LIQUID&GRIT

Slots Design Report

Competitive Research and Data Insights for Slots Designers

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MARCH

2019

NEW INNOVATIONS

BET UP RANGES

MECHANIC ANALYSIS

Heart of Vegas *5 Dragons Gold Max* and House of Fun *HOF Slot Legends* employ bet up mechanics with bet ranges to adjust the benefits.

Feature Details

- Hearts of Vegas 5 Dragons Gold Max
  - Upon machine-entry, a *Payback Meter* is visible to the right of the reels (1).
  - *Payback Levels* are based on bet amount ranges (2).
  - Each *Level* adds a different enhancement to the free spins (3).
- House of Fun HOF Slot Legends
  - A bet range prompt is displayed when players change their bet (4).
  - The bet range changes the potential free spins and *Tokens* awarded in a pick'em (5 & 6).
  - After the pick'em, a dialogue shows what a player could have won with a higher bet (7).
  - See the Character Collections section for more information on this machine.

Related Machines

- The Munsters (update) – myVEGAS Slots
- Big Fortune Valley – Big Fish Casino
- Mammoth Cash – DoubleU Casino

EXPERT INSIGHTS

Use bet ranges to simplify and improve the marketing message … and to promote in smaller areas within the player's natural game flow.

Product Council Insights

- **Simpler messaging allows for marketing in more areas.** In *HOF Slot Legends*, players receive machine-specific marketing upon clicking the bet button and after the pick'em. Ranges eliminate busy messages that explain *each* bet amount change (1 & 2).

- **Design the machine so that the bet up benefits are always visible.** An always-present element, like the meter in *5 Dragons Gold Max,* will more frequently remind players of what they missed (3).

- **Add highly-visual mechanics with larger bets that have moderate RTP impact.** In *5 Dragons Gold Max,* two of the three enhancements: 'More Wilds' and 'Higher Multipliers', display clearly in the machine … but often have a mild RTP impact.

- **Boost the RTP as players increase their bets.** In many RMG machines, the max bet has better RTP than the lower bets. Adopt this well-known adjustment and clearly explain the RTP benefit to players.

Player Persona Insights

- **Target Player:** *Money Mike*

- **Core Motivation:** Profit

- **Slots Machines Preferences:** He selects machines with no-nonsense mechanics focused on winning, like respins and multipliers.

- **Feature Preferences:** He is the least interested in features (in the app) compared to the other personas. He plays digital slots apps to make money, a profit, and get rich. He is all about the prizes and rewards.

Additional Information Online
Click here for more images and videos on 5 Dragons Gold Max and HOF Slot Legends

CHARACTER COLLECTIONS

MECHANIC ANALYSIS

House of Fun *HOF Slot Legends* incorporates character collection and progression systems based on the popular feature *HOF Legends.*

Feature Details

- Upon machine-entry, players receive three *Common Characters* (1).
- Players collect *Tokens* by landing *Token* symbols or as bonus rewards (2).
- *Tokens* are used to purchase *Character* cards, which award credits or bonus games (3).
- Leveling up three *Common Characters* unlocks *Rare Characters* and awards a *Mystery Credit Prize* (4, 5, & 6).
- There are six *Characters* to unlock.

Other Mechanics in the Machine

- Base Game and Token Collection
- Zeus Wild Reels
- Pick'Em Bonus with Free Spins
- Legend Card Purchase & Level Up

