



Slots Design Report

Competitive Research and Data Insights for Slots Designers

TABLE OF CONTENTS

NEW INNOVATIONS 3

- Lock & Respin with Combination Symbols
- Lock & Respin with Stacking Bonus Games
- Long & Short Progression Systems

KEY TRENDS 16

- Base Game Features
- Bonus Features

MARKET WATCH 19

- Notable Releases I & II

APPENDIX 22

- Slots Product Council

L&G SLOTS PERSONAS 24

- Fundamental Motivations
- Slots Personas
- Persona Characteristics

JANUARY

2019

NEW INNOVATIONS

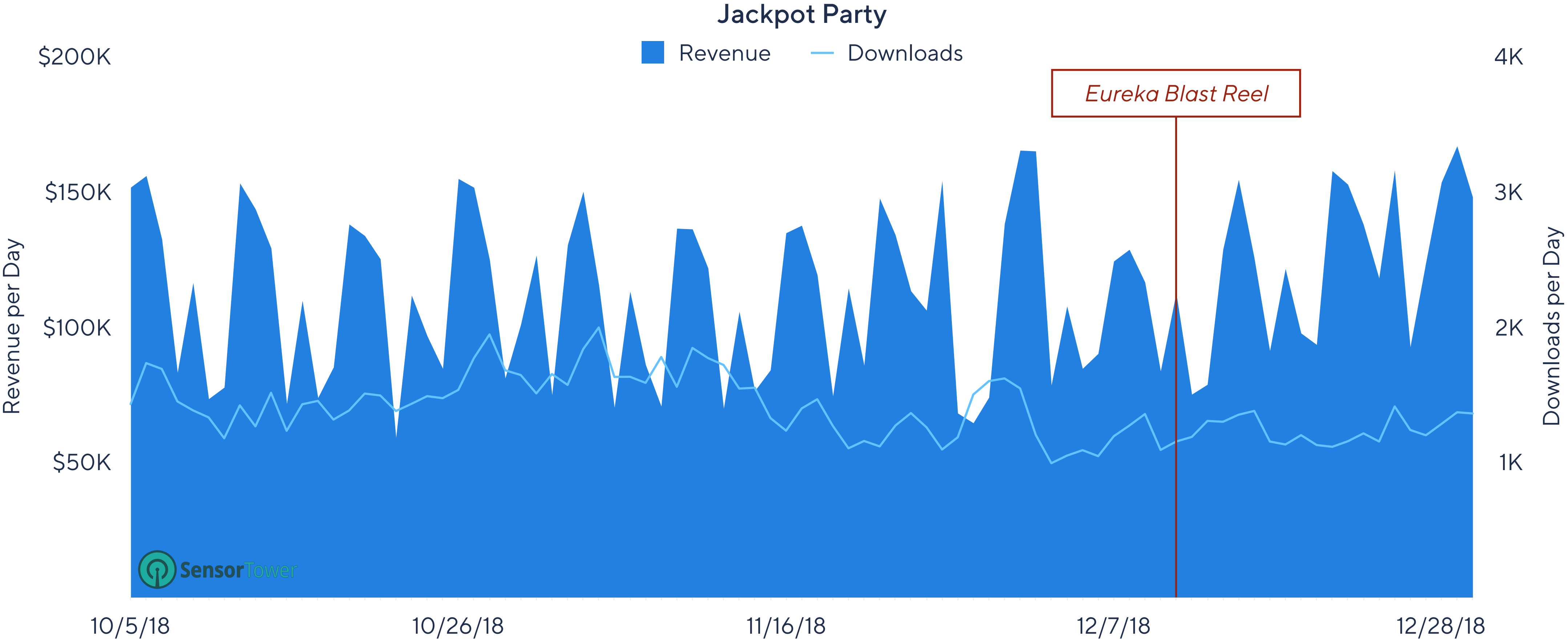


LOCK & RESPIN WITH COMBINATION SYMBOLS

IMPACT ANALYSIS



Jackpot Party revenue increased +5% WoW and +10% 2Wo2W following the *Eureka Blast Reel* machine release. Downloads were up +7% WoW and down -3% 2Wo2W during that time period.



2Wo2W = two weeks over two weeks ago
Graph data is iOS U.S. only

MECHANIC DETAILS

The *Dynamite Lock It* feature combines special symbols to form new, larger ones. Once a certain-size symbol is created, it constructs a *Shape* ... and then awards a bonus wheel.

Feature Details

- Six or more *Dynamite* symbols trigger the *Dynamite Lock It* feature (1).
- Players are awarded five respins. During the respins, *Dynamite* symbols combine to create *Dynamite Shapes* (2).
- At the conclusion of the respins, players are awarded prizes based on the *Dynamite Shapes* (3).
- Larger clusters, 2 x 2 or greater, convert into a wheel that adds prizes (4 & 5).

Other Mechanics in the Machine

- [Dynamite Lock It Feature](#)
- [Free Games](#)

Related Machines

- [All Mine Gold](#) & [All Mine Diamond](#) - Caesars Slots
- [Kong 8th Wonder of the World](#) - POP! Slots
- [Diamond Mine RMG](#) - BluePrint Gaming



INSIGHTS & ADVICE

This machine is ideal for **Gambler Gails**, who are motivated by Profit and Arousal. These players appreciate features that convert a symbol to something more lucrative, like this *Dynamite Shapes* mechanic.

Product Council Insights

- Almost every time this feature triggers, one or more nearly-complete Shapes are matched early in the respin. This gives players particular spots in the grid to aim for, keeping the player engaged in the outcome ... like a bingo player that needs only *one more spot* for a bingo.
- Dynamite symbols combining makes the final respins more exciting (and more rewarding). The last spin is the most suspenseful as there is typically only a one-spot difference between a 2 x 3 going to a 4 x 3 ... or something else.
- Consider using this mechanic in the base game and adding a retention feature. For example, House of Fun added *Monsterpedia* to Fangalicious and Caesars Slots added a collection wheel to All Mine Gold.
- This mechanic integrates nicely with more elaborate animations. Discuss potential themes for clumping and reshaping symbols with the design team.
- The wheel spin for bigger Dynamite allows players to see the potential wins. This is a nice improvement over the original (where the 100x symbol is hidden).

