



SLOTS DESIGN REPORT

Competitive Research and Data Insights for Slots Designers

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FEBRUARY

2020

NEW INNOVATIONS



CASINO > CONTENT > SOCIAL

SOCIAL BONUSES WITH CUSTOM DESIGN ELEMENTS

Bubble Madness Deluxe in *POP! Slots*

MECHANIC TEARDOWN

During a pick'em bonus, players collect keys to unlock jackpot chests. A social bonus has players design custom fish to earn individual multipliers and group rewards.

Feature Details

- Players choose a starting bet from a tiered menu (1).
- Golden lionfish leave behind sticky bubbles where they land.
- Landing a golden lionfish in a bubble converts all connected bubbles into wilds (2 and 3).

Pick'em Bonus

- Landing two chests on reels 1 and 5 triggers a pick'em bonus.
- Players pick shells to reveal keys and unlock corresponding jackpot chests (4 and [video](#)).
- Higher bets activate bigger chests.
- Bigger chests require more keys to unlock.
- Inactive keys and chests still appear during the bonus—but players cannot use them.

Social Bonus

- Landing two shells on reels 1 and 5 triggers a social bonus for all players in the room.
- Each player designs a custom fish by selecting three elements: shape, color, and pattern (5).
- Players earn individual multipliers each time their fish match any of the design elements of a series of five random fish (6 and [video](#)).
- Each match fills a group meter for that design element.
- Filling a group meter awards an extra round at the end of the bonus (7).
- All players win multipliers for the design element that triggered the extra round (8).

Additional Information

- See more images and videos in the [Bubble Madness Deluxe](#) Library.
- This content first appeared as an exclusive Win Zone machine. See the [Bubble Madness](#) Library for more information.



EXPERT INSIGHTS

Increase the apparent value of high bet tiers by using decoy offers and by letting players see what they could have won during play. Ensure that features are most exciting in their final moments.

Insight Details

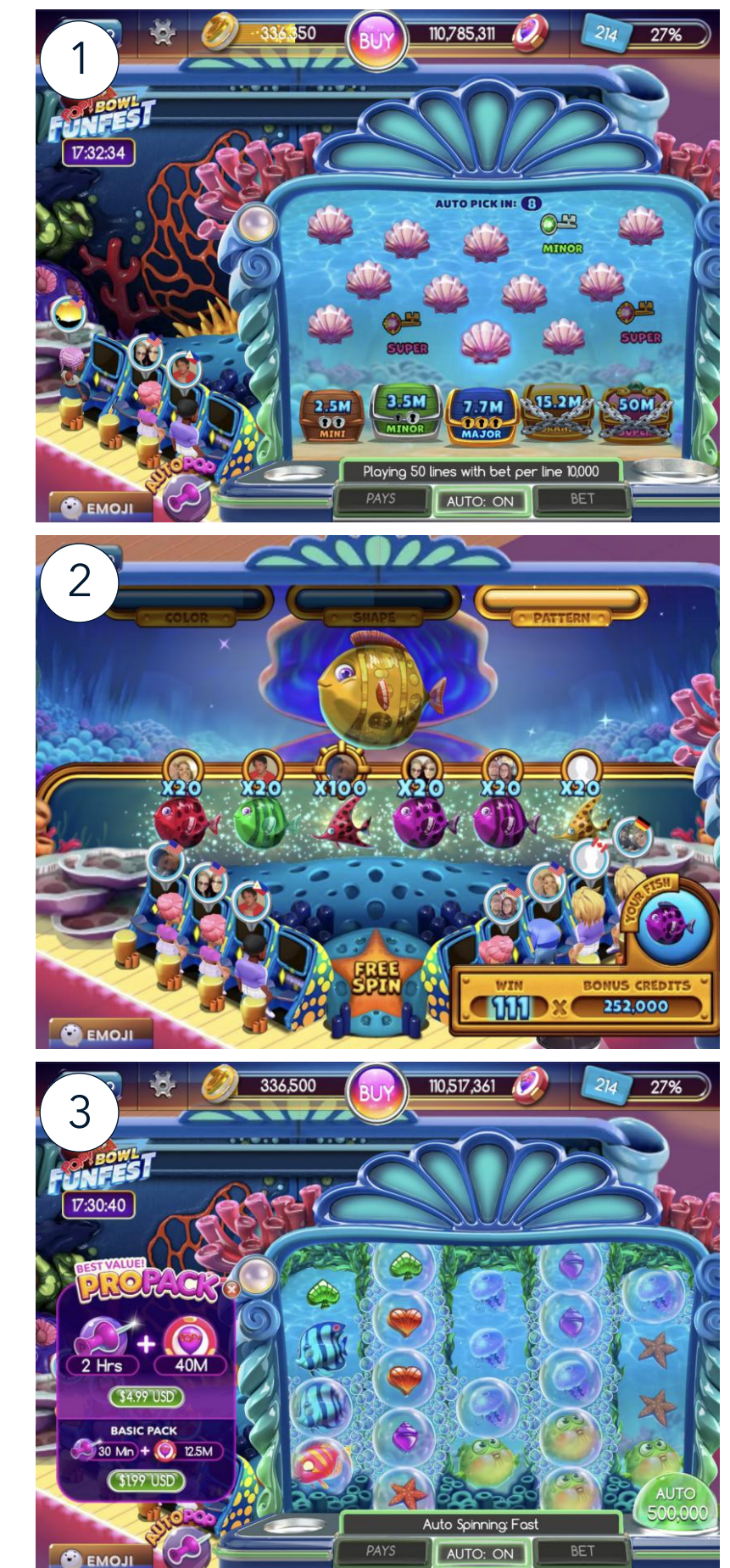