Related Machines & Features

- Monsterpedia Quest – House of Fun
- Reel Treats – Gold Fish
- Slotocards 2019 Collection – Slotomania
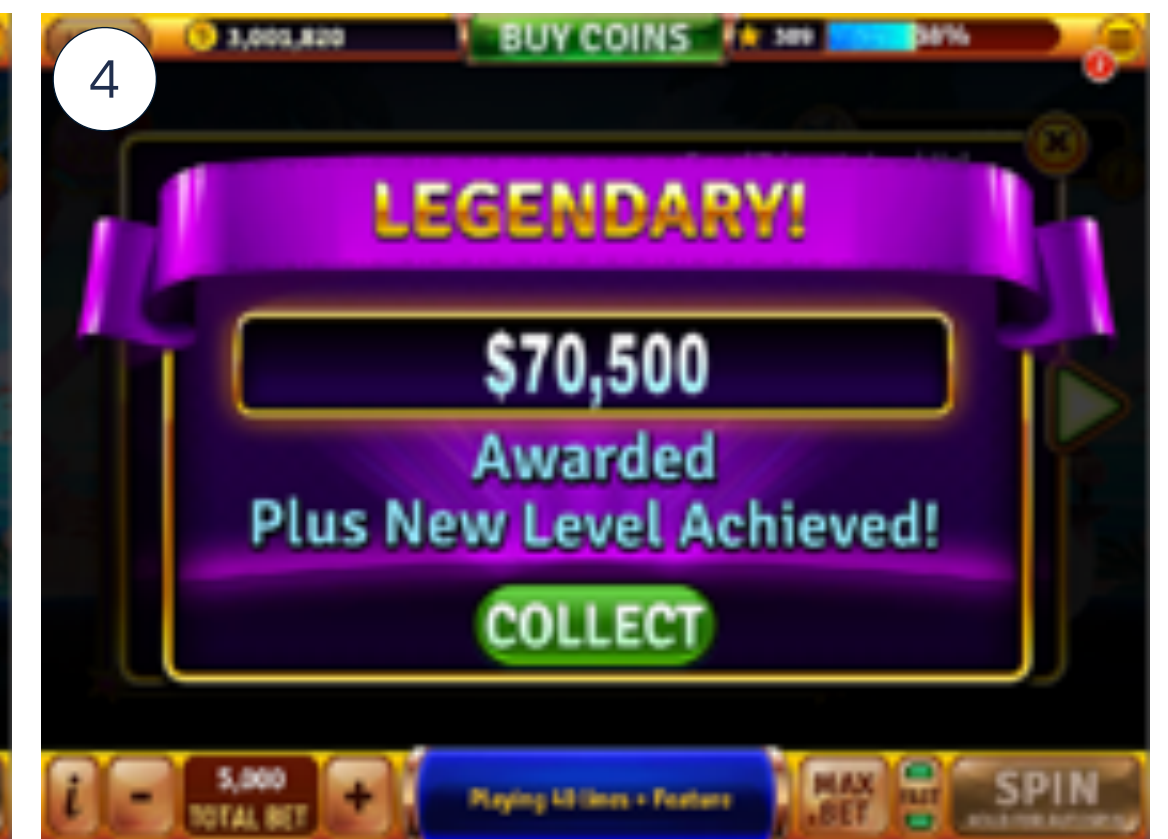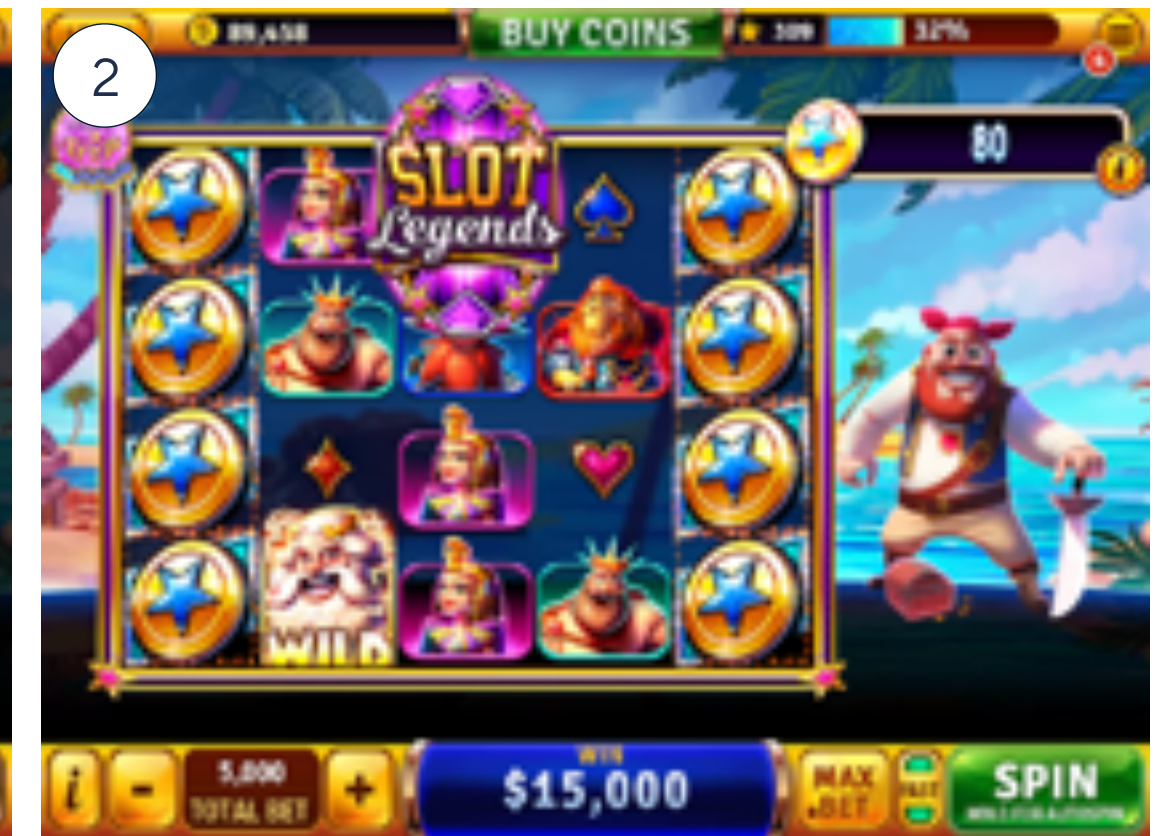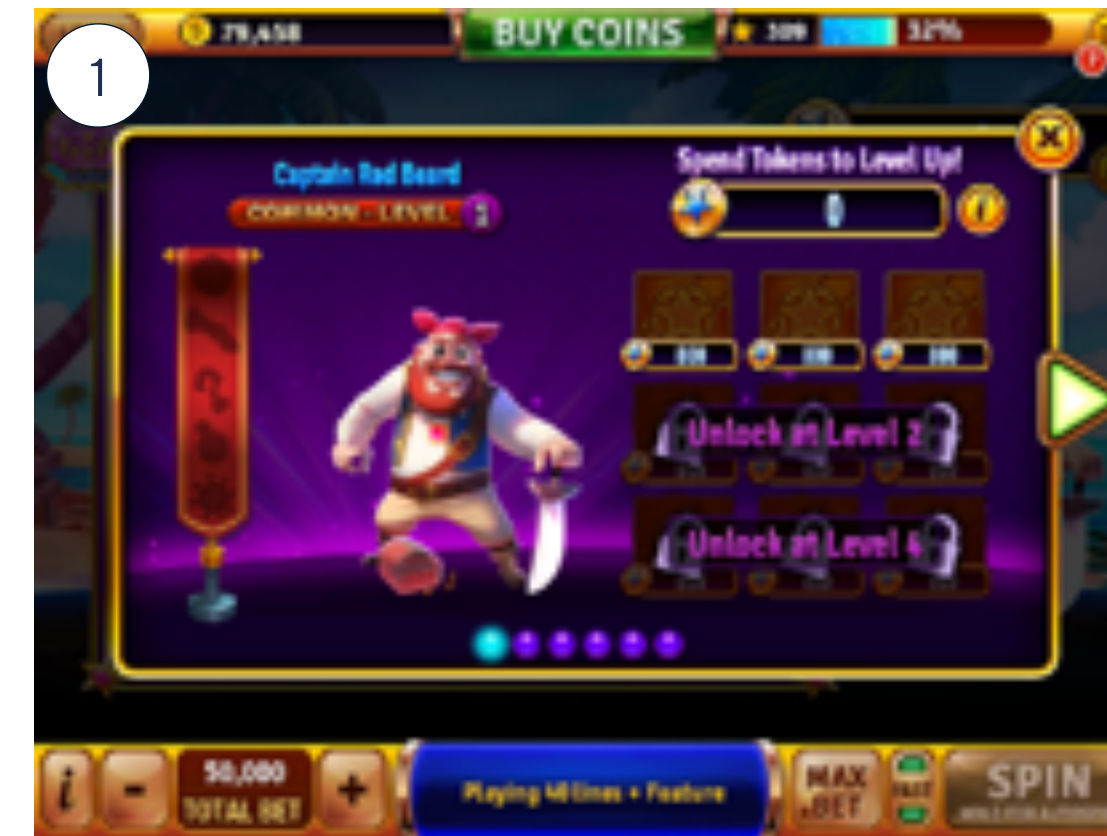
EXPERT INSIGHTS

