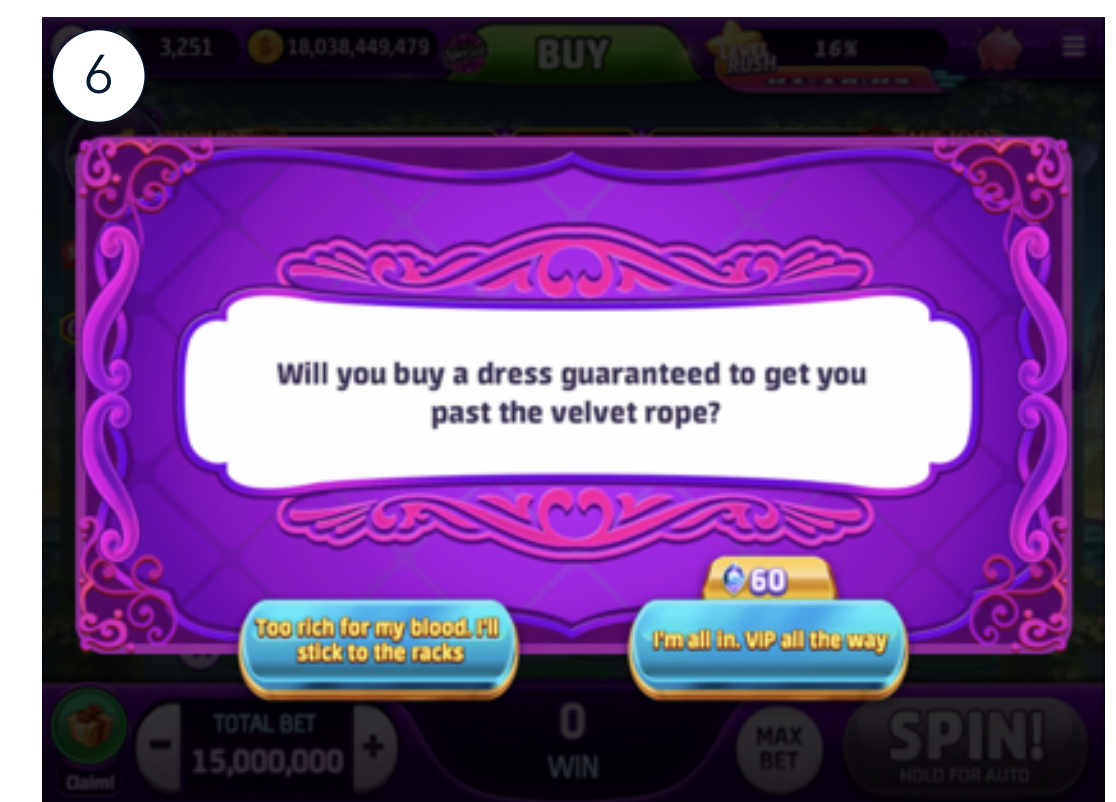
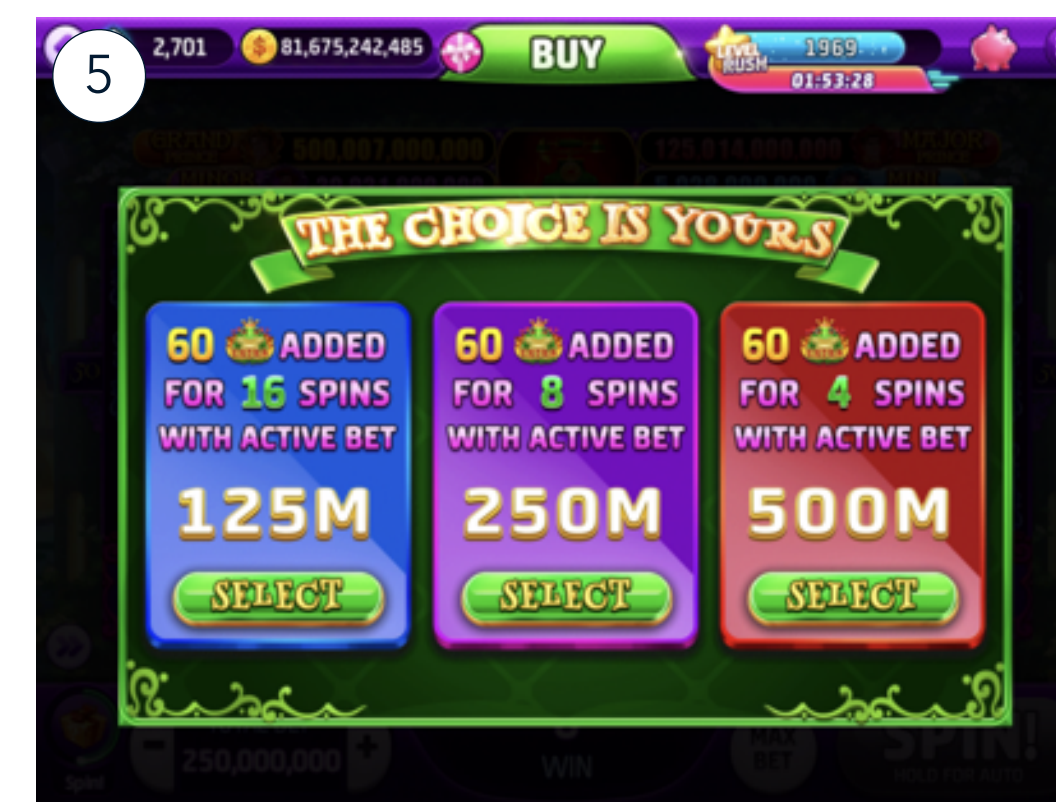
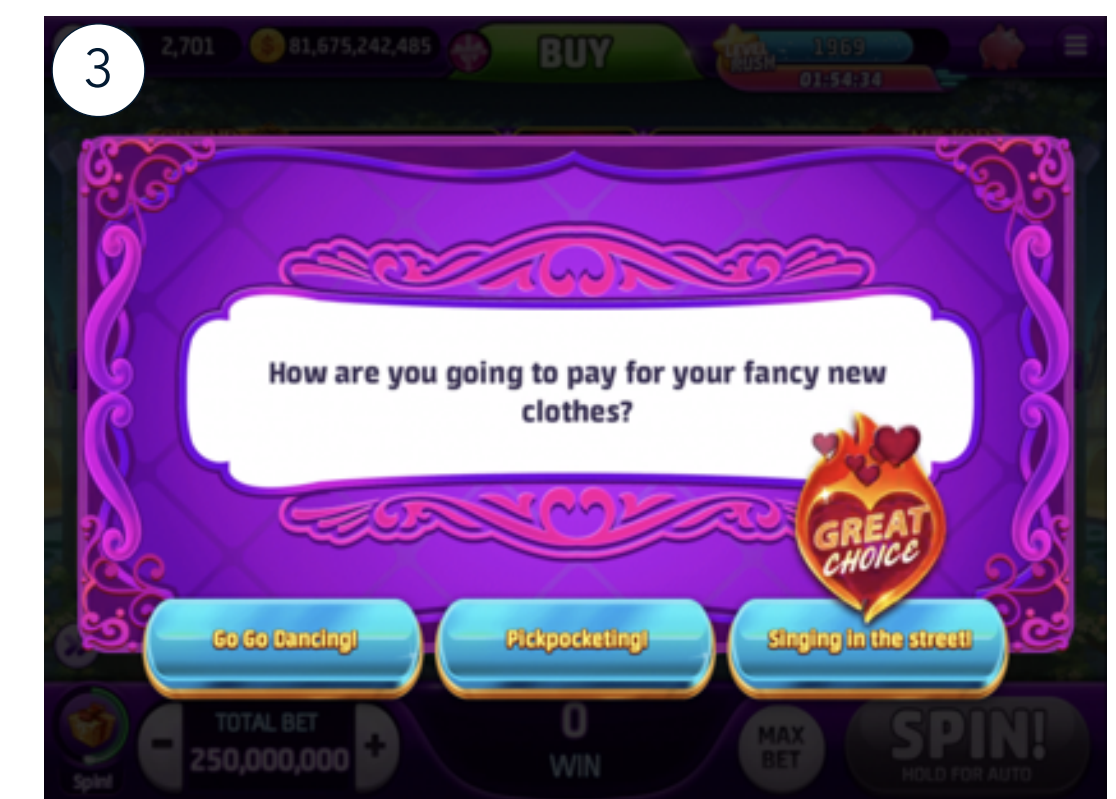
