



Slots Design Report

Competitive Research and Data Insights for Slots Designers

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SEPTEMBER

2019

SUPPLEMENTAL

Cash Frenzy's Golden Island Treasure, one of our New Innovations last month, was heavily influenced by *Slotomania's "Infinite Freedom"* (IF) machines.

Details on IF Machines

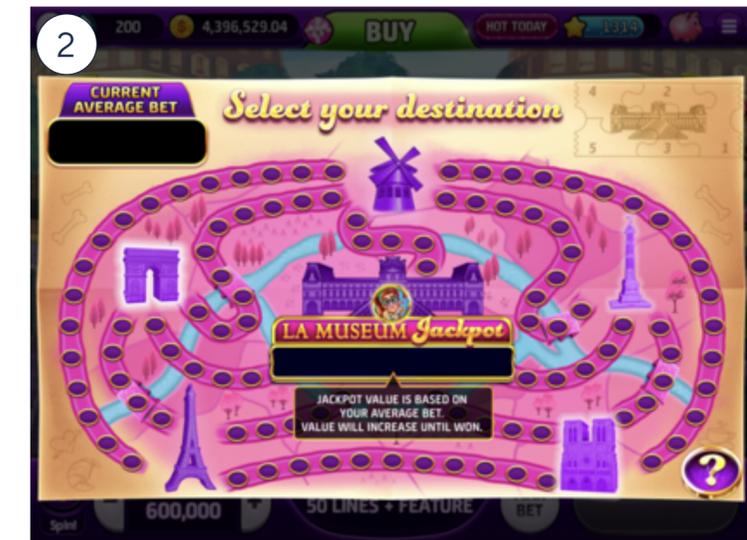
- IF machines are designed to let players pick a path, increasing machine replayability.
- The IF progression system is a different technology from SlotoQuest even though the map layout appears similar (SlotoQuest was referenced in the [August 2019 Slots Design Report](#)).
- Although *Cash Frenzy* did add variations to Golden Island Treasure (as noted below), the progression system is very similar to the progression in *Slotomania's* IF machines.
- Review *Cash Frenzy's Golden Island Treasure* machine in the [In-Machine Quests](#) Wiki page for more information.

IF Machines

- [Farm Fortune Markets](#) in *Slotomania* – 9/17/18 (1)
- [My Dear Puppy](#) in *Slotomania* – 1/25/19 (2)
- [Return to Giant's Treasure](#) in *House of Fun* – 3/25/19 (3)
- [Civiltreasures Merchants](#) in *Slotomania* – 6/7/19

Differences Between Golden Island Treasure (GIT) and My Dear Puppy (MDP)

- **Themes:** Pirates in GIT, puppies in MDP.
- **Paylines:** [20 lines](#) in GIT, [50 lines](#) in MDP.
- **Respins:** [Pirate ship multi-matrix respins](#) in GIT, [wild respins](#) in MDP.
- **Jackpots:** In GIT, the [jackpot](#) is triggered by collecting symbols during play and in the final island bonus game. In MDP, players must unlock the sixth area for a jackpot pick'em bonus to win the [La Museum jackpot](#).
- **Free Spins:** In GIT, a [collection mechanic](#) triggers the free spins. In MDP, [landing three symbols](#).



NEW INNOVATIONS



WIKI > CONTENT > SOCIAL

CASCADING MULTIPLIERS ON PRIZE TOWERS

Sword of Destiny in *Jackpot Party*

MECHANIC TEARDOWN

In *Sword of Destiny*, there are two prize towers: one with cascading multipliers during free spins and another that increases in value based on numbers selected during a pick'em bonus.

Cascading Multipliers Prize Tower

- Players land three X Zone symbols to trigger eight free spins (1).
- On the prize tower, multipliers are assigned to each symbol (2).
- The assigned multiplier is applied to a win with that symbol.
- Winning multipliers are removed from the prize tower, causing new multipliers to cascade down (3 and [video](#)).
- Every extra X Zone symbol awards an additional free spin (4).