Use character collections to decrease the RTP, while still rewarding players with non-RTP based benefits. Then, release a machine-specific secondary currency to mask the conversion value of the currencies and collection items.

Product Council Insights

- Add machine-specific currencies to let the player exchange large bets for low RTP impact benefits. In this case, players are given a secondary currency to complete a collection. This decreases the amount of value necessary to be given back from the machine … and hide how much is returned for larger bets (1).

- Incorporate the benefits of the characters into the core gameplay. In Yggdrasil Gaming Jungle Books, there are five *Characters* that award up to two different spin enhancements. Players randomly receive new *Characters* and enhancements during base play (2 & 3).

- Pair a collection system that boosts player performance with a competitive system that rewards stronger collections … to capitalize on a mechanic from successful mid-core apps like Clash Royale. Before implementing this feature, make sure you have a significant amount of high value players that enjoy competition (4).

Player Persona Insights

- Target Player: *Sensation Serena*

- Core Motivations: Arousal, Glory

- Bonus Games Preferences: She seeks more involved bonus game mechanics to be entertained and feel enjoyment. She likes bonuses with *Deal or No Deal* options, collecting things, and mini stepper machines.

- Jackpot Preference: Progressive jackpots pooled from many players' bets.

Additional Information Online
Click here for more images and videos on HOF Slot Legends

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ACCUMULATION BONUSES

MECHANIC ANALYSIS

During the free spins in DoubleU Casino *Fiery Stallions,* players accumulate bonus coins that are awarded only if a 'Collect' symbol lands. The bonus is in addition to the free spins winnings ... and sits prominently at the top of the reel set.

Feature Details
- Five or more *Stallion* symbols trigger the free spins (1).
- The number of free spins awarded is based on the number of landing *Stallions.* Ten *Stallions* award a jackpot (2).
- During the free spins, *Stallions* add the amount shown on the symbol to the *Stallion Bonus* (3).
- Players must have a 'Collect' symbol land to reap the *Bonus* (4).
- Any *Stallion Bonus* remaining at the end of the free spins is lost.