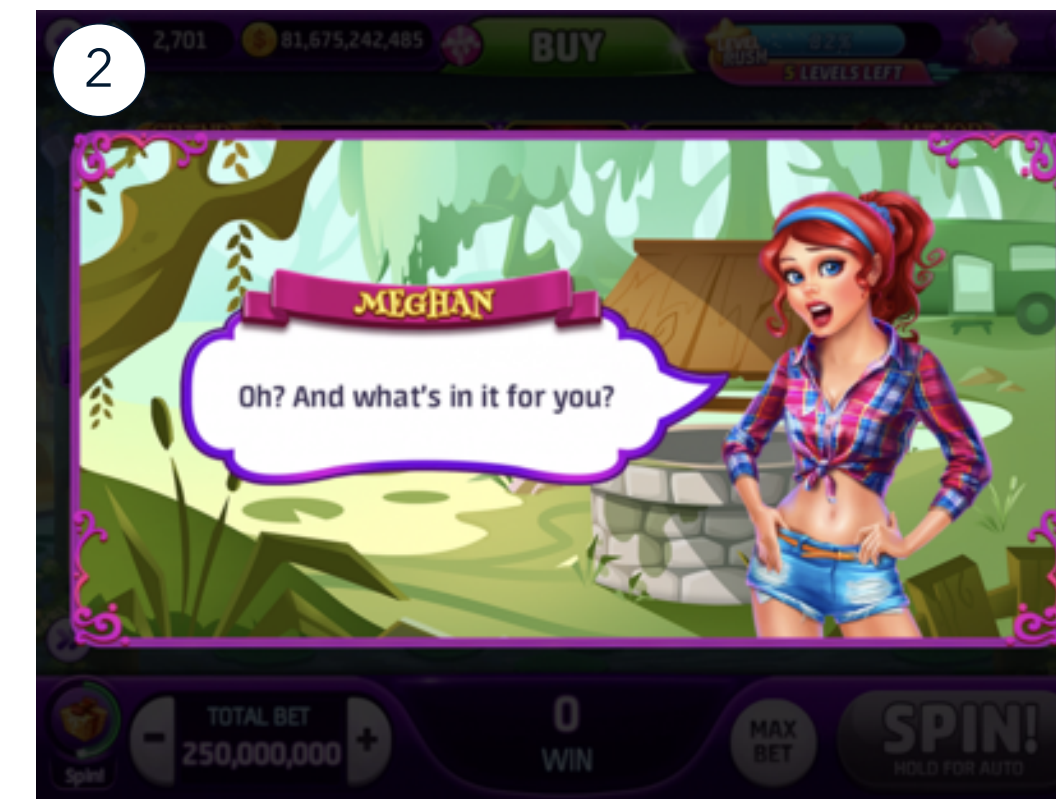
SlotoStories Get Me a Prince in *Slotomania*