- **Drive players toward higher bets with inferior “decoy” options.** Bubble Madness Deluxe offers three [bet tiers](#), but none are obviously superior to the others. Instead, use the [decoy effect](#) to increase the perceived value of a more expensive option by offering a less appealing alternative at a similar price—like a movie theater that has a small popcorn for \$3, a medium for \$6, and a large for \$7.
 - For example, *The Economist* offers three subscription plans: a digital plan for \$59, a print plan for \$125, and a combination of both, also for \$125. Who would possibly pick the print-only plan for the same price? According to one study, no one; 84% of consumers opted for the \$125 combination plan, and the remaining 16% chose the \$59 digital plan. So why bother? When the decoy print-only plan was removed from the survey, *only* 32% of consumers picked the \$125 combination plan—a 62% decrease.¹
- **During play, show low-betting players what they would have won with higher bets.** [Loss aversion](#) describes the tendency to weigh losses more significantly than equivalent gains, particularly when assessing high-value risks.² By showing players the chests they would have won with higher bets, Bubble Madness Deluxe reframes potential gains as losses, using the power of loss aversion to increase players’ future bets (1).
- **End big features on a high point—and don’t water down an exciting finish with low-stakes extras.** The bonus meter rounds in Bubble Madness Deluxe’s social bonus put the most excitement at the end of the experience (2). According to research on the [peak-end rule](#), people judge experiences based on their most intense sections and final moments, not their total duration.
 - A study put two groups of subjects through nearly identical pleasurable experiences. While one group's experience ended at its most pleasurable moment, the other included an additional mildly pleasurable experience at the very end. Subjects that experienced the supplemental mild pleasure ranked their overall experience as *less pleasurable*, despite having received an objectively greater amount of pleasant experiences.³
- **Integrate IAP marketing directly into the machine.** This allows you to promote packages to players at key moments, like those immediately following a near-miss, without disrupting play (3). In one survey, players reported preferring banner ads over ads that interrupt gameplay by 164% and said they were 133% more likely to interact with banner ads.⁴