Other Mechanics in the Machine
- Free Spins & Stallion Bonus

Related Machines
- Michael Jackson Beat It – Jackpot Party
- Michael Jackson Leave Me Alone – Quick Hit Slots
- Goldmine Bang – Caesars Slots
- Mustang Money – Ainsworth Game Technology (RMG)
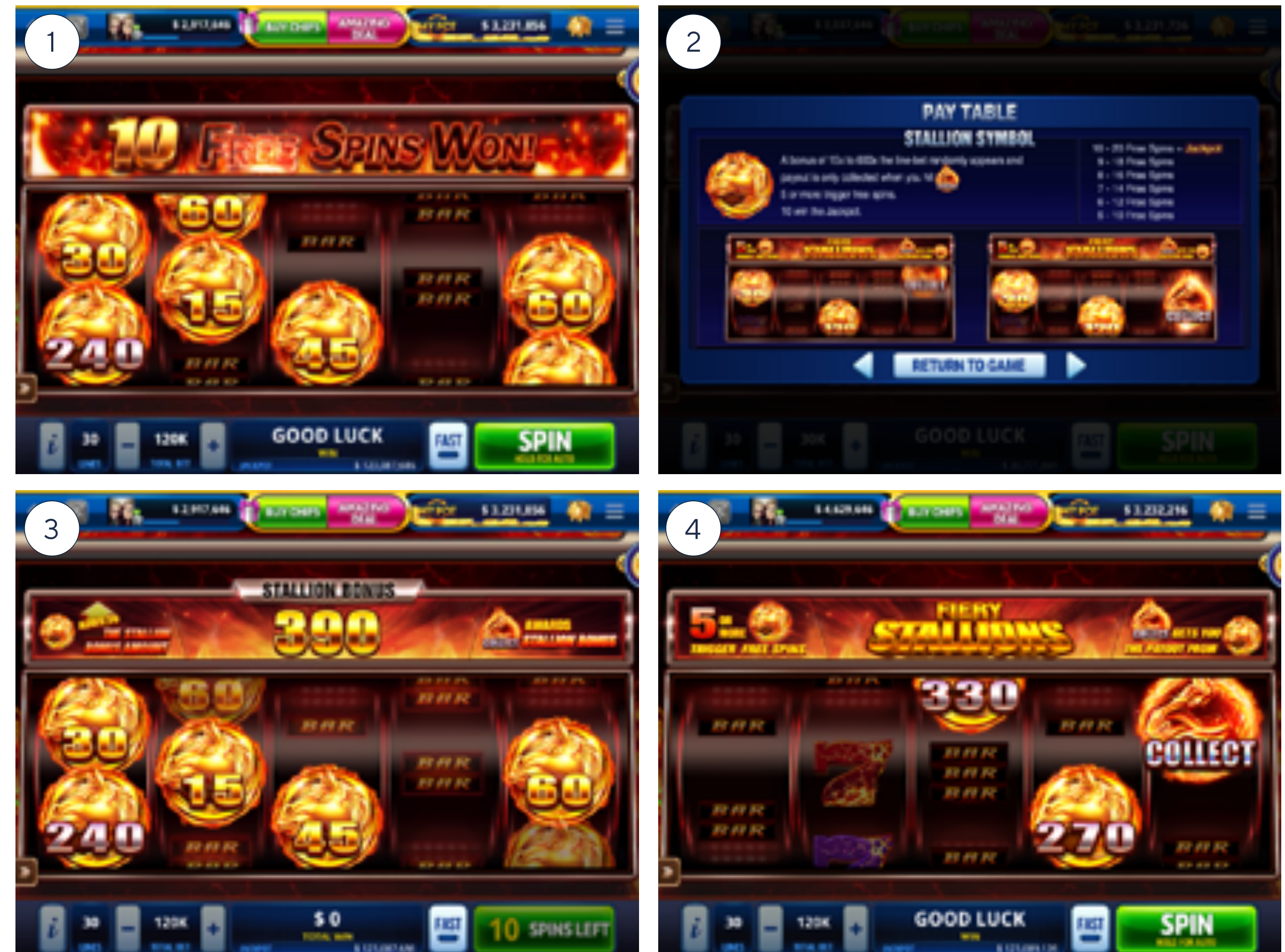
EXPERT INSIGHTS

To create a visually stimulating machine, pair strong themes with a persistent bonus on top of the reel set that accumulates value as players spin. Consider adding a *Deal or No Deal* option when players 'Collect' to let players personalize the potential bonus size and risk.

Product Council Insights

- Divert player's attention away from losses with this type of bonus system. Like the *Diamonds* flying into the level meter in Pharaoh's Way ... this mechanic makes players *feel* rewarded even when they lose (1 & 2).