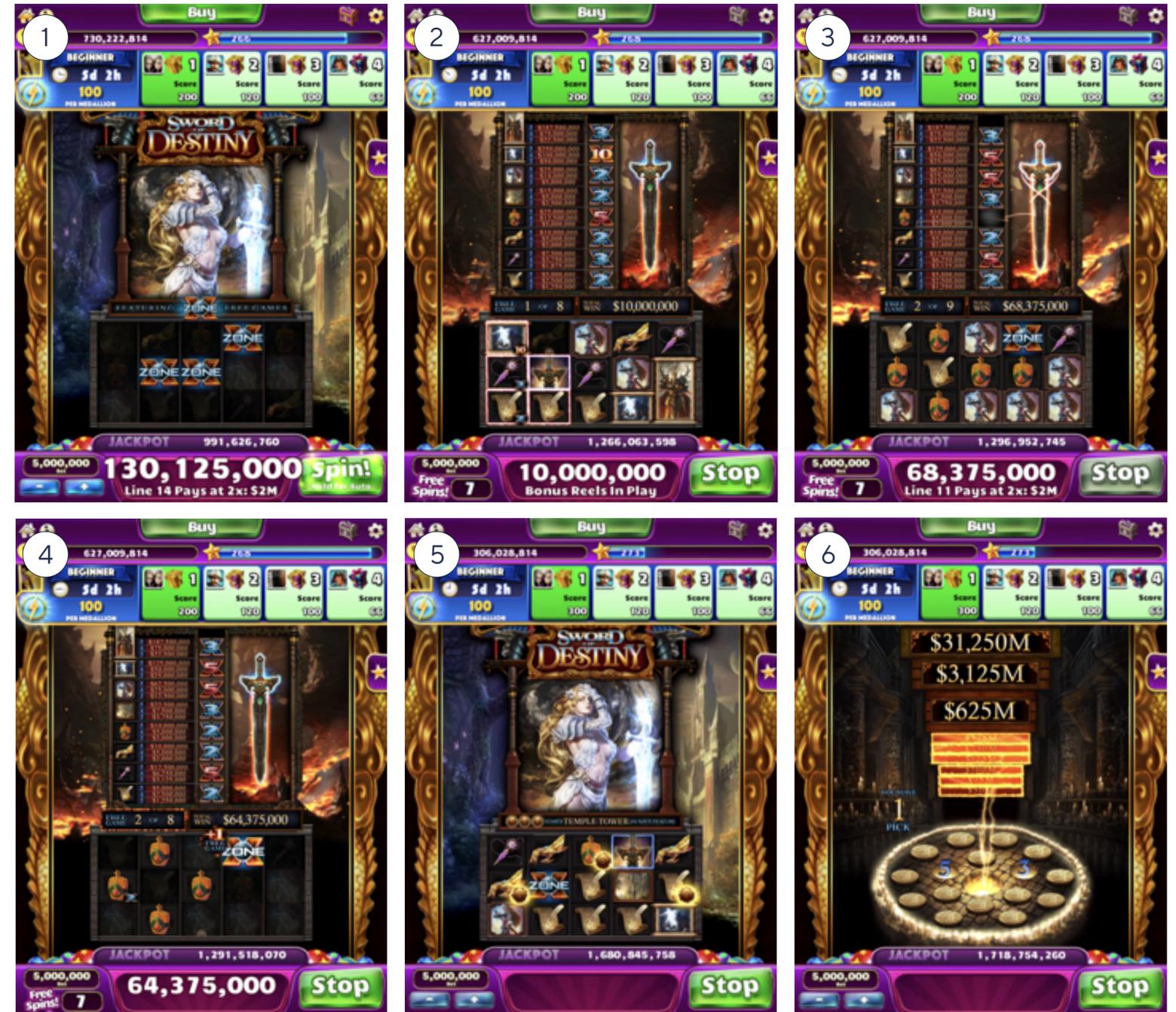
Pick'em Bonus Prize Tower

- Three stone symbols trigger a pick'em bonus with a prize tower (5).
- Players get three picks in the pick'em game.
- Each pick moves players 1-6 steps up the prize tower, depending on the selection ([video](#)).
- The level reached on the tower determines the jackpot value (6).



Quickly find more information in the Feature Database

- See images and videos in the [Sword of Destiny](#) Library.