MECHANIC TEARDOWN

Players make choices to advance a story. Some choices award boosts for paid spins.

Feature Details

- During base play, a meter shows an icon.
 - Landing symbols with that icon fills the meter (1).
 - Completing the meter triggers a story section (2 and video).
 - Each new story section requires collecting a different icon.
- Players choose actions to take in the story (3).
 - Making the right choice causes a "Great Choice" icon to appear and may award a boost wheel spin.
 - The boost wheel adds wilds for a certain number of paid spins (4 and 5).
 - Some choices cost premium currency (6).
- The story continues to progress as the meter fills during base game spins, occasionally requiring additional player choices.



MECHANIC TEARDOWN (CONT.)

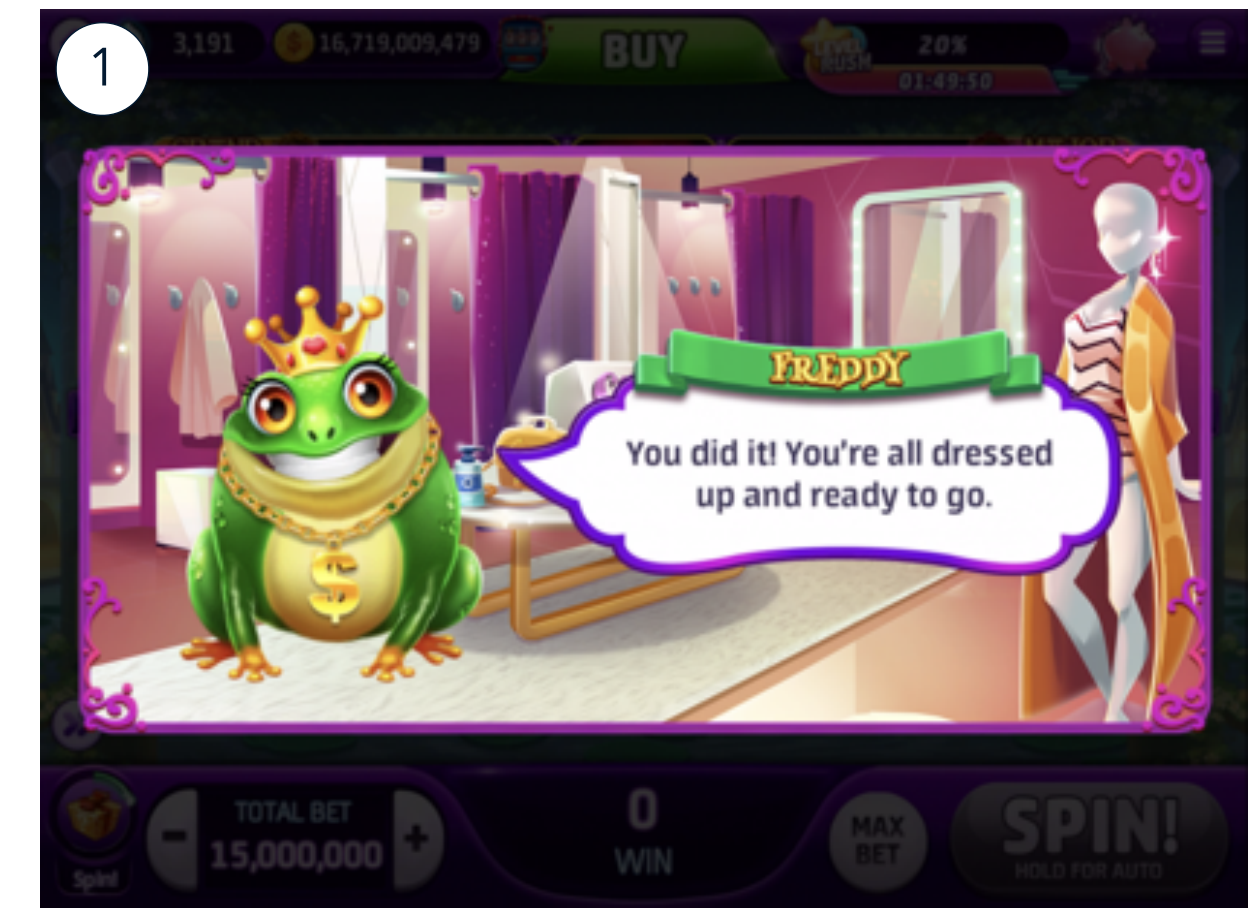
Story chapters award pick'em or added reel bonuses. Two other bonuses can be triggered from the base game.

Feature Details

- Completed story chapters trigger one of two bonuses (1).
 - In the Going Out bonus, players pick multipliers from a series of rows (2 and [video](#)).
 - "Win All" symbols award all multipliers on the row.
 - "Maxed Out" symbols end the bonus.
 - In the Royal Spin bonus, players spin a wheel to add reel arrays and wild multipliers for a set number of spins.
- Frog symbols can randomly trigger a pick'em bonus (3).
- Three or more lip symbols award 10-30 free spins.
 - Frogs landed during free spins become roaming wilds.
 - Frogs that roam to the same position become multiplier wilds.

Additional Information

- See more images and videos in the [SlotoStories Get Me a Prince](#) library.



PRODUCT INSIGHTS

We interviewed three *Slotomania* players who spend \$10-\$9,000 per month.

People who play games to escape like a variety of ways to progress.

Daydreamer Denise player types are the most likely to enjoy the escapism of interactive stories.¹ SlotoStories zeroes in on this player type with some of her other favorites, too: collections, pick'ems, added reels, and bonuses with multiple options. Even the frequently changing collection items hit the mark, as one low-spending player specifically pointed out.²

However, these players also have a strong preference for free spins, which are surprisingly absent from the story bonuses. Both high-spenders we interviewed were "disappointed" that the wheel spin boost bonus used paid spins and not free spins (1).³

For an even bigger draw, consider offering a greater variety of tasks to advance the story besides just collections, including challenges, mini-games, and a quest map—all favorites of Daydreamer Denise.