- Pair this feature with a strong theme to increase visual excitement. *Fiery Stallion* uses very robust visual colors (gold, red, and yellow) that build upon the powerful free spins visuals (3).

- Create opt-in personalization with a *Deal or No Deal* option after a 'Collect' symbol hits. This option allows players with larger wallets and higher risk-tolerance to continue to gamble their winnings ... and players with smaller wallets and lower risk-tolerance to simply 'Collect'.

- Add a jackpot to the max scatter to make anticipations more exciting. A jackpot also makes the marketing much more stimulating, changing it from 'Win 100x' to, 'Win a Jackpot'.

Player Persona Insights

- Target Player: *Gambler Gail*

- Core Motivations: Profit, Arousal

- Slots Machines Bonus Preferences: She enjoys bonuses that add additional reels, lines, and pays.

- Reason for Playing: She plays digital slots because it is enjoyable, entertaining, and exciting. It makes her feel good. And, she is motivated by the rhythm and the audiovisual effects of digital slots. Gaming feels like an effortless way to reward herself ... to experience a high.

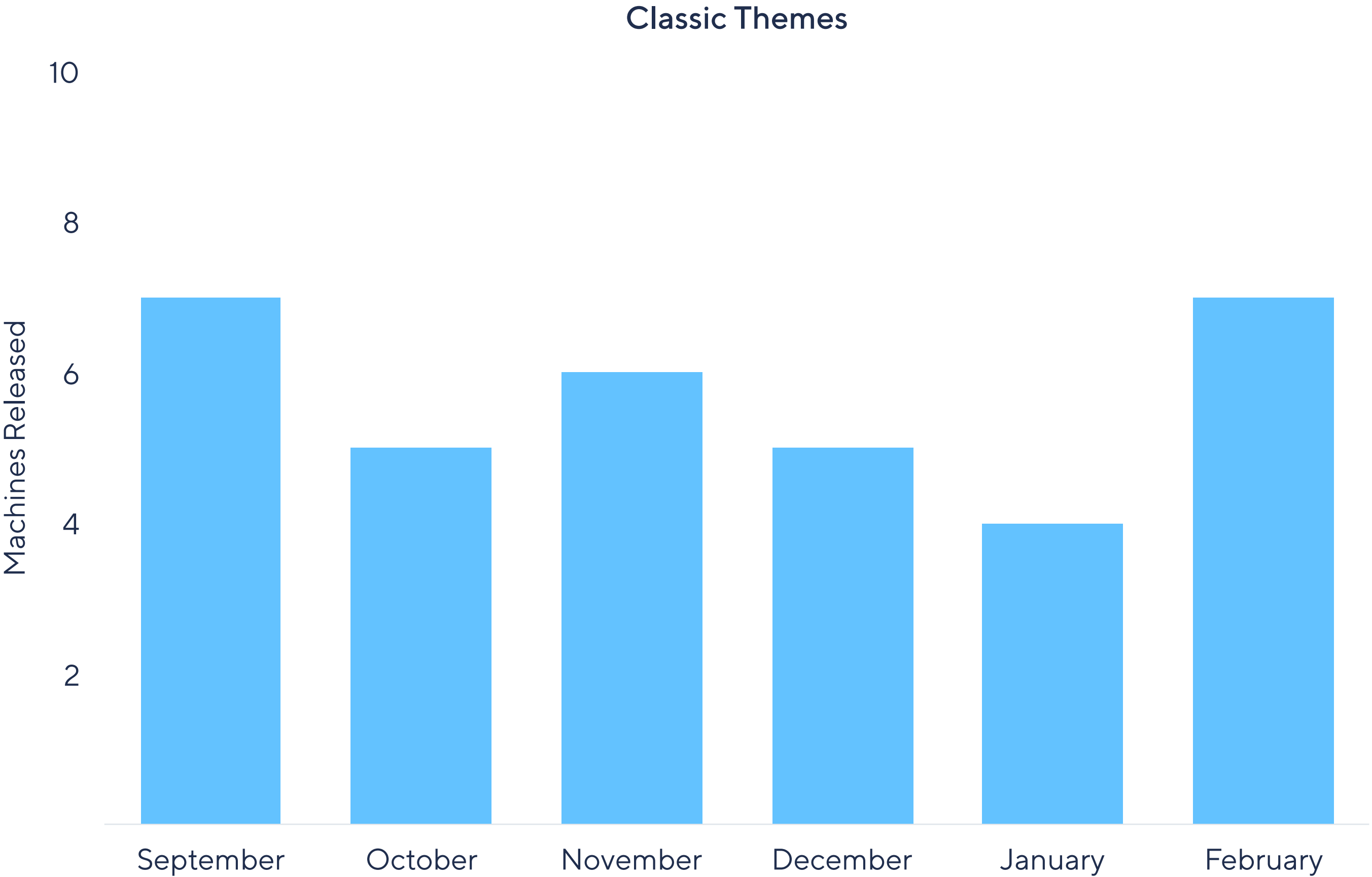| Additional Information Online |
|---|
| Click here for more images and videos on Fiery Stallions |