¹ [The decoy effect: how you are influenced to choose without really knowing it](#)

² [Is loss-aversion magnitude-dependent? Measuring prospective affective judgments regarding gains and losses](#), p. 87

³ [Evaluations of pleasurable experiences: The peak-end rule](#), p. 98

⁴ [Gamers Hate Ads That Interrupt Gameplay, According To New Market Report](#)



CASINO > CONTENT > SOCIAL

MULTI-STAGE BONUSES

Cash Fever Deluxe in *Cash Frenzy*

MECHANIC TEARDOWN

This 12 x 5 machine includes a jackpot bonus with a map progression and a free spins bonus with a respins mechanic.

Jackpot Bonus

- Landing a bonus symbol on reels 1 and 5 triggers a jackpot bonus.
- Players get five spins on a stepper machine.
- Spins fill a prize tower based on the numbers landed (1).
- Filling the prize tower or spelling "GRAND" on the reels awards the grand jackpot.
- Each jackpot bonus advances players on a map of coin prizes and multipliers (2).

Free Spins Bonus

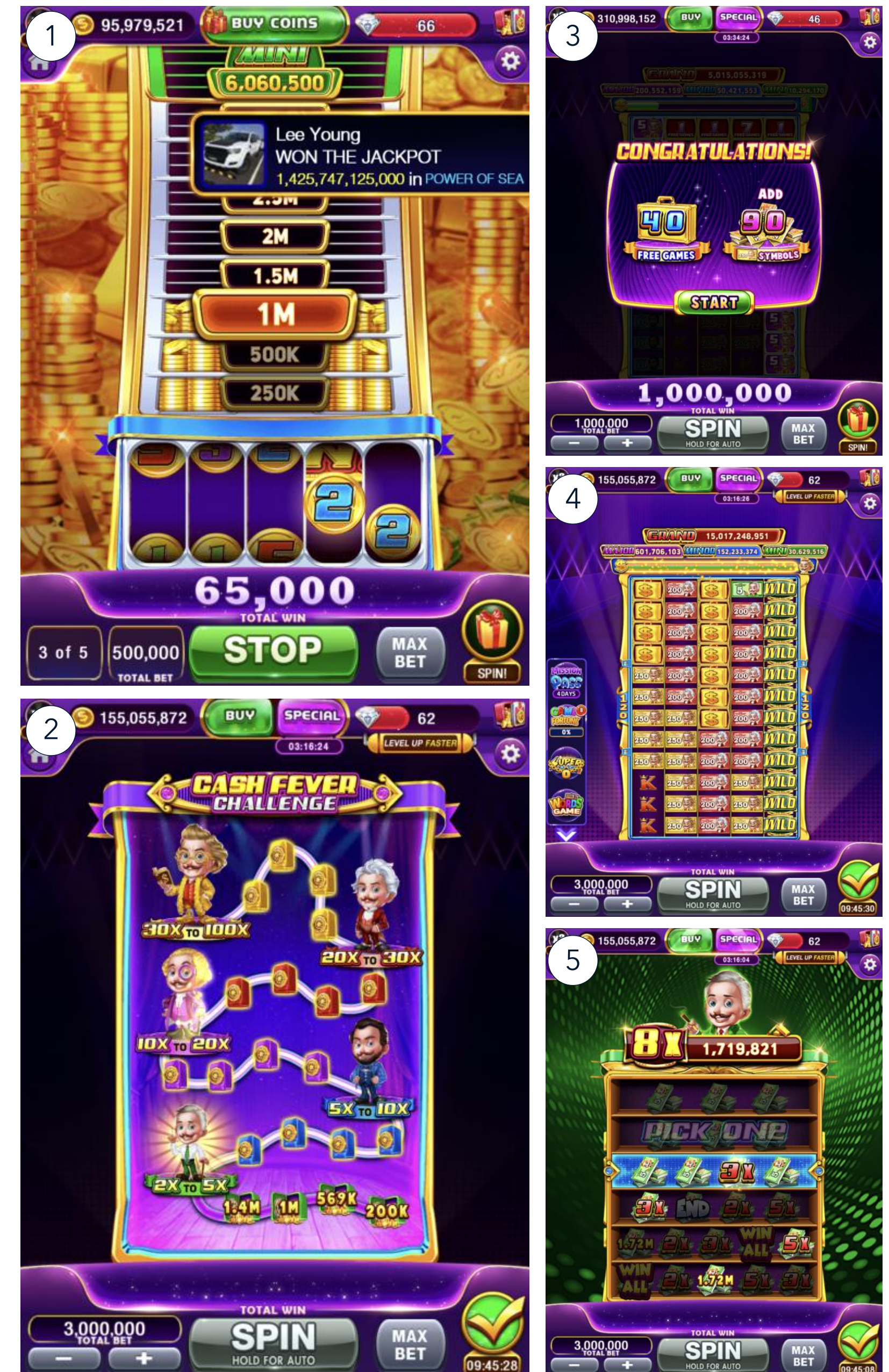
- Landing gold or silver briefcases on at least four consecutive reels triggers a free spins bonus.
- Briefcases respin to reveal numbers (video).
- Players are awarded free spins equal to the sum of all gold numbers.
- A number of maximum value symbols equal to the sum of all silver numbers is added to free spins (3).

Pick'em Bonus

- Landing briefcases fills a meter to trigger a pick'em bonus (4).
- Players pick prizes on up to six successive rows of a prize tower (video).
- Prizes include multipliers, cash, "Win All" symbols, and "End" symbols (5).
 - "Win All" awards all prizes on the row.
 - "End" ends the bonus.

Additional Information

- See more images and videos in the [Cash Fever Deluxe](#) Library.



EXPERT INSIGHTS

Create multiple paths to victory for jackpots. Publicly announce big winners, but turn off notifications during key moments.

Insight Details

- **Broadcast other players' big jackpot wins, but don't interrupt important moments.** *POP! Slots* announces big jackpot winners to other players (1). This is a great way to harness the power of [survivorship bias](#), which causes people to see improbable events as more likely when presented with success stories.⁵
 - During our play-testing, however, this pop-up actually covered one of our own jackpot wins ([video](#)). Don't trigger notifications during exciting moments. Not only can they interrupt what should be the highlight of a play session, but they can also make players' wins feel less substantial by showing even bigger wins.
- **Consider giving players multiple ways to win a jackpot.** *Cash Fever Deluxe*'s jackpot bonus awards the grand jackpot for filling the tower or spelling "GRAND" on the reels. Having multiple win conditions—one based on progression and one based on single spins—lets players feel like they always have a path to victory. For other examples of multiple victory conditions, look at *DoubleU Casino*'s [Go Wheel Fever](#) or cult arcade hit [Killer Queen](#).
- **Use high-contrast single-symbol triggers in larger reel sets to focus players' attention.** Unlike most symbols in *Cash Fever Deluxe*, which appear in long chains, the bonus symbol always appears by itself (2). And while other elements are small and rectangular, the bonus symbol is large, circular, and covers up parts of adjacent symbols. Use distinct colors, shapes, sizes, and typography to emphasize important symbols and to create similarity between less significant symbols.⁶
- **Let players skip long bonus features.** When awarding large numbers of free spins (>15), give players the option to instantly cash out and return to the main game both before and during free spins. Player types *Daydreamer Denise* and *Sensation Serena* enjoy layered bonuses, but *Fame Frank* and *Money Mike* are significantly less interested.⁷ This option will let those players get back to playing—and spending—more quickly.