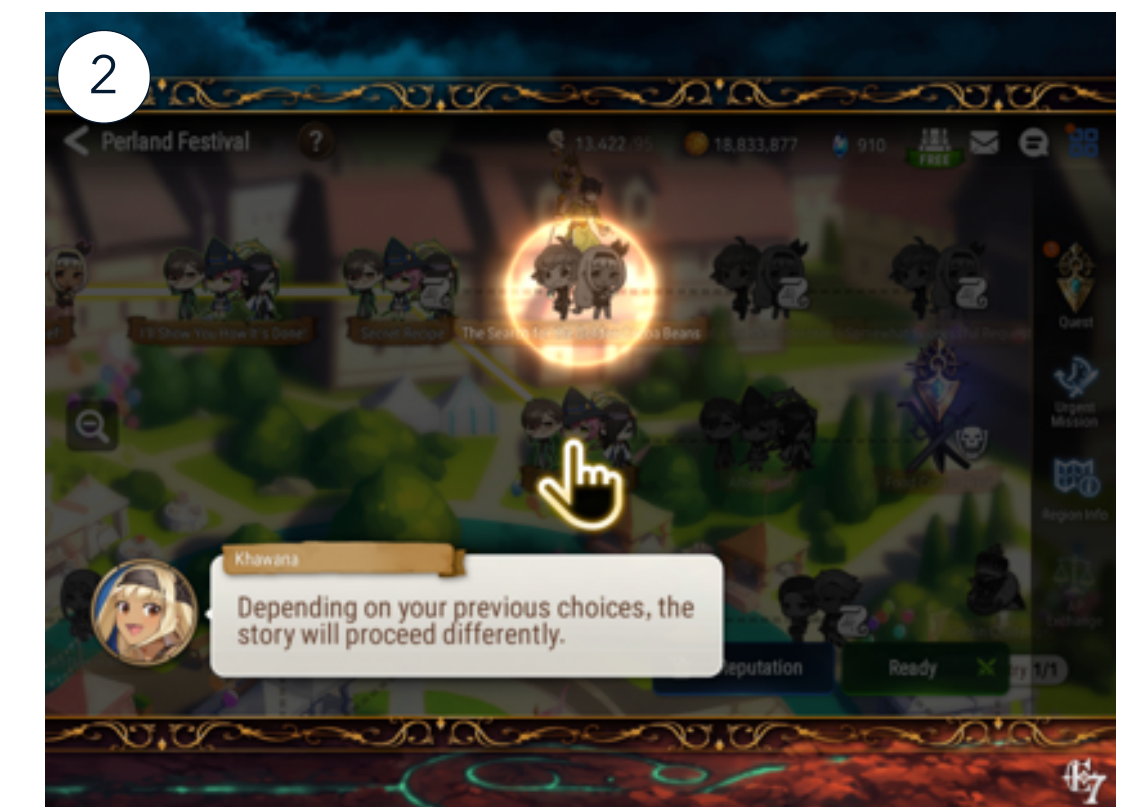
Make sure players' choices have an impact on the story—even if it's small.

A study of popular interactive stories found that the most important factors for player satisfaction were visible consequences for choices, emotional investment, and mental stress caused by difficult decisions. At the same time, players understand stories' limitations and don't expect their choices to radically change the story in a way that would alter game design.⁴

Unfortunately, a high-spending player who completed the story multiple times was "kind of disappointed" to find that her choices didn't produce "different outcomes."⁵ This was particularly frustrating for actions that cost premium currency, since players expected them to have a special impact. That same player stopped spending premium currency after her first playthrough because she felt that it didn't matter. See *Epic Seven's Bittersweet Dessert Festival* for an example where players' choices led to branching story paths (2).

Interactive stories and other niche subgenres represent opportunities for slots designers.

The players we interviewed were all "really excited" by SlotoStories' unusually "interactive" story progression.⁶ Although largely absent from slots apps, interactive storytelling is the core mechanic in three of the 20 highest-grossing casual apps in the U.S. The most popular storytelling app, *Episode*, averaged \$11.3M in quarterly U.S. revenue over the past three quarters.



¹ [Liquid & Grit Slots Personas Report](#), p. 17-21

² Subject A; Age 40 male, \$10/month spend, 5 hours/week playtime

³ Subject B; Age 32 female, \$9,000/month spend, 80 hours/week playtime

Subject C; Age 39 female, \$100/month spend, 30 hours/week playtime

⁴ [Keys To Successful Interactive Storytelling](#), p. 31-32

⁵ Subject C (\$100/month spend)

⁶ Subject B (\$9,000/month spend)

Subject C (\$100/month spend)



CASINO > CONTENT > SOCIAL

Golf Mini-Game

Shaq 9 in *myVEGAS*

MECHANIC TEARDOWN

A skill-based golf mini-game rewards players for completing holes in as few swings as possible.

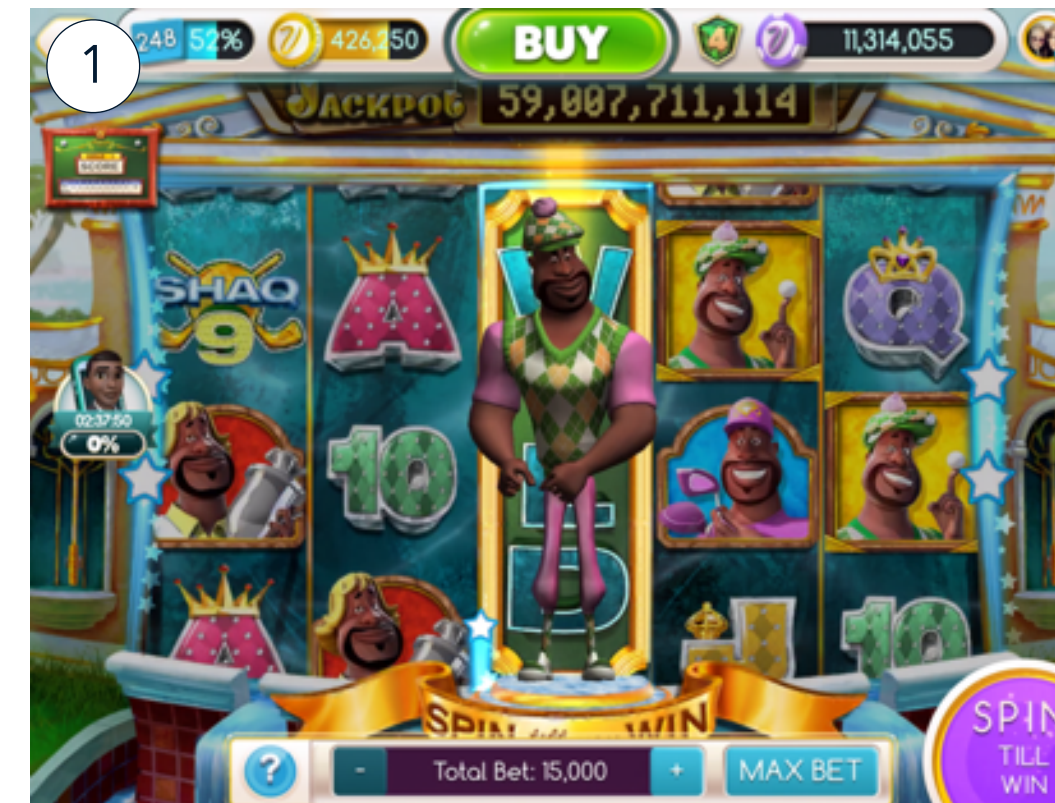
Feature Details

- Filling the center reel with Shaq symbols creates a full-reel wild and triggers a golf mini-game bonus (1 and 2).
- Players try to stop a moving swing meter over a target zone (3 and video).
 - The closer players get to the target zone, the farther they hit the ball (4).
- Completing a hole awards chips and free spins (5 and 6).
 - Using fewer swings awards a greater number of free spins and chips.
 - Finishing all nine holes awards a jackpot.