KEY TRENDS

THEMES

Classic themes in video machines appear to be trending. February saw an uptick despite a limited amount of machines released during this shorter month.

Classic Themes

Machines Released

September	7
October	5
November	6
December	5
January	4
February	7

7 Lucky Years in Caesars Slots

Vegas Classic Link in House of Fun

MARKET WATCH

2/1/19 – 2/28/19

NOTABLE RELEASES I

App	Machine	Key Image	Description
Slotomania	Rapid Chili	Badges	Players earn *Badges* by completing in-machine challenges. Challenges include hitting jackpots, bonuses, and specific symbols with qualified bets.
DoubleDown Casino	Legendary Pandarcher	Respins with Multipliers	During the Lightning Link-style respins, *Multiplier* symbols land and multiply all adjacent pay symbols (1).
Big Fish Casino	Tiger's Trove	Pet the Cat	Players can change the background scenery by petting a *Cat* (2).
POP! Slots	Fu Stacks	Replicating Reels to Fu Wheel	When a full stack of symbols land on reel one, the stack can replicate across two, three, or all reels.
Caesars Slots	Savannah Riches	Rock Obstacles	*Rocks* land and act as blockers that crumble after three successive spins. Once fully crumbled, the *Rocks* fill a bag that increase the chances of triggering the *Golden Lion Bonus* (3).
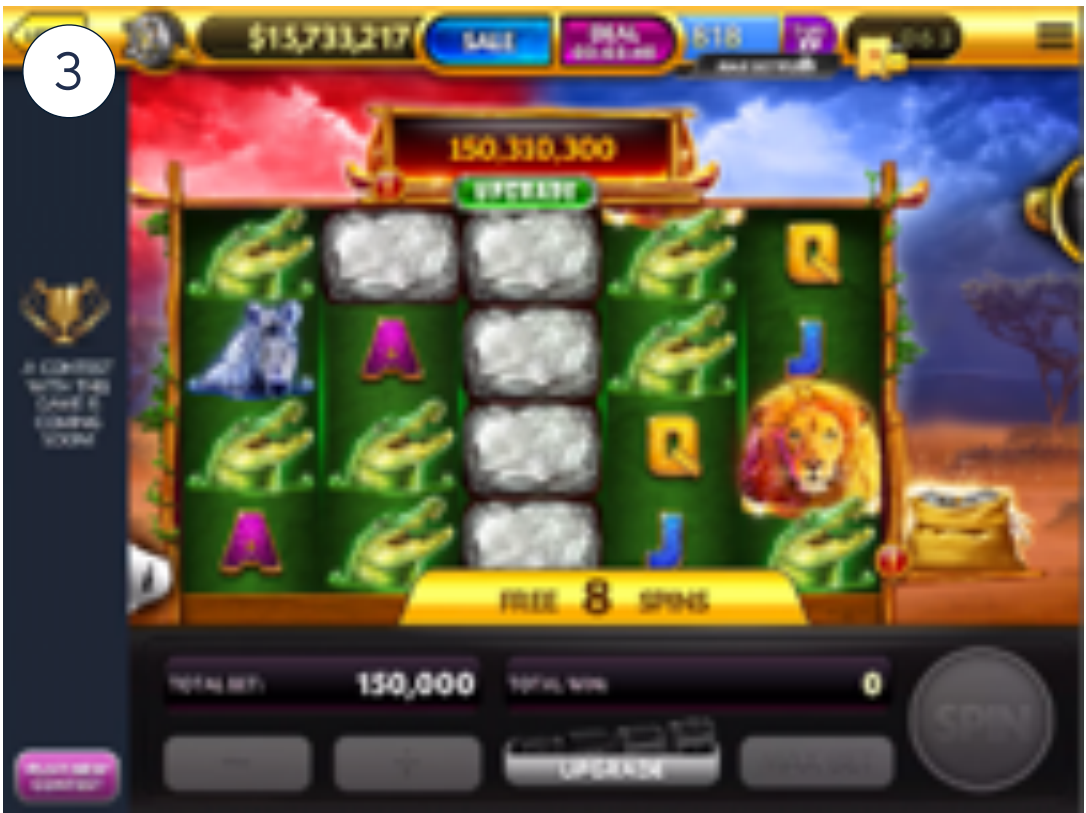
NOTABLE RELEASES II