EXPERT INSIGHTS

Cascading multipliers on prize towers increase player excitement by highlighting the impact of the feature at key moments.

Insight Details

- Use cascading multipliers to draw attention to activity on a prize tower. The cascading multipliers emphasize the start of the free spins, additional multipliers, and wins (see [image 1](#) and [this video](#)).
- Increase the value of the multipliers as the free spins progress. This eliminates the potential of a poor experience by making each free spin progressively more exciting (see [image 2](#) and [Expanding Respins & Spawning Bonus Boards](#)).
- Dedicate the most visual real estate to the tower's jackpot values and multipliers. In Sword of Destiny, the sword is the largest object on the screen. Although important to the machine's fiction, the sword's presence *should be reduced* to place greater visual emphasis on objects that add value. Sword of Destiny was originally an [RPG machine](#) (see [image 3](#)).
- Make it clear when a multiplier is applied to a win to educate players on this complex mechanic.

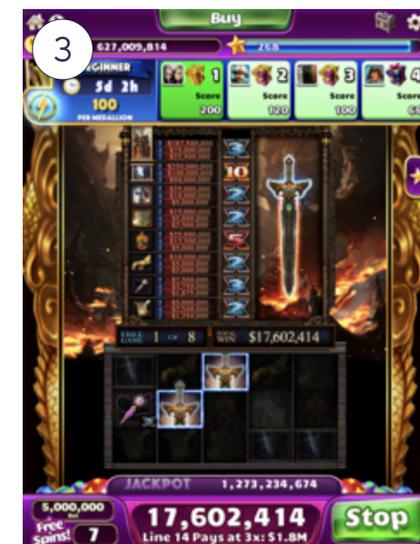
Persona Information

- Fantasy themes appeal to players who enjoy action and adventure movies—the two highest-grossing movie genres of 2019, with 66.3% of gross revenue for the year ([source](#)). Mythic themes (medieval, mythology, and folklore) target *Sensation Serenas* and *Daydreamer Denises*. These player types want fantasy locations, intriguing characters, and strong animation—again, similar to action and adventure movies.



Go deeper online using the Feature Database

- Review the visual strength of Hercules Grand's expanding reels, ghosting symbols, and characters in a portrait-mode machine. Go to the [Hercules Grand](#) Library and easily find the full analysis from the report in the [Reel Expansion Mechanics](#) Wiki page.



WIKI > CONTENT > SOCIAL

CALENDAR COLLECTIONS & PROGRESSIONS

69 Fun in *Slotomania*

MECHANIC TEARDOWN

In *Slotomania's 69 Fun*, players spin to collect day-of-the-week icons. Collecting all seven icons triggers a wheel that advances players along a calendar. Players also earn machine-specific currency to buy enhancements.

Wheel Trigger

- Symbols with ladies are randomly tagged with day-of-the-week icons.
- Collecting all seven day-of-the-week icons triggers a wheel spin (1).
- Collecting the same icon adds to that day's count (2).

Wheel Bonus

- The wheel contains each weekday and its associated hit count (3).
- Players spin the wheel to determine their advancement on the calendar (4).
- The day's count is converted to a machine-specific currency.

Calendar Progression

- Landing on a Sunday or a date with a lady on it triggers free spins and awards a bonus equal to the average bet multiplied by the day's count ([video](#)).