Additional Information

- See more images and videos in the [Shaq 9](#) library.

The depth of Shaq 9's golf progression is ideal for Daydreamer Denise and Gambler Gail players, who have the greatest preference for mini-games and are highly motivated by escape and arousal.⁷ And because it's based on a familiar real-world system, players can easily understand the rules and goals without further explanation.⁸ Skill-based mechanics, however, are still unproven within slots.



⁷ Liquid & Grit Slots Personas Report, p. 17-27

⁸ The Gamer's Brain, p. 112

SLOTS TRENDS

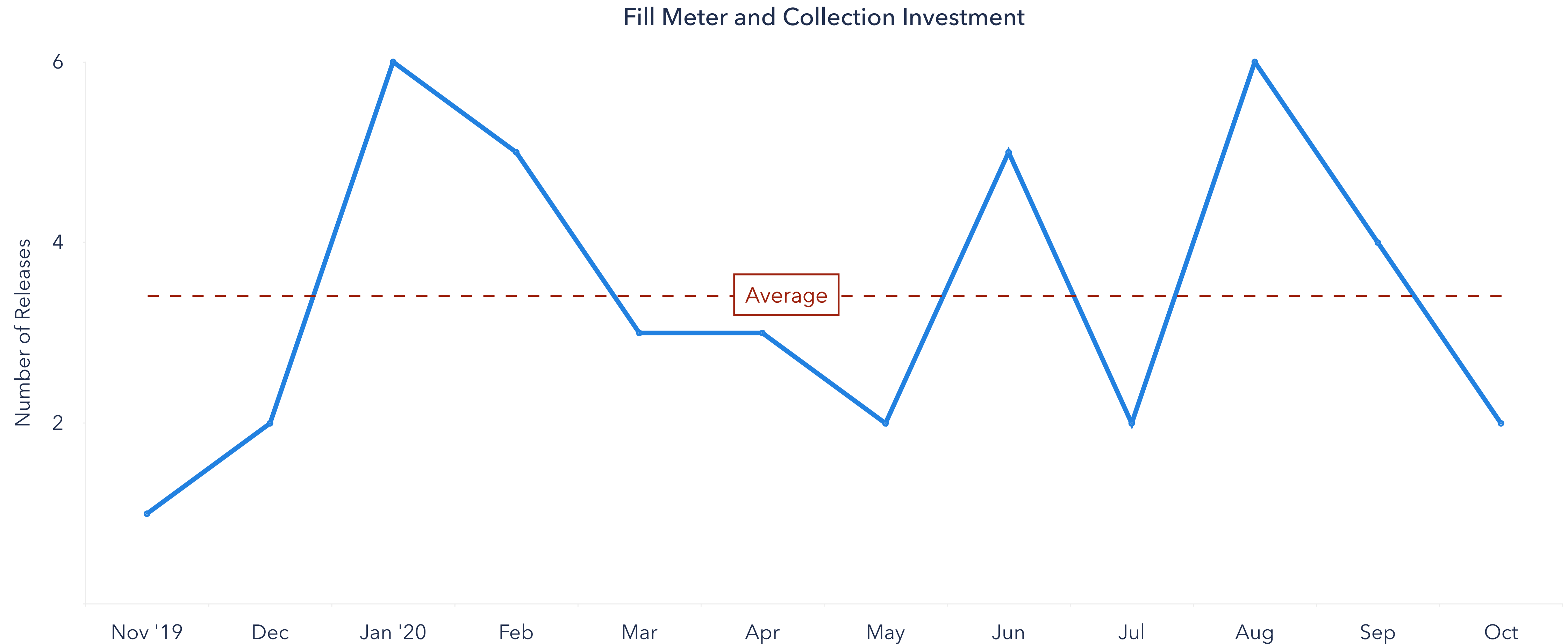


The latest developments in top-grossing apps

Tracked slots apps: *Big Fish Casino, Caesars Slots, Cash Frenzy, Cashman Casino, DoubleDown, DoubleU Casino, Game of Thrones Slots, Gold Fish Casino, Heart of Vegas, Hit It Rich!, House of Fun, HUUUGE Casino, Jackpot Magic Slots, Jackpot Party, Lightning Link Casino, Lotsa Slots, my KONAMI, myVEGAS, POP! Slots, Quick Hit Slots, Scatter Slots, Slotomania, and Wizard of Oz: Casino Slots*