⁵ [How the Survivor Bias Distorts Reality](#)

⁶ [Design Principles: Connecting And Separating Elements Through Contrast And Similarity](#)

⁷ [Liquid and Grit Slots Persona Report](#)



SLOTS TRENDS

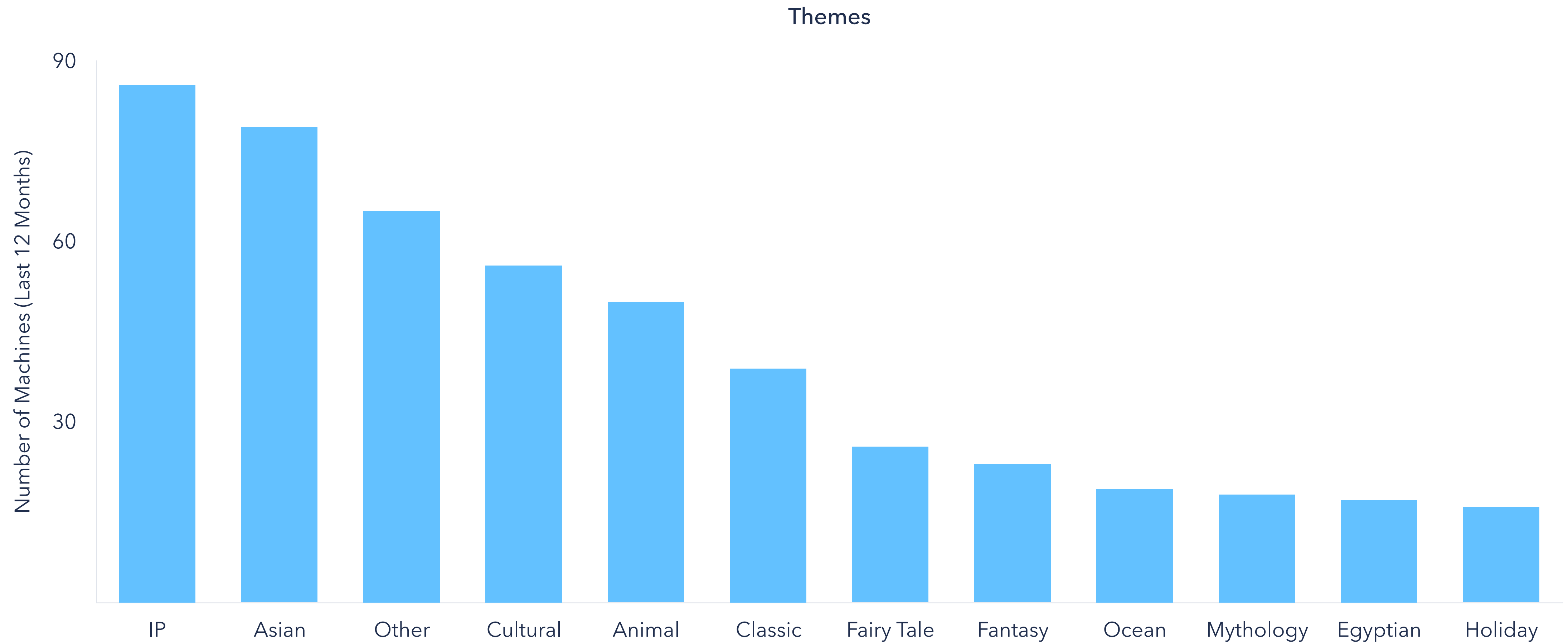


Tracked slots apps:

Big Fish Casino, Caesars Slots, Cash Frenzy, Cashman Casino, DoubleDown Casino, DoubleU Casino, Heart of Vegas, Hit It Rich!, House of Fun, Huuuge Casino, Jackpot Magic Slots, Jackpot Party, POP! Slots, and Slotomania