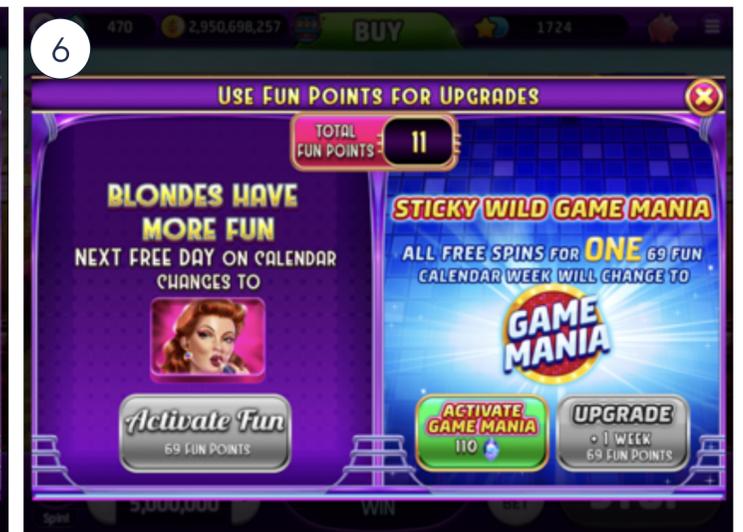
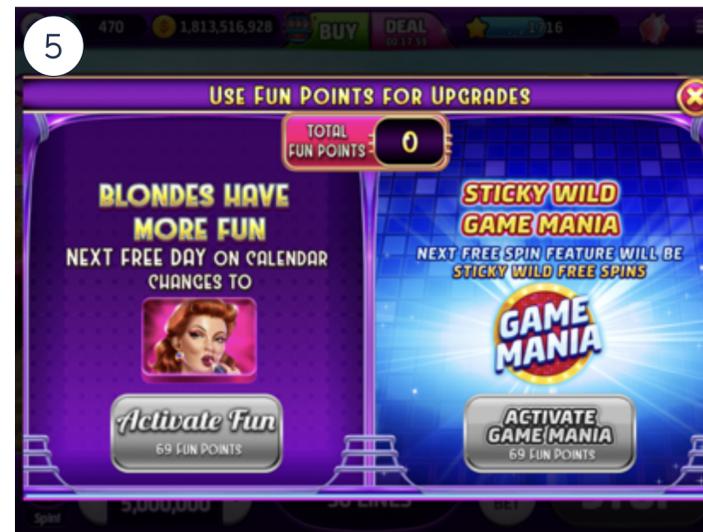
Store Enhancements

- Players can spend machine-specific currency to add enhancements (5).
- To activate, players must spend the core-game currency (6 and [video](#)).



Quickly find more images and videos

- Download images in the [69 Fun](#) Library.
- Watch the *Slotomania SuperGroup* walkthrough [here](#).



EXPERT INSIGHTS

Design progress bars and collection mechanics that resemble real-world systems to make add-on engagement features more welcoming and subtle.

Insight Details

- **Real-world systems help obscure the intent of the mechanic and make the machine more fun for players.** In 69 Fun, players must collect icons to fill the entire *week* and progress along a *calendar*, two subtle and enjoyable real-world systems that increase spins per player (see [image 1](#)).
- **Implement multiple progression systems to ensure that all player engagement is rewarded.** When players spin in 69 Fun and hit an uncollected day-of-the-week icon, they advance towards a wheel spin. If they spin and hit an already collected day-of-the-week icon, they increase that day's count and its potential in-machine currency reward (see [image 2](#)).
- **Add monetization gates to progression systems that require heavy engagement.** In 69 Fun, players who use machine-specific currency to add unlimited bonus enhancements for a certain number of calendar weeks must spend gems, a secondary game-currency (see [image 3](#)).

Persona Information

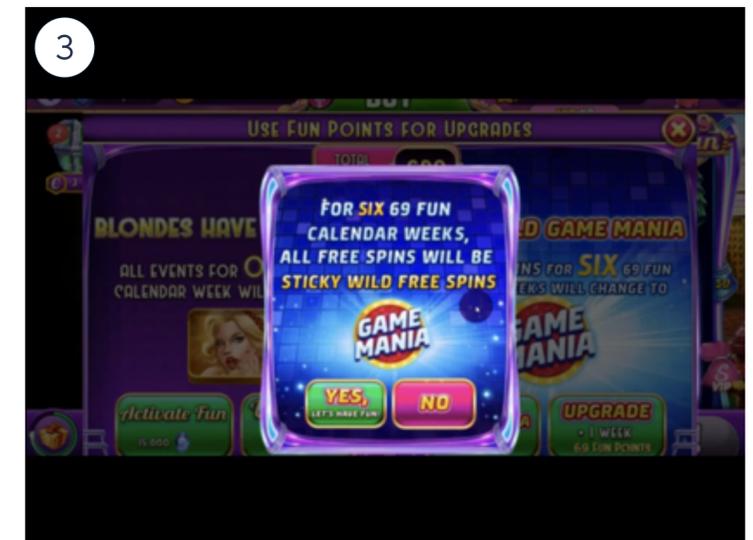
- **Challenge, collection, and quest mechanics help *Daydreamer Denise* escape her everyday pressures from the real-world by managing and completing controlled tasks in a virtual world.** Her desire is to escape—not necessarily to relax—by keeping her mind busy with tasks and goals.