	<i>Fame Frank</i>	<i>Money Mike</i>	<i>Daydreamer Denise</i>	<i>Gambler Gail</i>	<i>Sensation Serena</i>
Women	50%	51%	66%	60%	55%
Age	32.4	34.3	35.5	35.2	35.2
Education	3.5	3.3	3.5	3.2	3.3
Features with respins	3.6	4.0	4.2	4.2	4.3
Features that convert a symbol to something better	(1.3)	(0.6)	0.0	1.2	0.8



Email us to find out more detailed information on the L&G Slots User Persona Report, and how you can easily and quickly determine the player personas within your own apps.

INSIGHTS & ADVICE

This machine is ideal for **Gambler Gails**, who are motivated by Profit and Arousal. These players appreciate features that convert a symbol to something more lucrative, like this *Dynamite Shapes* mechanic.

Product Council Insights

- Almost every time this feature triggers, one or more nearly-complete Shapes are matched early in the respin. This gives players particular spots in the grid to aim for, keeping the player engaged in the outcome ... like a bingo player that needs only *one more spot* for a bingo.
- Dynamite symbols combining makes the final respins more exciting (and more rewarding). The last spin is the most suspenseful as there is typically only a one-spot difference between a 2 x 3 going to a 4 x 3 ... or something else.
- Consider using this mechanic in the base game and adding a retention feature. For example, House of Fun added *Monsterpedia* to **Fangalicious** and Caesars Slots added a collection wheel to **All Mine Gold**.
- This mechanic integrates nicely with more elaborate animations. Discuss potential themes for clumping and reshaping symbols with the design team.
- The wheel spin for bigger Dynamite allows players to see the potential wins. This is a nice improvement over the original (where the 100x symbol is hidden).

	<i>Fame Frank</i>	<i>Money Mike</i>	<i>Daydreamer Denise</i>	<i>Gambler Gail</i>	<i>Sensation Serena</i>
Women	50%	51%	66%	60%	55%
Age	32.4	34.3	35.5	35.2	35.2
Education	3.5	3.3	3.5	3.2	3.3
Features with respins	3.6	4.0	4.2	4.2	4.3
Features that convert a symbol to something better	(1.3)	(0.6)	0.0	1.2	0.8



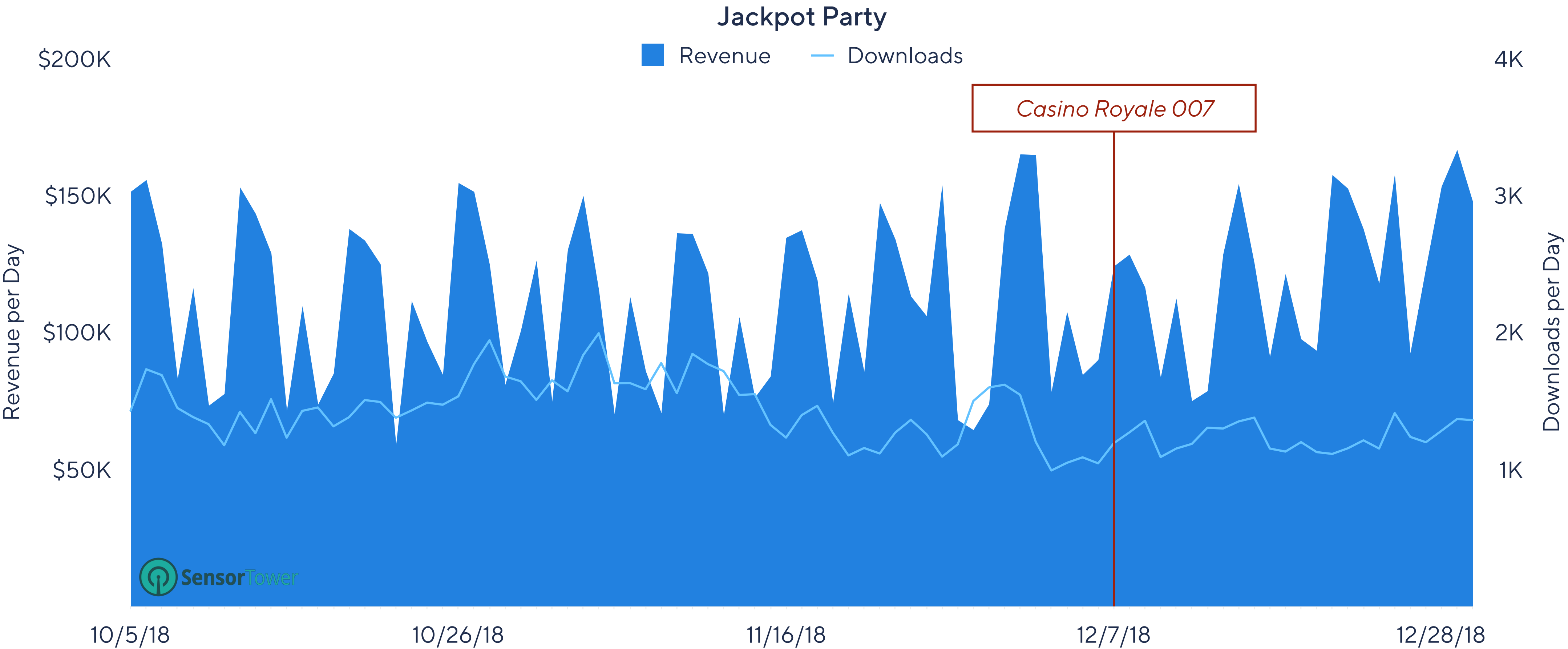
[Email us](#) to find out more detailed information on the L&G Slots User Persona Report, and how you can easily and quickly determine the player personas within your own apps.

LOCK & RESPIN WITH STACKING BONUS GAMES

IMPACT ANALYSIS



Jackpot Party revenue was down -11% WoW, but up +2% 2Wo2W after the release of the *Casino Royale 007* machine. Downloads were up +7% WoW, but down -3% 2Wo2W during that period.