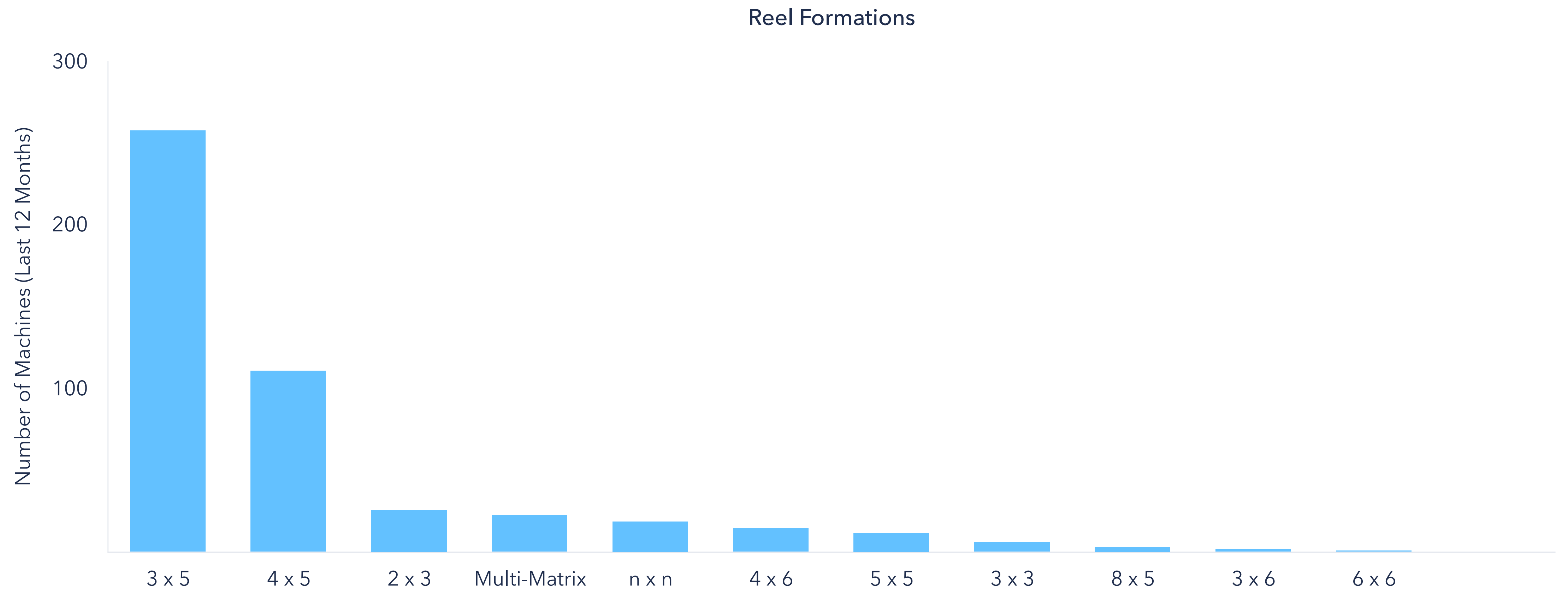
THEMES

In the past 12 months, IP- and Asian-themed machines appeared most frequently across top-grossing slots apps. These 12-month trends continued in the first month of this year.



REELS

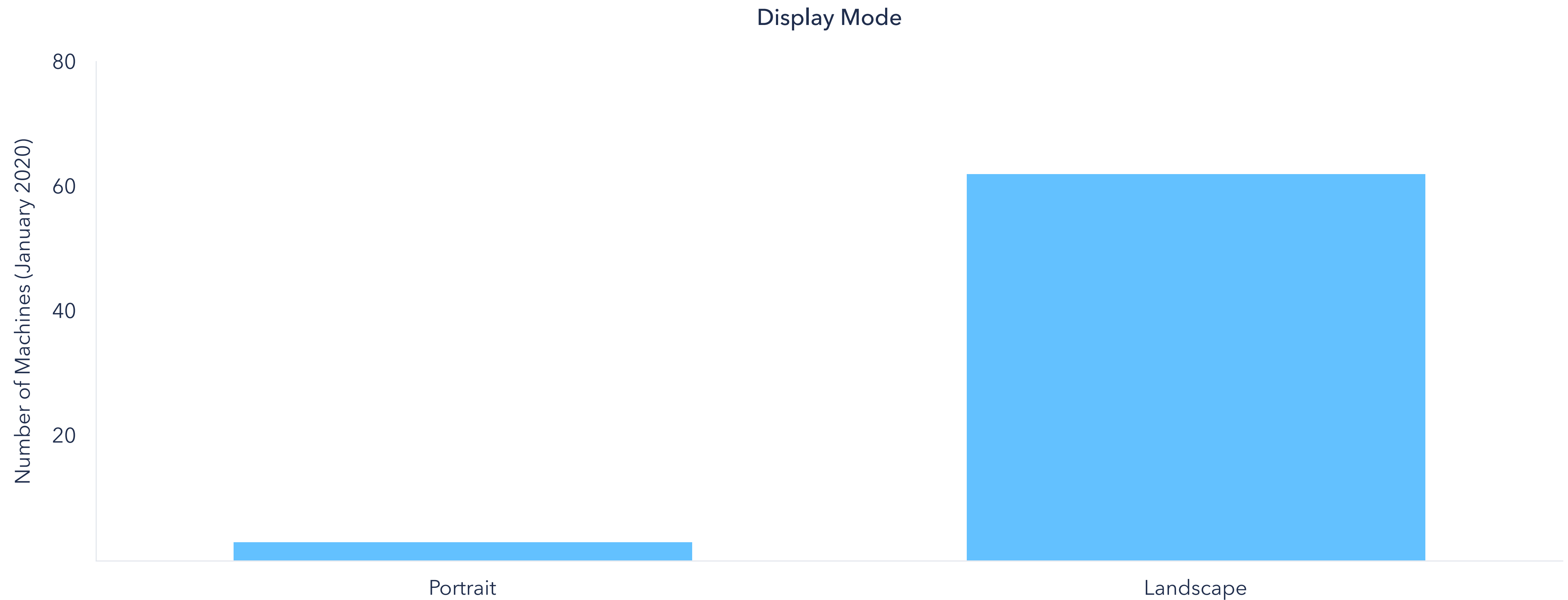
Reel formations of 3 x 5 dominate top-grossing slots apps. In January, 57% of machines released were 3 x 5 formations. Machines with 4 x 5 reel sets have declined in popularity over the past 12 months.



DISPLAY MODE

Among January releases, only three machines used portrait mode. Portrait mode machines can be found in our Feature Database by going to the “Popular” category and clicking “Portrait (slot machine)”.

See all the portrait mode machines by going [here](#).