Reference all the reports

For more information on in-machine progressions, review the following [Wiki](#) pages:

- [In-Machine Quests](#) for a progression system through a map of five different islands.
- [Multi-Challenge Progression Systems](#) for a progression with choices to collect or continue and sell a business.



SLOTS TRENDS

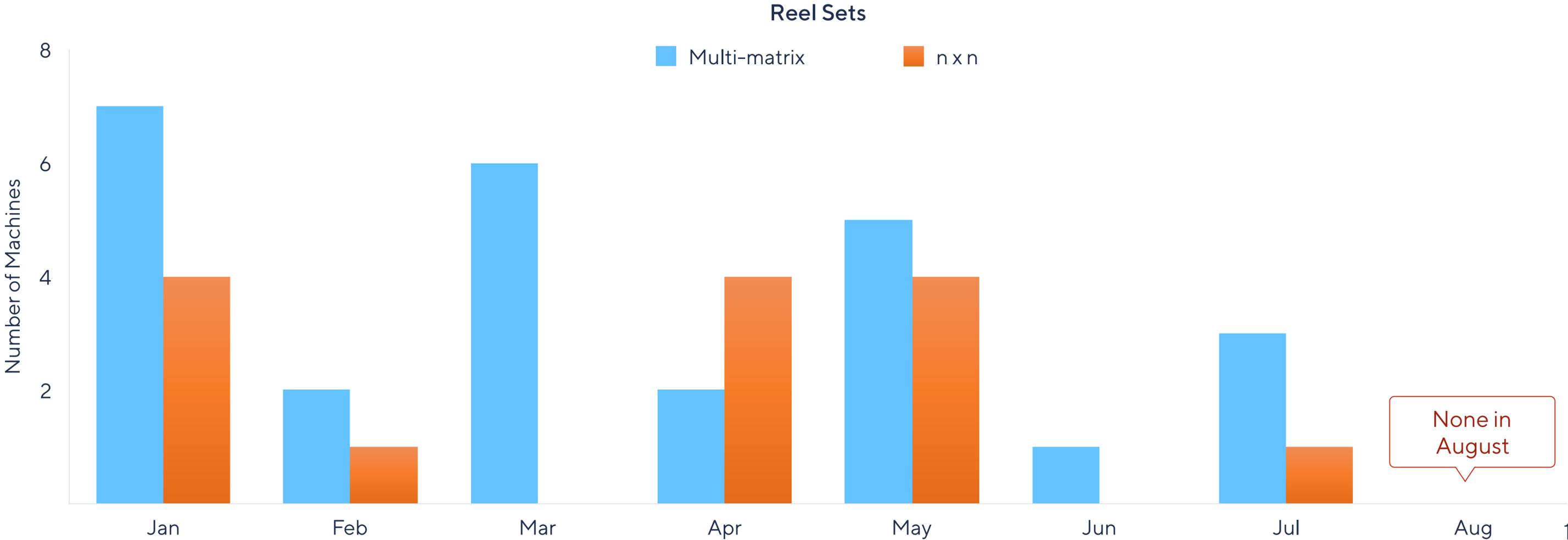


REEL SETS

Multi-matrix and $n \times n$ reel set configurations have declined since the start of 2019. Traditional reel set configurations of 3×5 and 4×5 are dominant. In the past three months, 83.5% of tracked apps have used these two configurations.