2Wo2W = two weeks over two weeks ago
Graph data is iOS U.S. only

MECHANIC DETAILS

This *Bond* IP machine includes many potential bonuses, and a consecutive bonus system that transitions from a pick'em to a free spin with locked symbols.

Feature Details

- Six or more *Chip* symbols award two respins (1).
- The *Chip* symbols then flip to determine the award (i.e., upgrades, credits, a wheel spin, or *007 Bonus*) (2).
- In the *007 Bonus*, one *Card* is shot to award credits, a jackpot, or the *Casino Bonus* (3).
- The *Casino Bonus* is triggered in the base game when three or more bonus symbols land. If two bonus symbols land, a *Bonus Respin* is awarded for a chance to hit another bonus symbol (4).
- In the *Casino Bonus*, five *Cards* are displayed face down. Players pick one *Card* to unlock each of the three reel sets. A second pick is awarded if the *Multiplier Card* is drawn (5).
- Picking the correct *Card* unlocks the reel set, adds locked symbols to the reel, and awards one spin for prizes (6).

Other Mechanics in the Machine

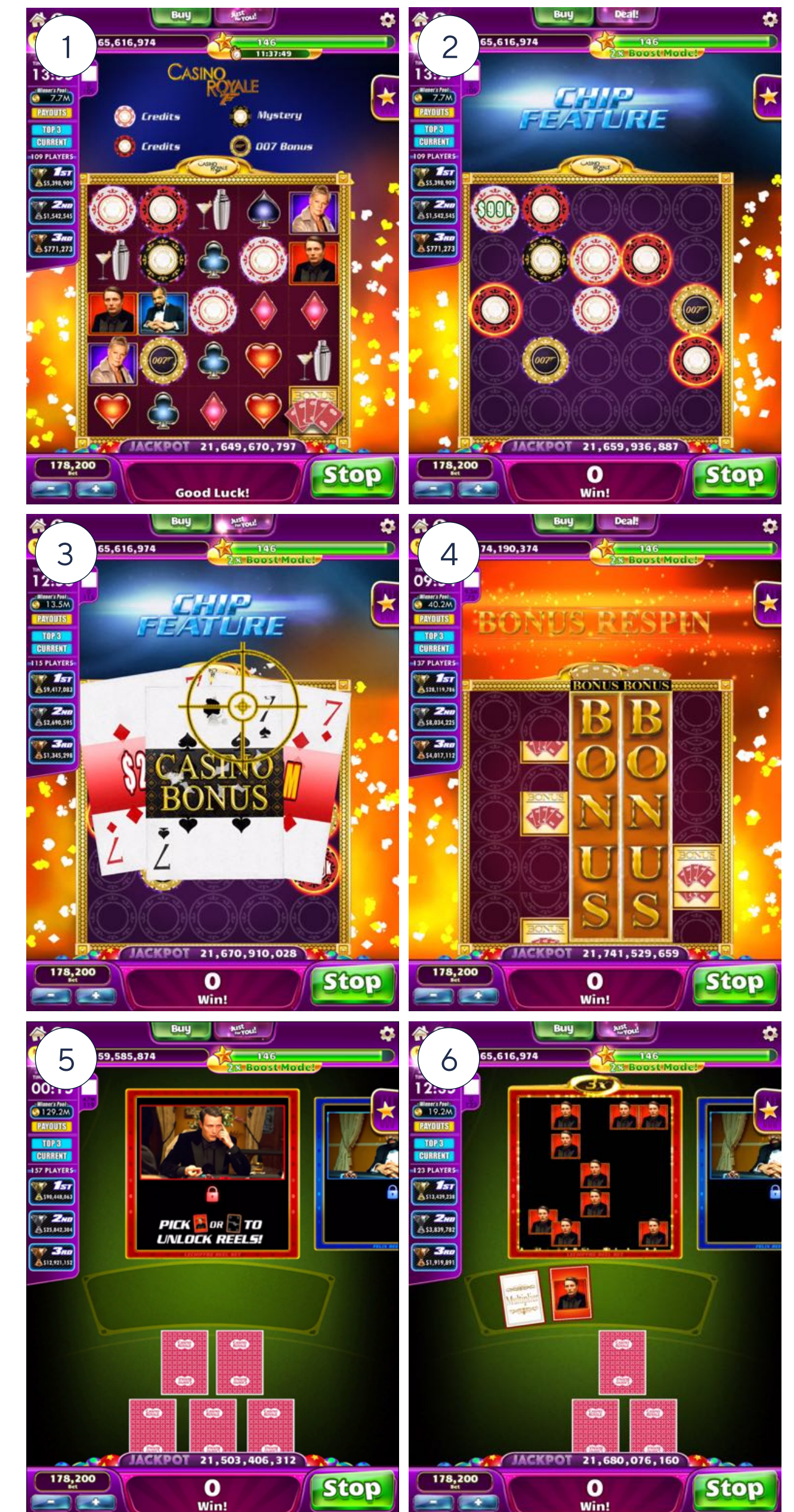
- [Bonus Respin](#)
- [Chip Feature & Casino Bonus](#)

Related Machines

- [Fu Fu Flip](#) - Slotomania
- [The Godfather: My Daughter's Wedding](#) - Jackpot Party
- [Winning Streak](#) - POP! Slots (event)

Additional Images and Videos

- [Casino Royale 007](#) - Jackpot Party
- [James Bond Casino Royale](#) - G2E 2017



INSIGHTS & ADVICE

Although this machine targets a wide range of player types, machines with *consecutive bonuses* appeal most to **Gambler Gail** players. Combine *both known value amounts* with *unknown special wins* in the respins to satisfy both *instant gratification* and *suspense* with a large, undetermined final prize.