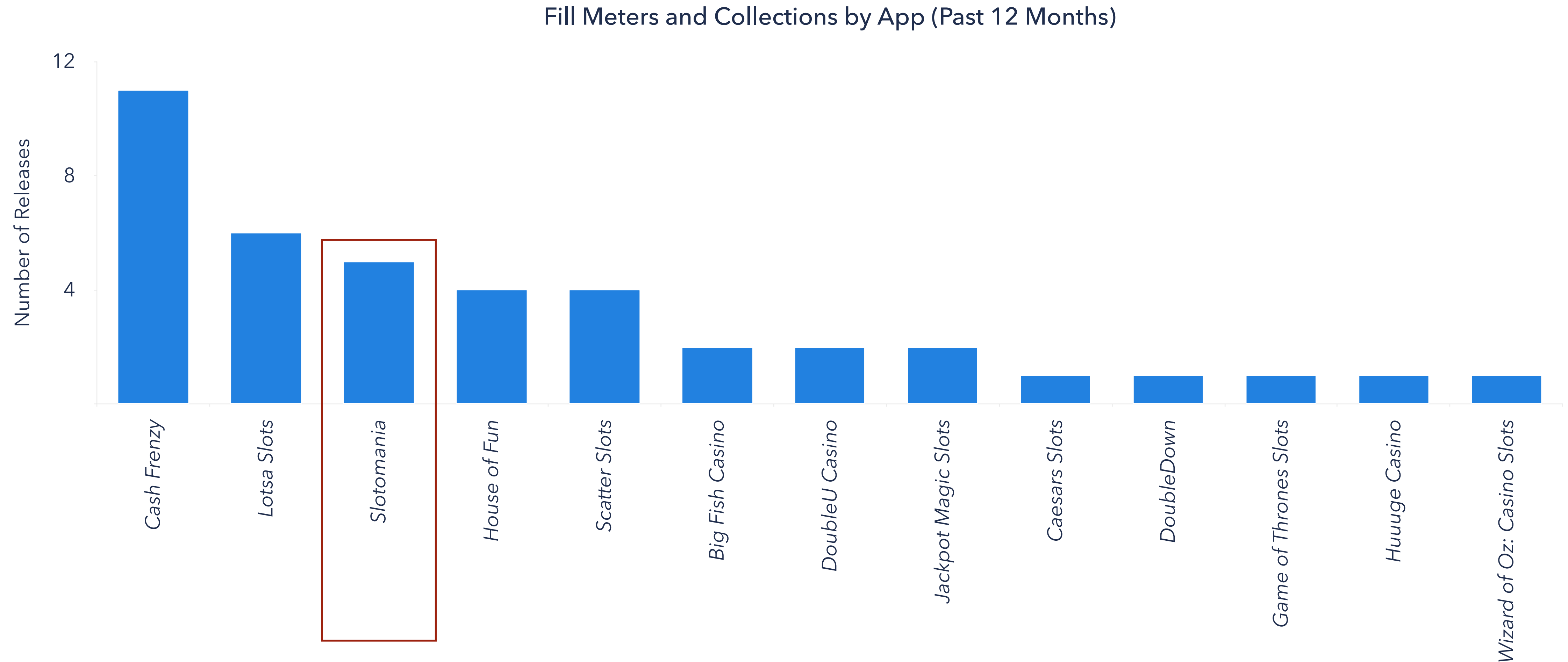
FILL METERS AND COLLECTIONS STAY FLAT

Fill meters and collections have averaged 3.4 releases per month in tracked apps over the past year. The past six months saw nearly the same number of releases as the preceding six months.



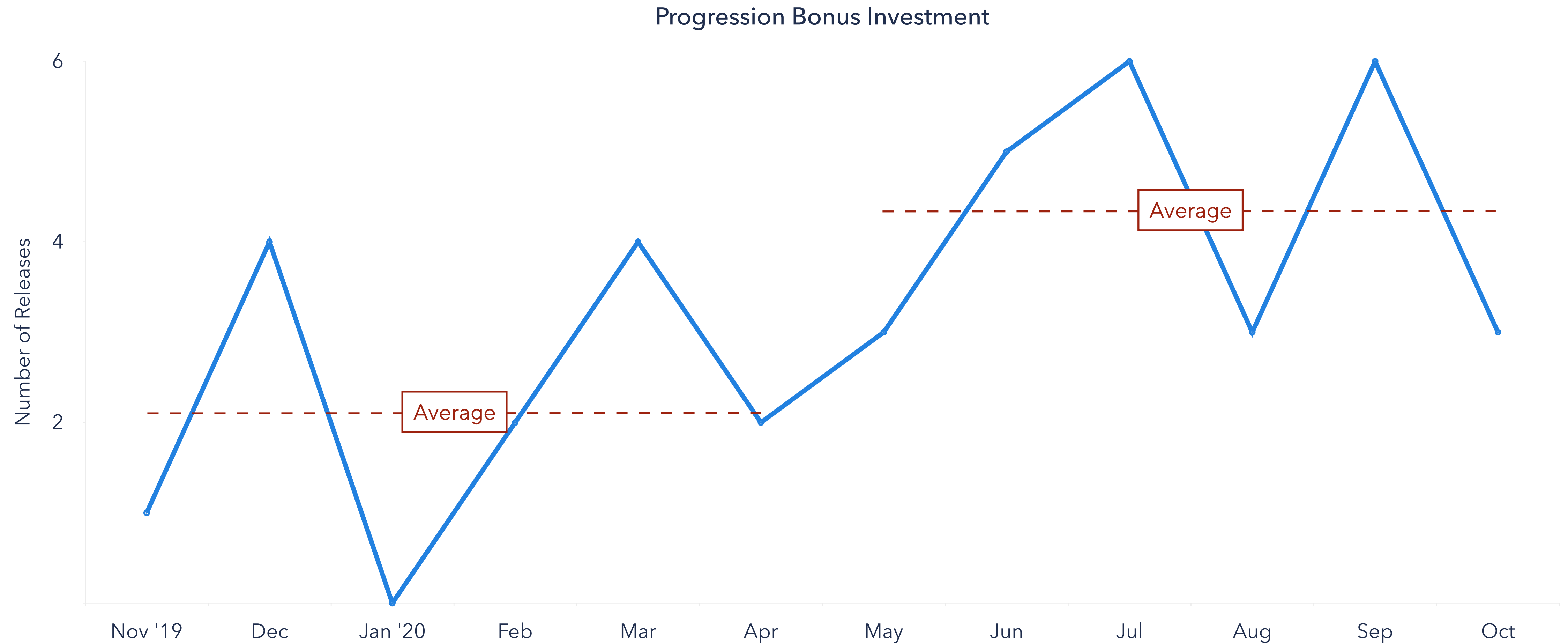
MANY APPS DON'T RELEASE FILL METERS OR COLLECTIONS

Among tracked apps, *Slotomania* released the third most machines with fill meters or collections in the past year. Just under half of tracked apps released none (not shown).