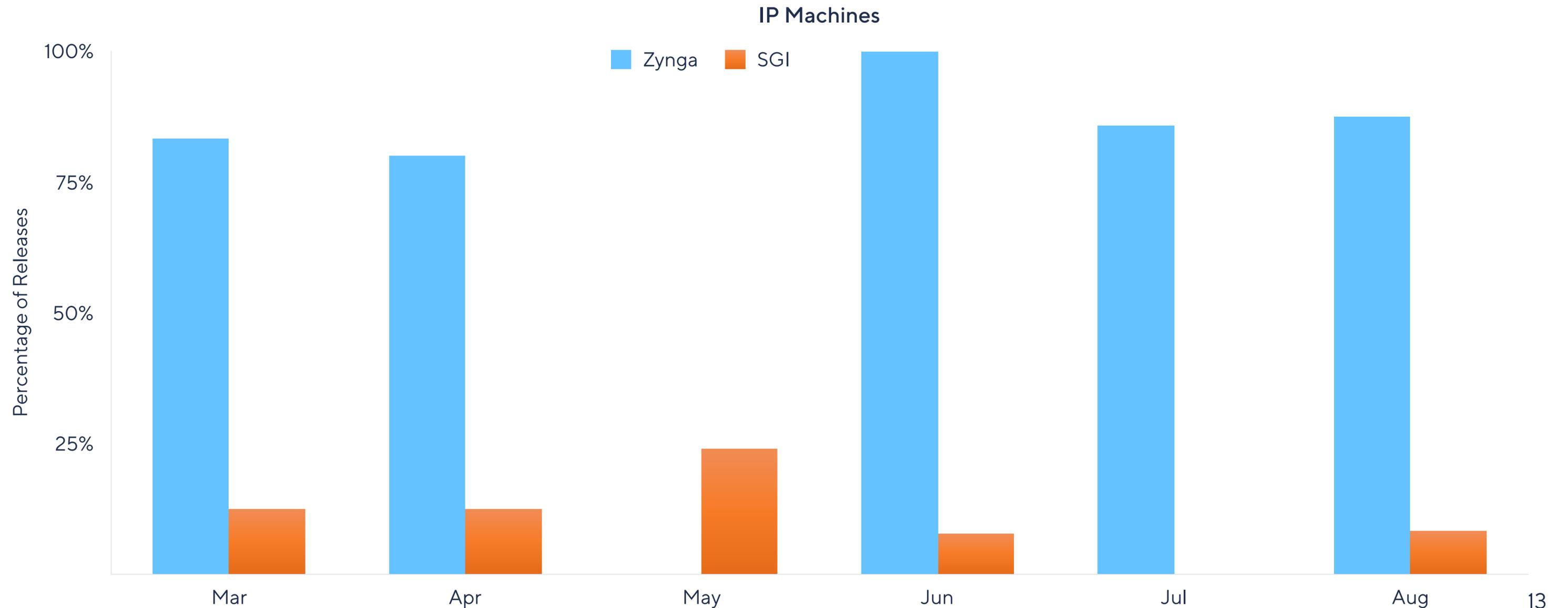
Details

- 3×5 and 4×5 reel set configurations are up +16% QoQ as a percentage of total tracked machines released.
- Tracked apps are the top-grossing slots apps in Casino.
- In August, no machines with multi-matrix and $n \times n$ reel set configurations were released by tracked apps.



THEMES

Zynga and Scientific Games released the majority of IP-themed machines, which account for 13% of tracked machines in the past six months. As a percentage of total machines released by publisher, 81% of Zynga's machines are IP machines compared to only 14% for Scientific Games.