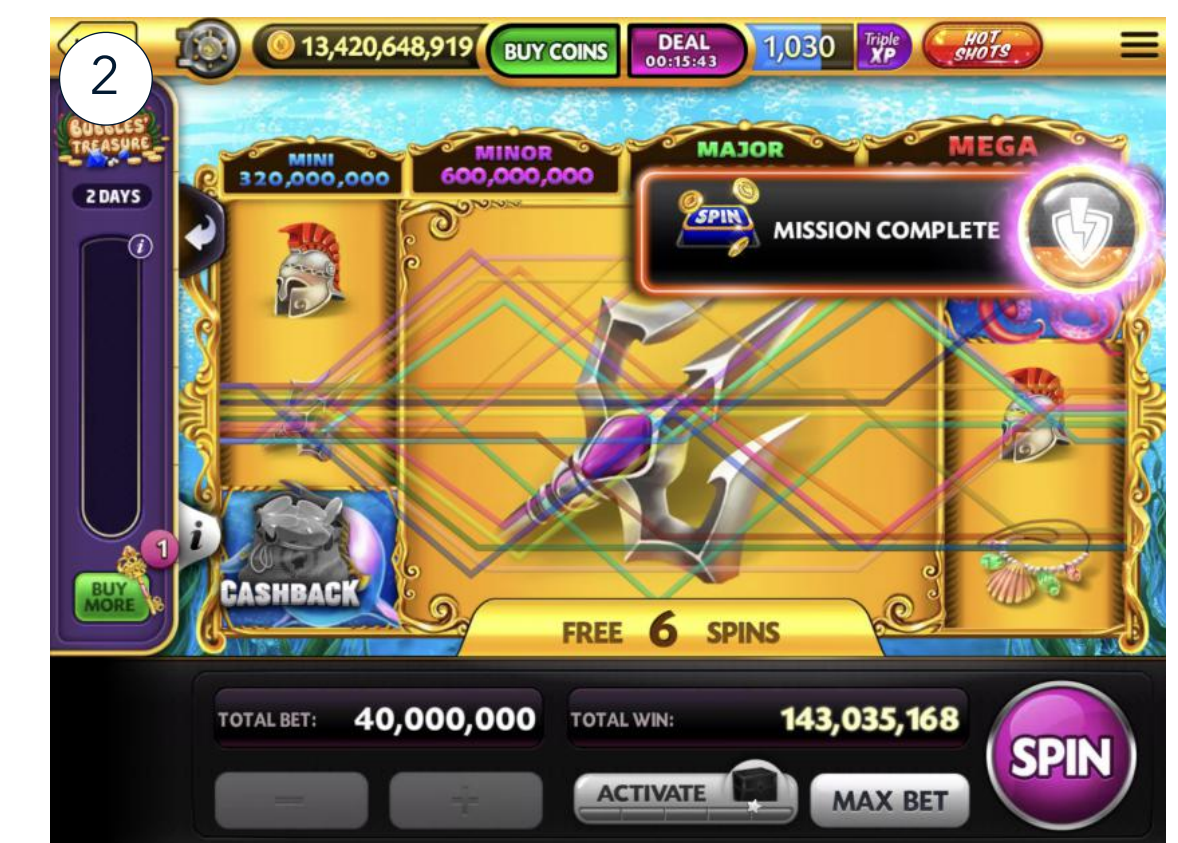
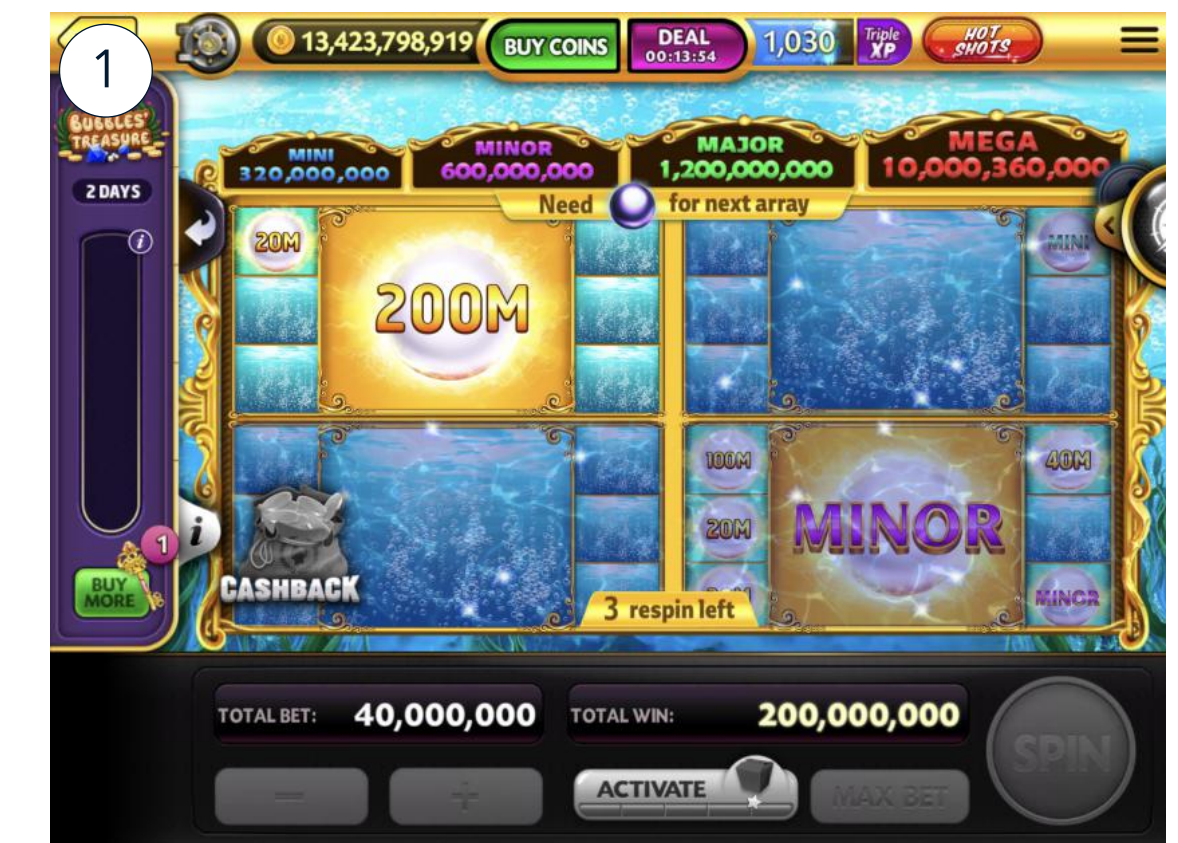