PROGRESSION BONUS INVESTMENT DOUBLES

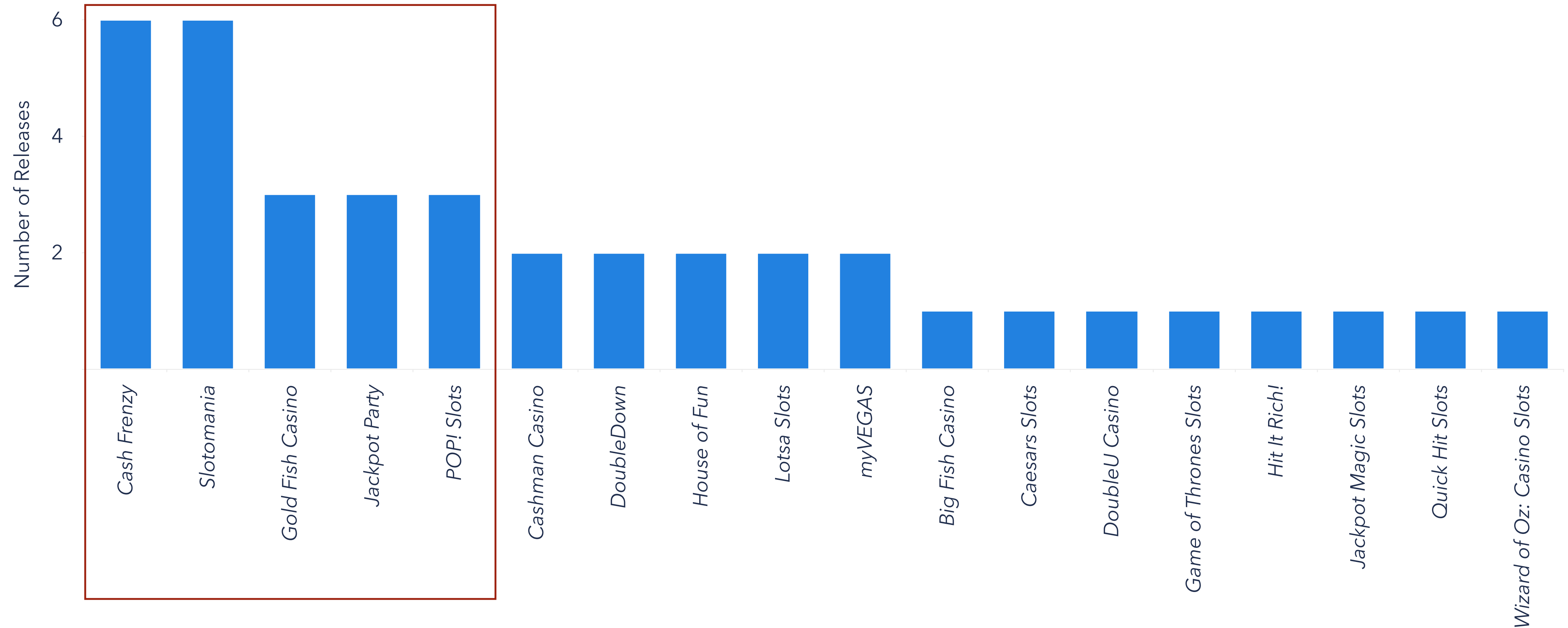
Average monthly progression bonus releases in tracked apps more than doubled in the past six months compared to the preceding six months.



FEW APPS RELEASE MOST PROGRESSION BONUSES

Five apps make up more than half of all progression bonus releases. Most tracked apps released one or zero progression bonuses in the past year (apps with no releases are not shown).

Progression Bonuses by App (Past 12 Months)