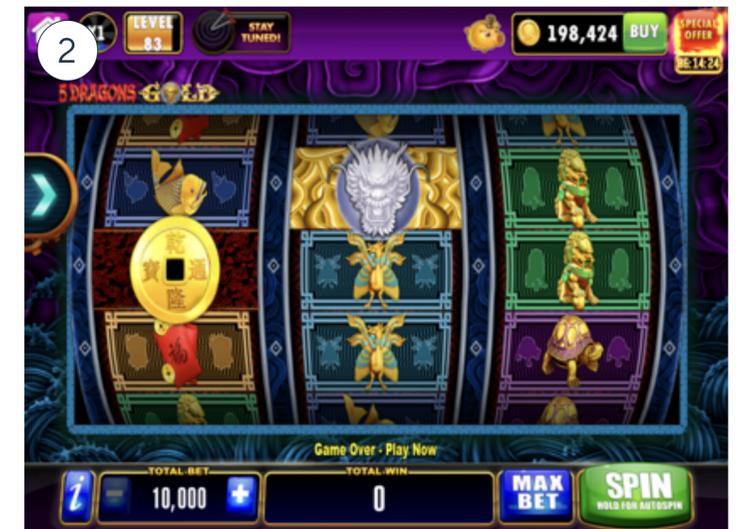
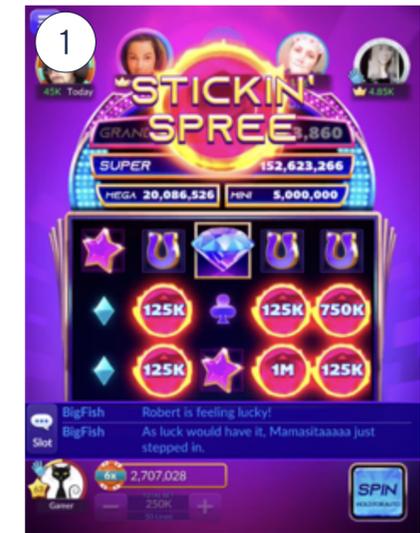


MARKET WATCH



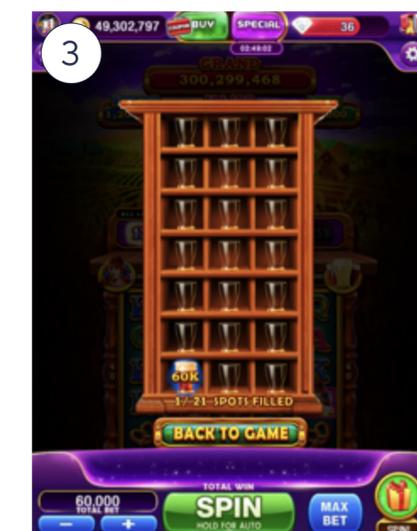
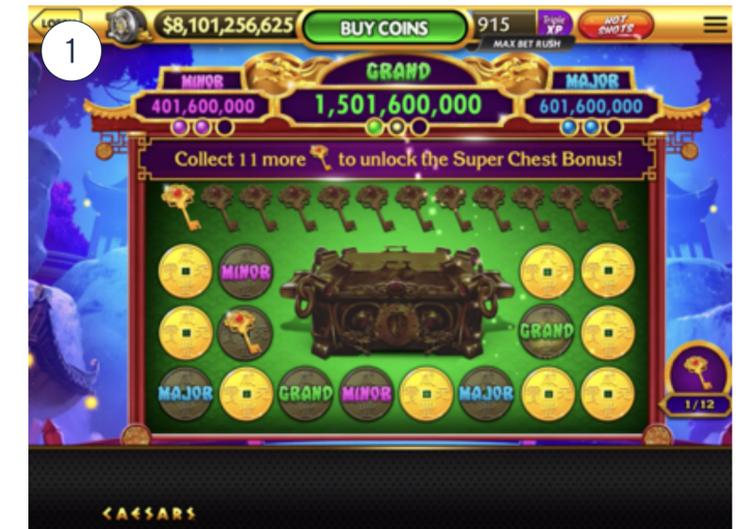
NOTABLE RELEASES I

App	Machine	Description
Big Fish Casino	Raging Reels	<ul style="list-style-type: none"> Players hit six or more coin symbols to trigger a respin bonus (1). During the bonus, coin symbols stick in place, and each new coin resets the free spins counter (video). Players land arrow symbols to add up to two additional rows to the reels. Filling all five rows (three original and two additional) with coin symbols awards a jackpot.
Cashman Casino	5 Dragons Gold	<ul style="list-style-type: none"> This update to 5 Dragons Gold machine changes the machine to a stepper with an expanded center reel for free spins (2).
POP! Slots	Aztec Mystery	<ul style="list-style-type: none"> During a social bonus, players hit individual multipliers to increase their group win multiplier and progress through a series of temples (video). The final temple ends in an individual pick'em bonus for up to three jackpots.
Caesars Slots	Lobby Loot	<ul style="list-style-type: none"> Players hit six or more popcorn symbols to trigger five respins. Hitting five popcorns triggers one respin for a chance to land a sixth (3). During the respins, players fill rows with popcorn to win a wheel spin.