Product Council Insights

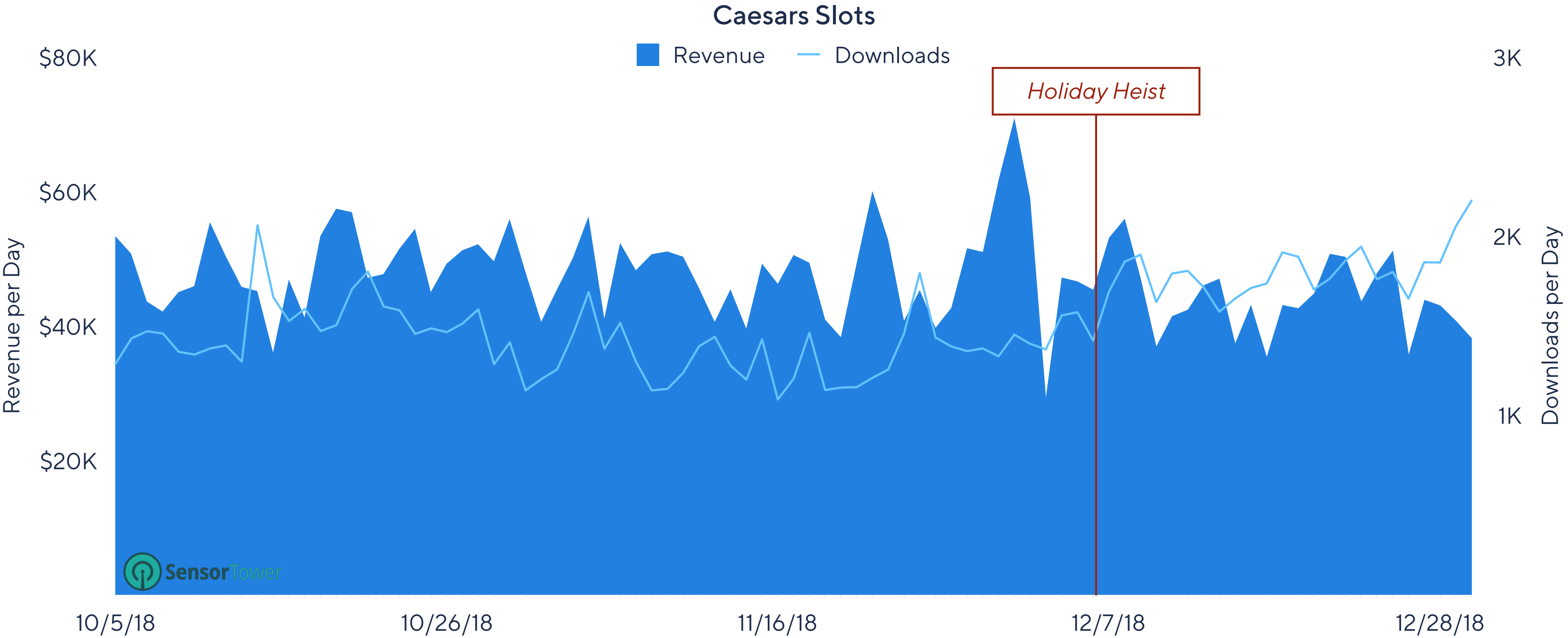
- This is a relatively new twist on consecutive bonus games (see this [video](#)). Consecutive bonus games are trending, with five released in December (see [Key Trends](#)).
- Due to the many potential awards, there is a lot of *expected value* in the respins. Consider decreasing the expected value to increase the number of respins awarded.
- Include the credit values and jackpot amounts on top of some symbols (like in *Lightning Link*), so players enjoy their wins during the respins. Then, designate the special symbols as ‘unknown’ so that players highly-anticipate the grand finale of the respins, which reveals the special symbols prizes.
- This new variation on anticipation modes (see the [video here](#)) heavily-emphasizes anticipation. This is a positive adaptation *if* there is a high potential to hit a bonus on the *Bonus Respin*. Otherwise, players may become annoyed with more attention and time added to near-misses.
- The individual reels increase the number of times special symbols, like the *Bond* symbols, can flash by a player on a spin (because of the shorter reel strips). This heightens player anticipation, while also keeping the reel spins short.

	<i>Fame Frank</i>	<i>Money Mike</i>	<i>Daydreamer Denise</i>	<i>Gambler Gail</i>	<i>Sensation Serena</i>
Women	50%	51%	66%	60%	55%
Age	32.4	34.3	35.5	35.2	35.2
Education	3.5	3.3	3.5	3.2	3.3
Multiple bonuses one after another	3.5	4.1	4.1	4.4	4.3
Features with respins	3.6	4.0	4.2	4.2	4.3

LONG & SHORT PROGRESSION SYSTEMS

IMPACT ANALYSIS

Caesars Slots revenue was down -10% WoW and 2Wo2W after the release of the *Holiday Heist* machine. During that period, downloads were up +23% WoW and up +22% 2Wo2W.



2Wo2W = two weeks over two weeks ago
Graph data is iOS U.S. only

MECHANIC DETAILS

Players first complete a 600-piece progression system by collecting items during free spins. Then, a second, 7-piece progression system is unlocked for players to collect items during a pick'em bonus.