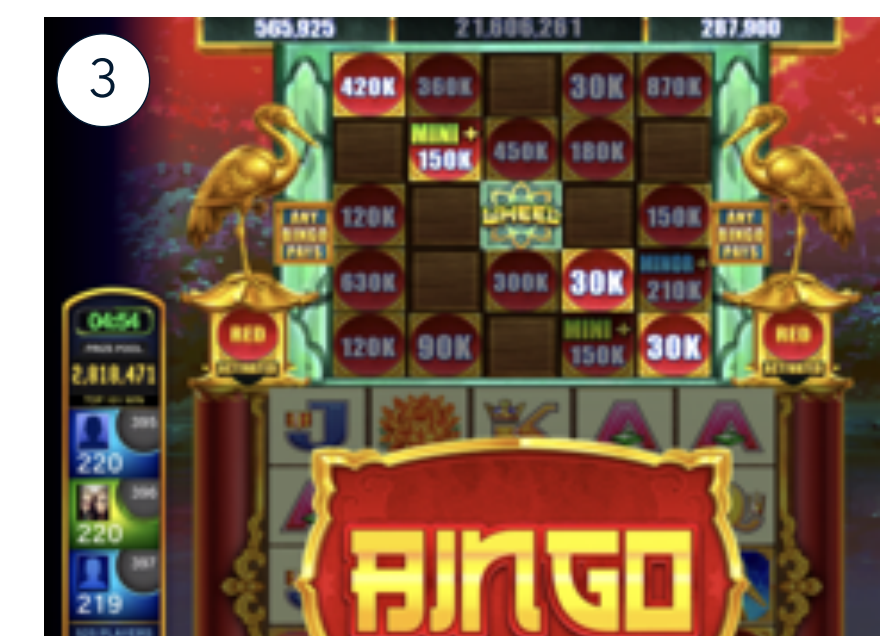
MARKET WATCH



New and notable releases

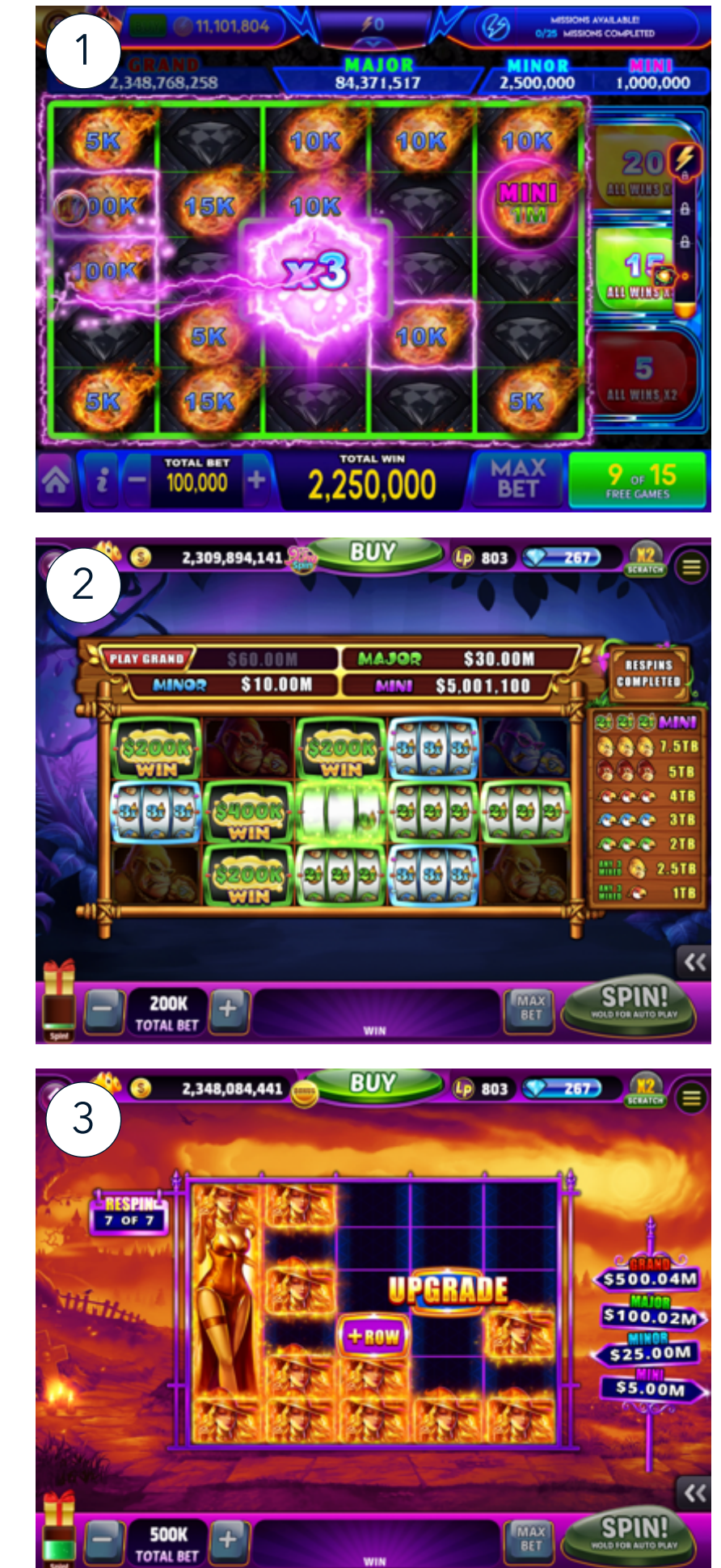
NOTABLE RELEASES I

App	Machine	Description
Caesars Slots	The Hunting Party	<ul style="list-style-type: none"> Landing reward posters in all four corners of the reel set triggers free spins. During free spins, bounty posters trigger respin battles. <ul style="list-style-type: none"> A hero and a monster both spin numerical reels. The character with the higher value wins the battle (1). Potion symbols defeat the current monster and restore all defeated heroes. Players have four heroes. Losing all four heroes ends free spins (video). Leaderboards rank players for most free spins, largest free spin payouts, and most battles won.
DoubleU Casino	Cauldron Cash	<ul style="list-style-type: none"> Six or more cauldron symbols trigger a random number of free spins. <ul style="list-style-type: none"> Colored cauldrons award the corresponding cauldron jackpot (video). Cauldrons with up arrows increase the value of all cauldron jackpots (2). Cauldrons with plus signs award extra free spins.
Heart of Vegas	Golden Crane	<ul style="list-style-type: none"> Prize symbols are added to corresponding positions on a bingo board. <ul style="list-style-type: none"> Bingos award all included prizes (3). Bingos that include the center board position award a bonus wheel spin (video).



NOTABLE RELEASES II

App	Machine	Description
Lightning Link Casino	Wham Bam Pow	<ul style="list-style-type: none"> All reel positions spin independently (video). Multipliers on the center reel position are applied to random spaces (1). Colored +1 symbols add free spins to corresponding free spin bonuses and can trigger free spins. Free Games symbols trigger a pick'em free spin bonus. <ul style="list-style-type: none"> An initial pick'em awards one of three free spin bonuses. During free spins, meteor symbols on the center position trigger sticky respins.
Lotsa Slots	Banana Spins	<ul style="list-style-type: none"> Six or more mini-stepper symbols trigger three sticky respins. Additional mini-steppers landed during respins reset the respin counter. At the end of respins, each mini-stepper spins for a prize (2 and video). Filling all reels awards the grand jackpot. Six or more banana symbols trigger up to 11 free spins. <ul style="list-style-type: none"> Triggering symbols convert into sticky wilds. Free spin bonuses fill a meter for a super free spin bonus.
	Wicked Rich	<ul style="list-style-type: none"> Five witch portraits on reel 1 trigger three sticky respins. Boost symbols spin to award a jackpot wheel spin or reel improvements (3 and video). Witch portraits and boost symbols award one extra respin each. Three or more flying witch symbols trigger free spins. <ul style="list-style-type: none"> Flying witches award 1-2 free spins each. Adjacent flying witches form a rectangle that adds 1-2 free spins for each position it contains.



Quickly review all features and machines

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

APPENDIX



LIQUID & 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 slots preferences and playing habits.

	Demographics				
	Fame Frank	Money Mike	Daydreamer Denise	Gambler Gail	Sensation Serena
Size	21%	22%	27%	19%	11%
% Female	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
Playtime	5.0	4.5	5.0	4.9	6.5



* The education, money spent, and playtime numbers represent the relative value of each category compared to other player personas.

PREMIUM PARTNERSHIPS

Liquid & 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](#)

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](#)

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 with economists, psychologists, game scholars, and data scientists.



Sensor Tower

Mobile App Store Intelligence

[Sensor Tower](#)

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.



"...Simplicity is the greatest adornment of art."
– Albrecht Durer

LiquidandGrit.com



Brett.Nowak@LiquidandGrit.com