NOTABLE RELEASES II

App	Machine	Description
Caesars Slots	Sumo in Love	<ul style="list-style-type: none"> Players hit two different sumo symbols to trigger a sumo fight bonus. The sumo fight bonus adds up to 15 wilds to the current spin. At the end of the bonus, sumo symbols transform to the winner of the fight (video).
	Fu Xiang	<ul style="list-style-type: none"> Players land different color chest symbols for a chance to trigger a pick'em. The color of the chest determines the value of the bonus. Players collect 12 keys to unlock a super chest bonus (1 and video).
Cash Frenzy	Cash Fever	<ul style="list-style-type: none"> Players collect machine-specific currency to purchase vaults and progress through chapters (2). Players can trigger a cash wheel bonus that can start two more bonuses in addition to awarding prizes.
	Mia's Beer Hall	<ul style="list-style-type: none"> Players collect beer maiden symbols to fill a meter. <ul style="list-style-type: none"> When full, the meter unlocks a beer collection wheel spin. Players spin to determine a bonus and add the winning beer to a board (3). Players guess the color of the final beer to complete the board, earning a multiplier if correct. Hitting multipliers moves players up a multiplier tower (video). <ul style="list-style-type: none"> Players have three spins to hit another multiplier before the tower restarts.



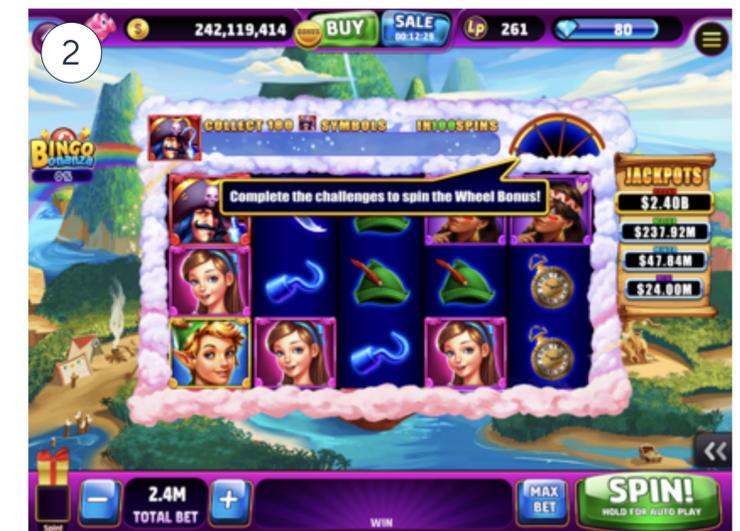
NOTABLE RELEASES III

App	Machine	Description
DoubleU Casino	Vegas Golden Chips	<ul style="list-style-type: none"> • Players hit six or more chip symbols to trigger three respins. • Any additional chip symbols hit during respins restart the respin counter. • Gold chips add additional chip symbols to the reels once the respins end (1).
Lotsa Slots	Never Lose	<ul style="list-style-type: none"> • Players complete collection challenges within a specified number of turns to trigger a bonus wheel spin (2 and video). • Players can also hit three treasure chest symbols to trigger a Treasure Island bonus. • During the bonus, players navigate four characters around a treasure map to collect bonuses. • Hitting a multiplier, jackpot, or crocodile ends the bonus (video).
Gold Fish	Double Blessings	<ul style="list-style-type: none"> • Landing three or more bonus symbols triggers a respin bonus. • During the respin bonus, special symbols add two additional rows to a single reel for that spin (3 and video).



Quickly review all the machines released

- Use the [Library Tool](#) and filter by year and month to see all the releases.



APPENDIX



UTILIZE L&G'S TOOLS

Uncover new puzzle trends and understand competitor investments with Liquid and Grit's tools and capabilities. Matrix tool is now live!



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.



WIKI TOOL

1. Reference all 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 any report's Executive Summary.

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	Kinrate Analytics	Sensor Tower
<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>	<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 of economists, psychologists, game scholars, and data scientists.</p>	<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.



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.

“I am seeking. I am striving. I am in it with all my heart.”

– Vincent van Gogh

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