Feature Details

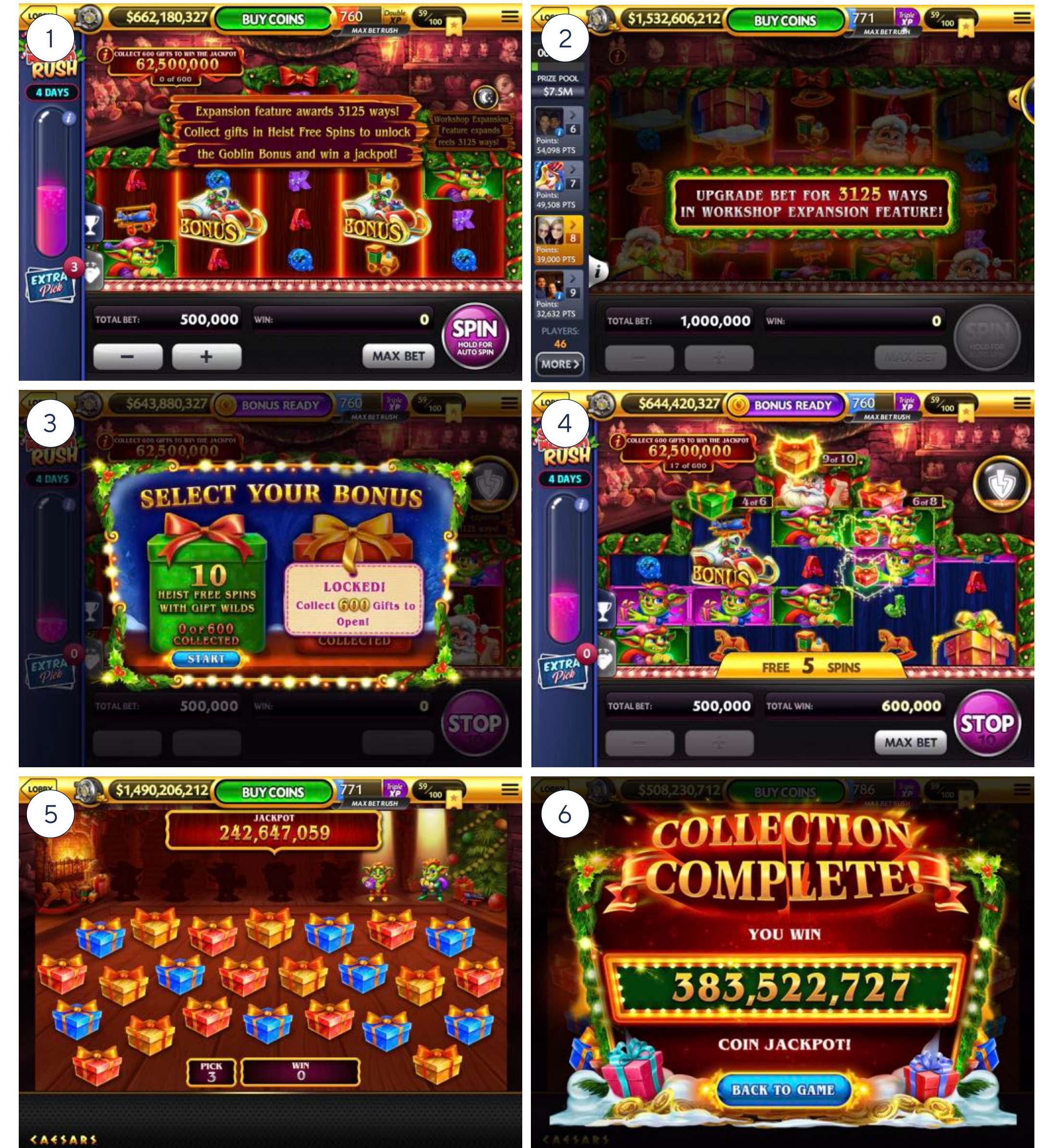
- Players collect 600 *Gifts* during free spins for a jackpot award, unlocking a *Goblin Bonus* with qualified bets (1).
- A *Workshop Expansion Feature* randomly triggers regardless of bet amount, expanding the reels and adding wilds.
 - Players with qualifying bets receive 3,125 ways to win.
 - Players with non-qualifying bets are given a notice to 'Upgrade bet' (2).
- A 'Select your bonus' has an option locked until enough *Gifts* are collected (3).
- During free spins, players collect *Gifts* to convert symbols to wilds ... with total *Gifts* collected counting towards the collection goal (4).
- In the *Goblin Bonus*, players are awarded three picks for coins and *Goblins*. Revealing *Goblins* awards three more picks (5).
- Collecting 7 *Goblins* during the bonus rounds awards a jackpot, resetting the collection feature (6).

Other Mechanics in the Machine

- [Goblin Bonus](#)
- [Free Spins](#)

Related Machines

- [Mystery of the Amazon](#) - House of Fun
- [Monster Riches Revenge](#) - House of Fun
- [Mammoth Stampede](#) - Slotomania



INSIGHTS & ADVICE

Unlock a *seemingly* shorter, higher-volatility progression after a *seemingly* longer, more predictable one to remove the high-churn, post-completion moment. The appearance of shorter progression makes it easier for players to start from the beginning again. This type of mechanic targets **Sensation Serena's ...** the target player type with the highest engagement and likelihood to spend, but smallest number of players.

Product Council Insights

- **Consider separating one bonus into two smaller ones to create more pleasant game moments.** Do this by unlocking the potential to win a new bonus with an initial bonus system (as opposed to unlocking and awarding immediately).
- **Although players only need to collect 7 Goblins (and a few are collected pretty quickly), the Goblin Bonus may be more difficult than it appears.** This is because players can collect duplicates, causing the progression to stretch out ... making the outcome a mystery to players.
- **A good combination of progression systems is to make the easier, earlier progression known and relatively predictable ...** and the more difficult, second progression system longer and less predictable (with larger potential wins).