MARKET WATCH



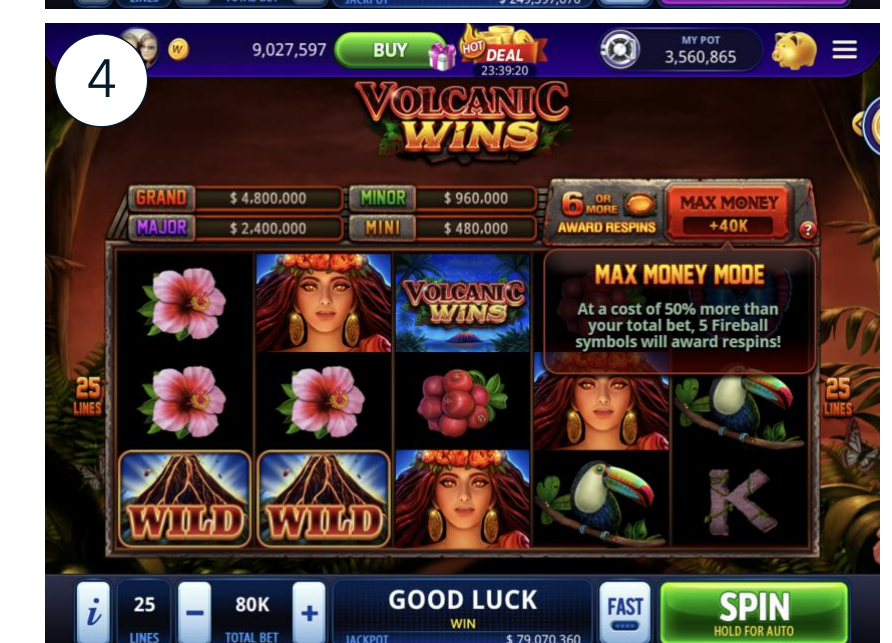
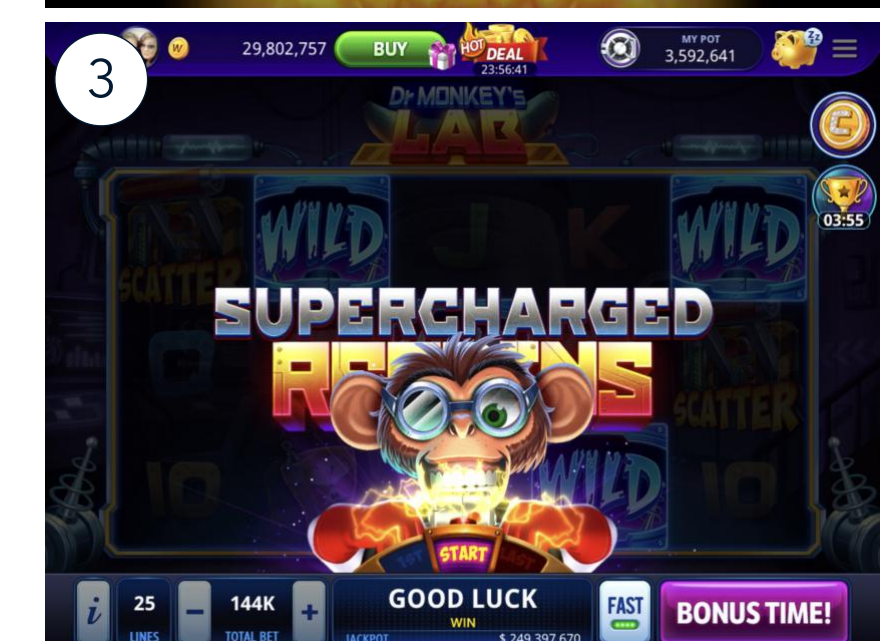
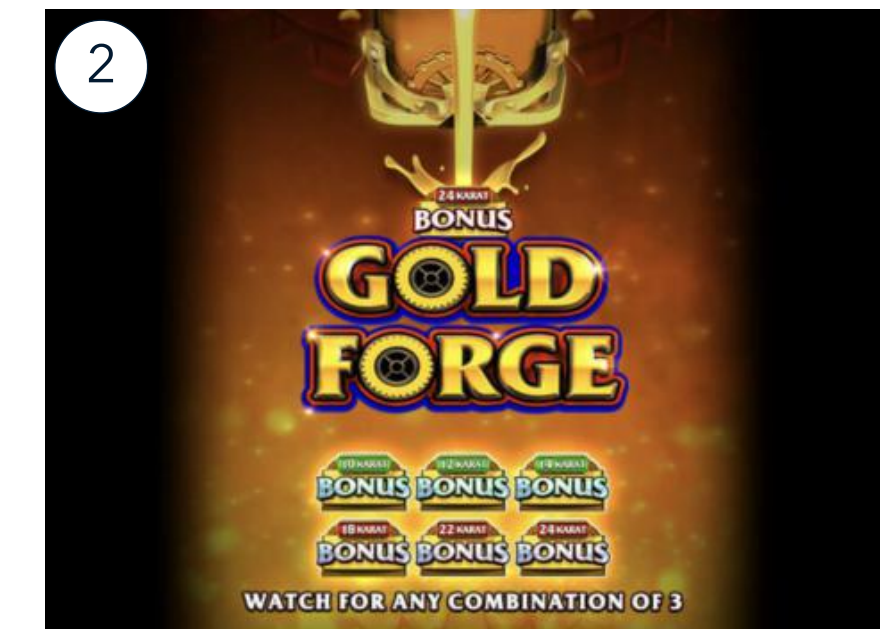
NOTABLE RELEASES I