App	Machine	Key Image	Description
Jackpot Party	Aztec Dawn	Reel Blast Free Games	The free spins is on a large, three-reel set with a colossal center reel (1).
Gold Fish	Butterfly Sword	Card Jackpot Mini-Game	In the bonus game, players try to pick the card of the target suit amongst four cards. If the target suit is selected in one or two attempts, the jackpot is rewarded.
	Nemo's Voyage	Nautilus Pressure Meter	On each spin, a pressurized depth gauge lowers the *Nautilus* on the meter. There are four depths on the meter that each unlock a feature. An increase or decrease *Pressure* symbol can land, forcing a player up or down the meter (2).
88 Fortunes Slots	Lock it Link Gold Gears	Lock It Feature	Three or more *Key* symbols in a row trigger the *Lock It* respin feature. The *Key* symbols lock together in the middle of the bottom row. One respin is awarded for each triggering *Key* symbol. During the respins, *Keys* that land adjacent to the locked *Keys* will join and add to the total prize (3).

Additional Information Online
Click here for a full list of machines released this month in the Online Market Watch

APPENDIX

SLOTS PRODUCT COUNCIL

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

Arthur Lee	Robin Littleworth

Game Design and Math Innovator Consultant

LinkedIn Profile

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.

Before making an impact in the social mobile market, Arthur was a Senior Mathematician in RMG at American Gaming Systems (AGS) and KONAMI Gaming.

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.

Product and Operations Consultant

LinkedIn Profile

Robin Littleworth is a leading management consultant and with over a decade of experience producing hundreds of compelling slot games.

Currently, he is an advisor to social casino companies on game design, studio operations, marketing, and strategic planning.

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.

DEMOGRAPHICS

A survey of 1,299 participants from the U.K. and U.S. were recruited to respond. The data formed patterns of game choices, slots preferences, and playing habits ... producing five distinct personas.

	Demographics*				
	Fame Frank	**Money Mike**	**Daydreamer Denise**	**Gambler Gail**	**Sensation Serena**
Size	21%	22%	27%	19%	12%
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 are representative of the strength of each player persona.

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 website

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 website

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

Sensor Tower

Mobile App Store Intelligence

Sensor Tower website

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

"The chief enemy of creativity is 'good' sense."

– Pablo Picasso

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