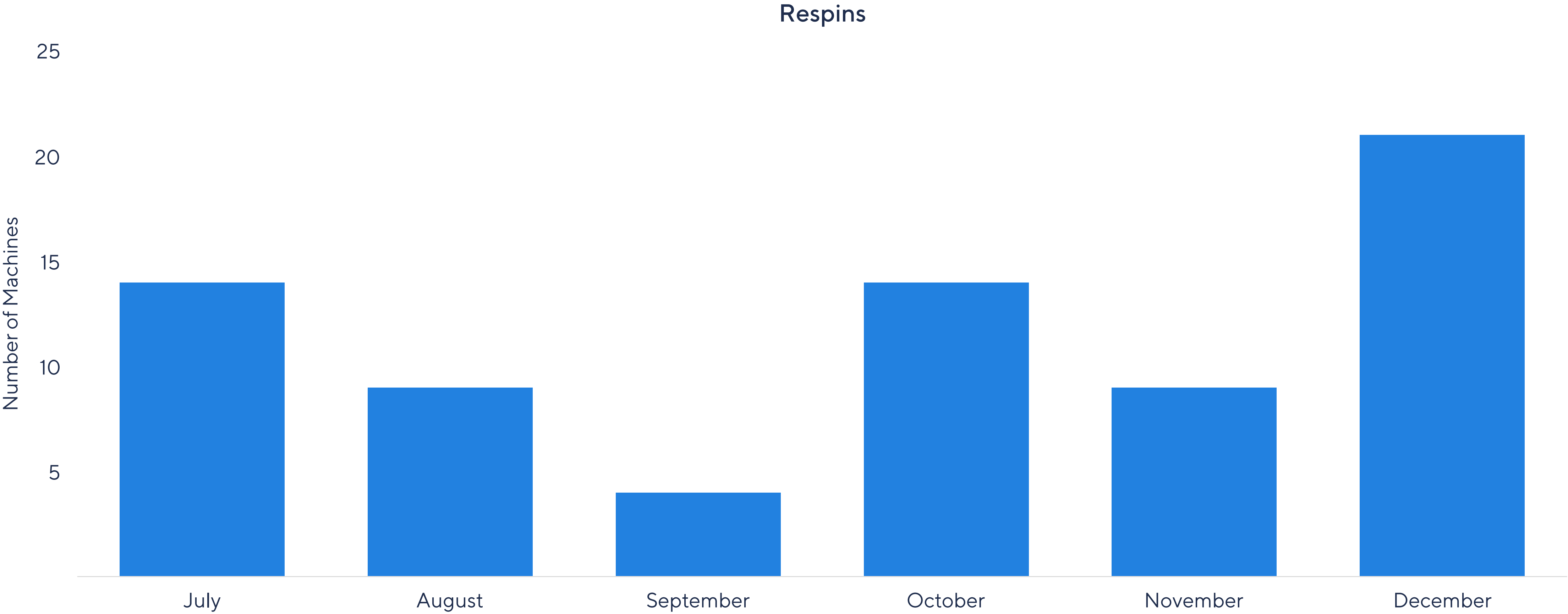
	<i>Fame Frank</i>	<i>Money Mike</i>	<i>Daydreamer Denise</i>	<i>Gambler Gail</i>	<i>Sensation Serena</i>
Women	50%	51%	66%	60%	55%
Age	32.4	34.3	35.5	35.2	35.2
N	21%	22%	26%	19%	12%
Money Spent	4.2	4.9	3.5	5.4	5.8
Play Time	5.0	4.5	5.0	4.9	6.5
Features that you collect	(0.6)	(1.1)	0.1	0.0	1.6

KEY TRENDS



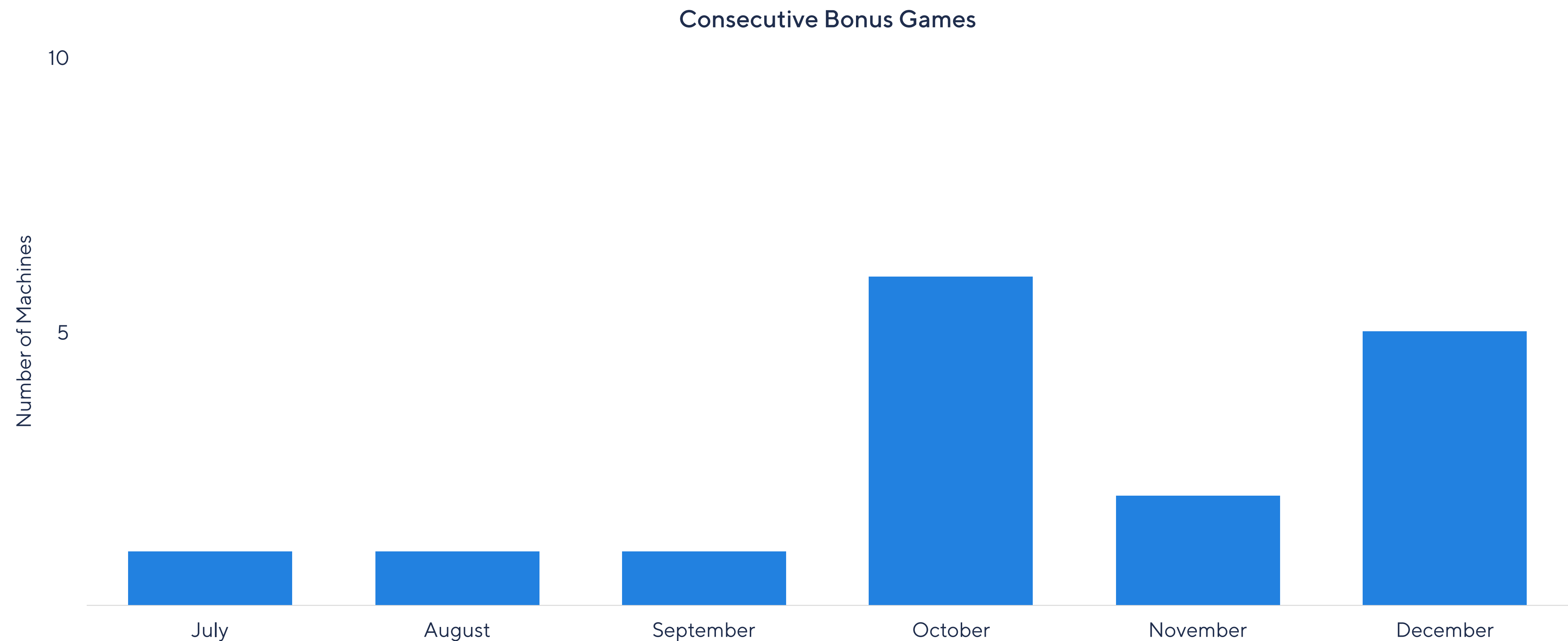
BASE GAME FEATURES

Respins continue to rise, becoming the dominant base game feature (21 machines from the top 30 grossing apps in December). New variations on respins continue to be released ... see the [New Innovations](#) section for examples.



BONUS FEATURES

Machines with consecutive bonus games, like in *Casino Royale 007*, are becoming a new trend in social slots design.