App	Machine	Description
Caesars Slots	Neptune's Pearls 2	<ul style="list-style-type: none"> Landing six or more white pearl symbols triggers three respins on four reel sets. <ul style="list-style-type: none"> White pearls lock in place and dark pearls unlock the next reel set (1). Landing a white pearl resets the respins counter. Filling all positions on a reel set awards the grand jackpot. Landing three scatter symbols on reels 2, 3, and 4 triggers eight free spins. <ul style="list-style-type: none"> During free spins, reels 2, 3, and 4 are replaced by one giant symbol (2 and video). Landing a giant white pearl triggers respins. Landing a giant scatter symbol awards three additional spins.
Cash Frenzy	Maniac Dracula	<ul style="list-style-type: none"> Players spin to collect moons and fill a meter (video). <ul style="list-style-type: none"> Filling the meter advances players on a prize map. Reaching the end of the map awards the grand jackpot. Landing six or more moons triggers free spins. <ul style="list-style-type: none"> Moons, vampires, and wilds become moving wilds. Players choose one of four reels. If the chosen reel lands the most moons, players earn prizes from all four reels (3 and video). Otherwise, players only win prizes from their chosen reel.



NOTABLE RELEASES II

App	Machine	Description
Cash Frenzy	Sun Goddess	<ul style="list-style-type: none"> Landing three suns on reels 1, 3, and 5 triggers a pick'em bonus. The pick'em bonus awards one of three bonus games: another pick'em bonus, free spins with extra spin symbols, or expanding reel free spins (1 and video). Spins during the base game randomly trigger up to 10 different bonuses.
DoubleDown	Gold Forge	<ul style="list-style-type: none"> Landing three bonus symbols triggers 10 free spins (2 and video). Bonus symbols have six different values. Bonus symbols landed during free spins fill six corresponding meters. Filling a meter awards that bonus amount (video). Each bonus value can only be awarded once. Landing three bonus symbols during free spins awards one extra spin, up to a maximum of 100 spins.
DoubleU Casino	Dr. Monkey's Lab	<ul style="list-style-type: none"> Landing wilds on reels 2-5 triggers three respins. Each respin increases wild multipliers (3 and video). Landing three scatter symbols triggers free spins with extra wilds.
	Volcanic Wins	<ul style="list-style-type: none"> Landing six or more fireballs triggers three respins with sticky fireballs. Players can pay 50% more than their total bet to trigger respins with only five fireballs (4). Landing more fireballs resets the respins counter. Landing directional symbols adds a multiplier to fireballs in the directions indicated (video). Respins randomly trigger widened reels.



NOTABLE RELEASES III

App	Machine	Description
House of Fun	Despicable Critters	<ul style="list-style-type: none"> • Players spin to collect coins. <ul style="list-style-type: none"> • Coins can be used to purchase cards (video). • Purchasing all cards on a page triggers a free spins bonus on a unique reel set and unlocks the next page (1). • Landing six or more wolves triggers a respins bonus followed by free spins (video). <ul style="list-style-type: none"> • Wolves add free spins. • Baskets add free spins and award credits. • Dynamite expands reels by up to three rows. • Disguised wolves turn into sticky wilds during free spins. • Landing any of these symbols resets the respins counter. • Once respins are complete, players play out the accumulated free spins (2).
Slotomania	Around the World with Lucy	<ul style="list-style-type: none"> • Players spin to collect coins and fill a meter. • Filling the meter advances players on a prize map (3 and video). • Completing the map awards a jackpot and unlocks the next map. • Landing one or more golden globe symbols awards 25 free spins on two reel sets. • Collecting wings during free spins adds wilds and extra reel sets at milestones. • Players earn badges for completing challenges.

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 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.



“You get whatever accomplishment you are willing to declare.”

– Georgia O'Keeffe

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