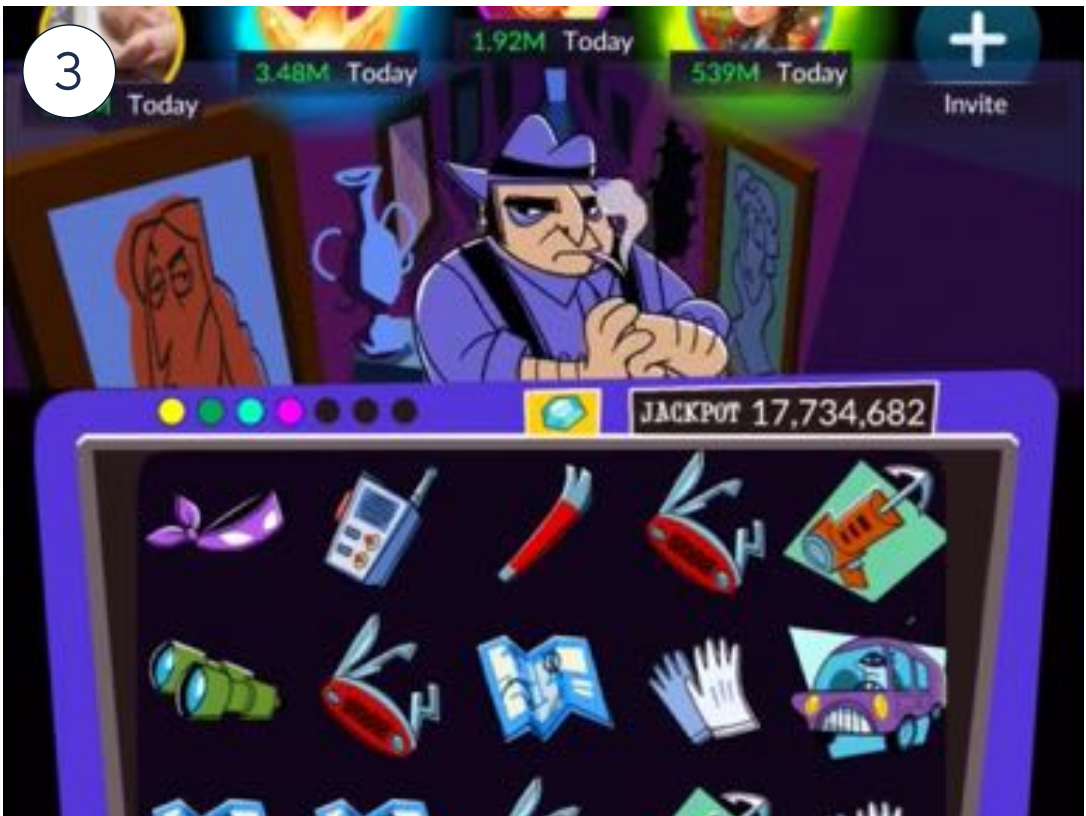
MARKET WATCH



12/1/18 - 12/31/18

NOTABLE RELEASES I

App	Machine	Special Feature Database Video/Image	Description
Slotomania	Wild Spinbad	Free Spins and Wild Selection	Players choose the number of spins and type of wilds used, during free spins (1)
DoubleDown Casino	Sphinx 3D	Bonus Selection	Players choose the bonus from multiple bonus mechanic options (2)
	Crown of Egypt Update	Updated Machine	Machine has improved graphics and progressive jackpots. Original machine was released in 2013
Big Fish Casino	The Great Museum Heist	Heist Member Collection	Players spin in a social bonus to collect <i>Heist Members</i> , filling a meter to win a social reward (3)
Cashman Casino	Big Money Gold	Mighty Cash Respins	During the respins, filling all reels with special symbols triggers the <i>Big Money Wheel</i>



NOTABLE RELEASES II

App	Machine	Special Feature Database Video/Image	Description
DoubleU Casino	Mammoth Cash	Special Mammoth Symbols	Special <i>Mammoth</i> symbols award extra payouts when landing in winning combinations (1)
myVEGAS Slots	Kong The 8th Wonder of the World	Wheel Bonus Feature	Players spin to collect credits for use during a wheel bonus. During the wheel bonus, players have three lives to spin for credit win multipliers, jackpots, wheel upgrades, or loss of life (2)
Classic Vegas Casino	Crackin Fortune	Two-Phase Bonus	A stepper machine with a two-phase respins feature. During phase one, players collect special symbols to increase the jackpot levels and the number of pick'em picks. The pick'em is the second phase (3)
Classic Vegas Casino	Golden Safe	Colossal Symbol	A stepper machine with 3x3 colossal symbols that fill up all reel positions



[Click here for a full list of machines released](#)

APPENDIX



SLOTS PRODUCT COUNCIL

These industry-leading slots experts strengthen the Insights & Advice sections by analyzing the machines and providing commentary and analysis for the Report.

Arthur Lee	Joe Kisenwether	Robin Littleworth
<p>Game Design and Math Innovator Consultant</p> <p>LinkedIn Profile</p> <p>Arthur Lee is a leading slots consultant in social casino. Prior to going independent, Arthur was a Game Designer at Playtika for two and a half years. At Playtika, he headed the innovation of Lightning Link-type games with Fairy Bliss, Lady Havana, and one of the best performing games at House of Fun, City of Queens. Arthur designed record breaking titles such as Frankenbride, Lady Hotness, Giant's Treasure, and Beast.</p> <p>Before making an impact in the social mobile market, Arthur was a Senior Mathematician in RMG at American Gaming Systems (AGS) and KONAMI Gaming.</p> <p>He combines his experience of land-based slots with the lack of regulation in social games to provide the most competitive games in social and real money gaming.</p>	<p>Mathematician and Game Design Consultant</p> <p>LinkedIn Profile</p> <p>Joe Kisenwether is an award-winning game designer and mathematician.</p> <p>Joe is a 20-year veteran of the casino and online gaming industry. He spent eight years at Bally's as a Senior Mathematician and also worked for GameTech and Gaming Laboratories International before going independent and founding Craftsman Gaming in 2012.</p>	<p>Product and Operations Consultant</p> <p>LinkedIn Profile</p> <p>Robin Littleworth is a leading management consultant and with over a decade of experience producing hundreds of compelling slot games.</p> <p>Currently, he is an advisor to social casino companies on game design, studio operations, marketing, and strategic planning.</p> <p>Prior to his current consulting roles, Robin led all of the worldwide game development studios for Scientific Games where he annually produced the world's most innovative slot titles for both land-based and online.</p>

L&G SLOTS PERSONAS



FUNDAMENTAL MOTIVATIONS

In partnership with Kinrate Analytics, an expert team specializing in gaming user personas, we identified four fundamental motivations of online slots players; **Glory**, **Arousal**, **Escape**, and **Profit**.

Glory

- Feeling important and glamorous
- A great night out ... just like a real-life casino trip
- The desire to master gaming skills in front of others
- Enjoying challenges and wanting others to envy gaming abilities and success

Arousal

- Feeling enjoyment, entertainment, and excitement
- Appreciating the rhythm and audiovisual effects
- Effortless way to feel awarded and experience a high
- Strong emotional arousal and high stimulation

Escape

- A replacement for everyday concerns and anxiety
- Relieving stress and pressure
- Motivating activity when bored
- A sleep-alternative

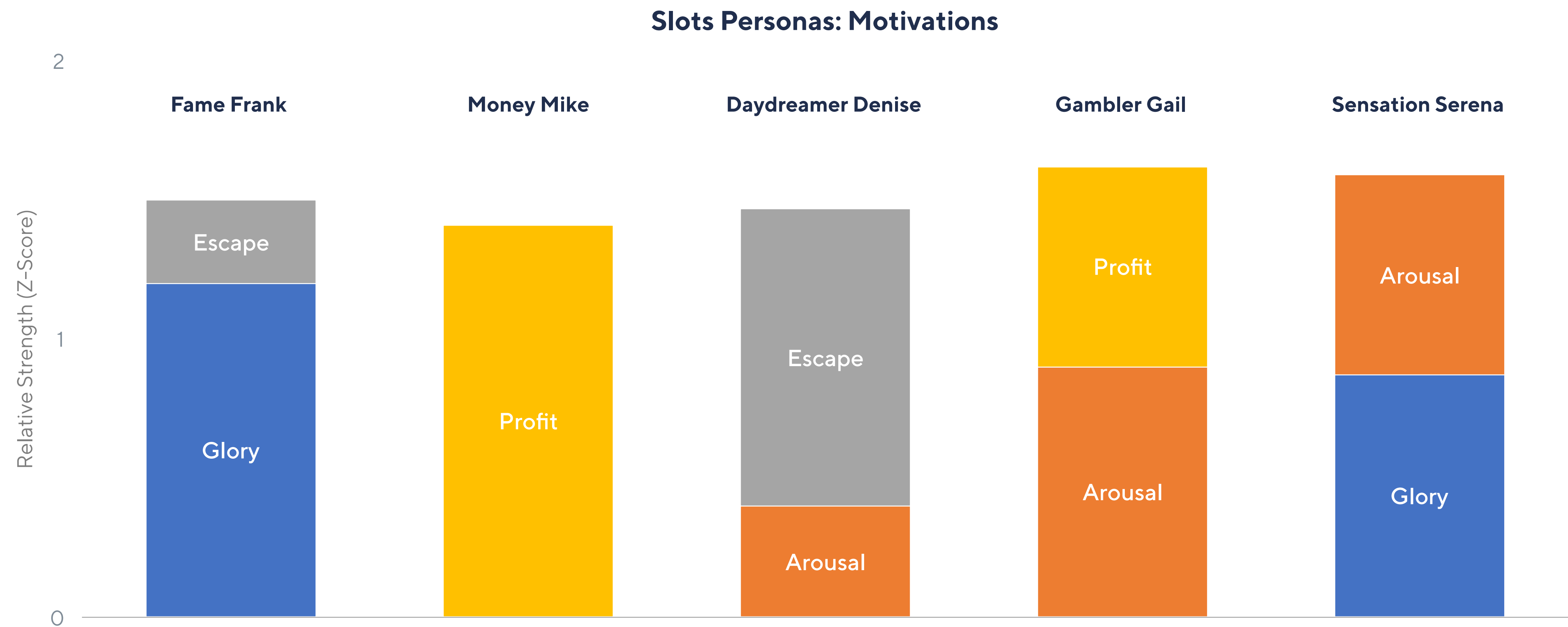
Profit

- The feeling of gaining money
- Wanting to make a profit, get rich, and win prizes and rewards



SLOTS PERSONAS

Based on these fundamental motivations, online slots players were segmented into five core player personas: **Fame Frank**, **Money Mike**, **Daydreamer Denise**, **Gambler Gail**, and **Sensation Serena**.



The L&G Slots Personas is based on a sample size of 1,299 respondents of online slots players

PERSONA CHARACTERISTICS

Each persona seeks out experiences that trigger positive motivations ... while limiting exposure to less desirable emotions. For example, **Fame Frank** is motivated by Glory and somewhat by Escape ... and is put off by feelings of Arousal (e.g., over-stimulation from audiovisual effects).

	<i>Fame Frank</i>	<i>Money Mike</i>	<i>Daydreamer Denise</i>	<i>Gambler Gail</i>	<i>Sensation Serena</i>
Demographics*					
Size	21%	22%	27%	19%	12%
Women	50%	51%	66%	60%	55%
Age	32.4	34.3	35.5	35.2	35.2
Motivations & Detractions**					
Glory	1.2	-0.2	-0.4	-1.1	0.9
Arousal	-1.1	-0.6	0.4	0.9	0.7
Escape	0.3	-0.6	1.1	-0.5	-1.1
Profit	-0.4	1.4	-1.1	0.7	-0.6
Play Characteristics**					
Online Slots Interest	3.1	3.0	3.3	3.6	3.8
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 mean age of respondents was 34.5, 57% female, and U.K. n = 818 and U.S. n = 481
**These numbers indicate relative strength of each player persona using Z Scores ([more info](#))

“If you invest in beauty, it will remain with you all the days of your life”

– Frank Lloyd Wright

LiquidandGrit.com



Brett.Nowak@LiquidandGrit.com

