



Slots Design Report

Competitive Research and Data Insights for Slots Designers

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MAY

2019

NEW INNOVATIONS

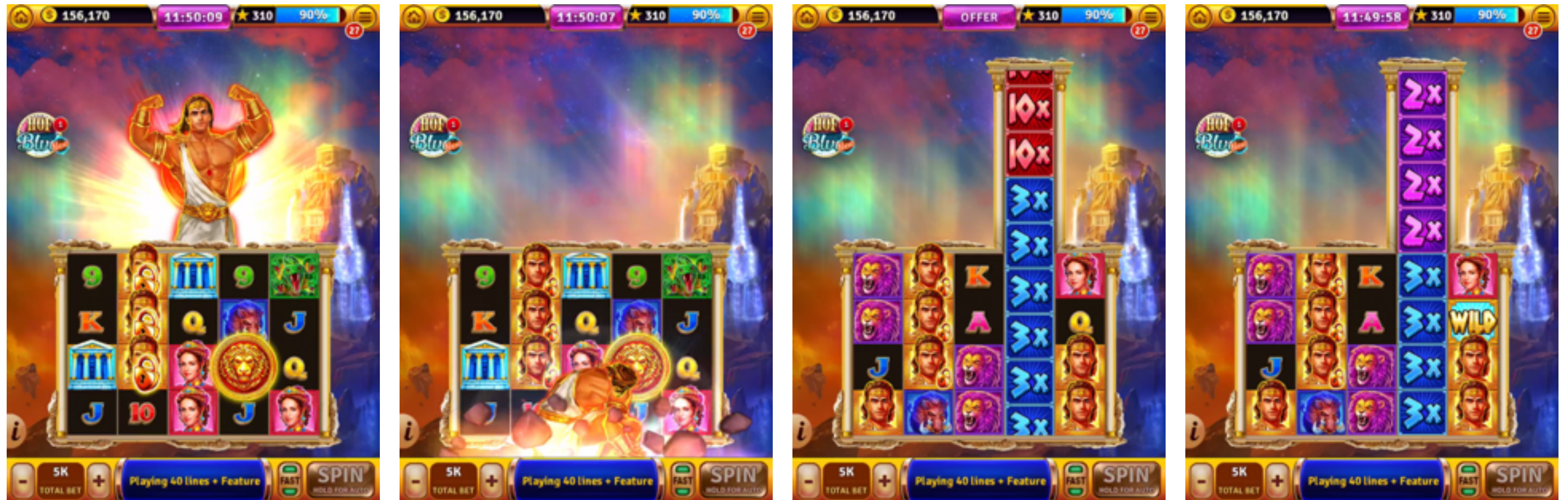


REEL EXPANSION MECHANICS

Hercules Grand in House of Fun

MECHANIC TEARDOWN

In *Hercules Grand* (House of Fun), once a *Lion* symbol hits, any reel holding a *Lion* expands ... *Hercules* symbols lock ... the other symbols convert to multipliers ... and a single respin triggers. Additional wilds are added to the reels before pays are awarded.



Feature Database:
[Hercules Grand](#) – House of Fun

EXPERT INSIGHTS

To build anticipation in landscape-view machines, pair a single symbol trigger with *Ghosting Symbols* that display above the reel set. To limit the RTP impact, trigger a single respin, or other low-paying mechanic.

Insight Details

- *Ghost Symbols* are an under-developed, yet visually-powerful, mechanic for landscape mode machines. In *Hercules Grand*, transparent versions of the *Lion* symbol can be seen falling above the reel set, exciting players with the potential of a hit (see [this video](#) for more information) (1).
- **Test RMG innovations sooner.** *Hercules Grand* is heavily inspired by *Griffin's Throne* by IGT ... a machine displayed at G2E 2018 in IGT's *Innovation Labs* area and recently released to the casino floor (2).
- **Decrease innovation risk with strong production.** Have a back-up machine ready to release in case the innovative machine falters ... limiting the downside of an innovative machine (and increasing the ROI of experimentation).

Persona Information

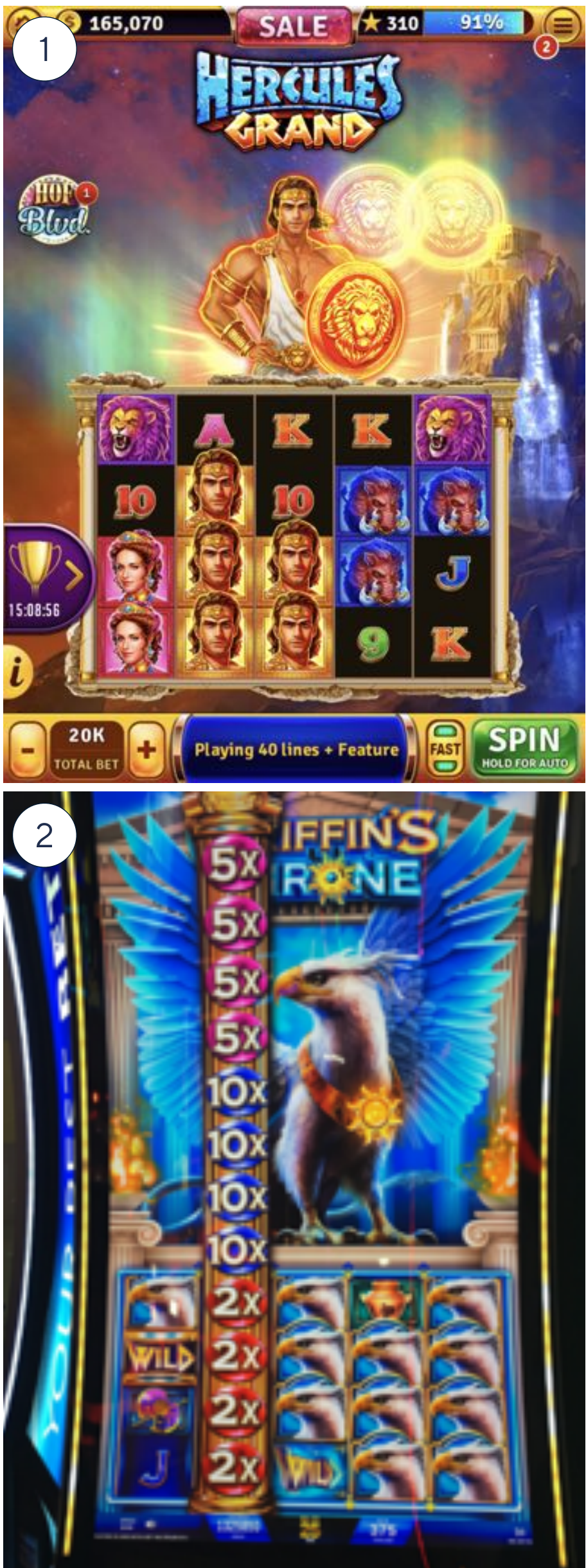
- **Target persona:** *Money Mike* (see [L&G Slots Personas Report](#) for more info).
- **Reason:** He selects machines with no-nonsense features focused on winning, like *respins* and *multipliers*.
- **Valuable characteristics:** Of the two male personas (*Fame Frank* is the other), *Money Mike* is more likely to monetize (even though he spends less time playing slots).

Additional Information

- [Reel Expansion Feature](#) – KONAMI (RMG)
- See all [Expanding Reels](#) (filter on Reels > Expanding)

Feature Database Improvement

Many videos, like in the *Hercules Grand* Library, are now titled appropriately so that you can easily find the right video.

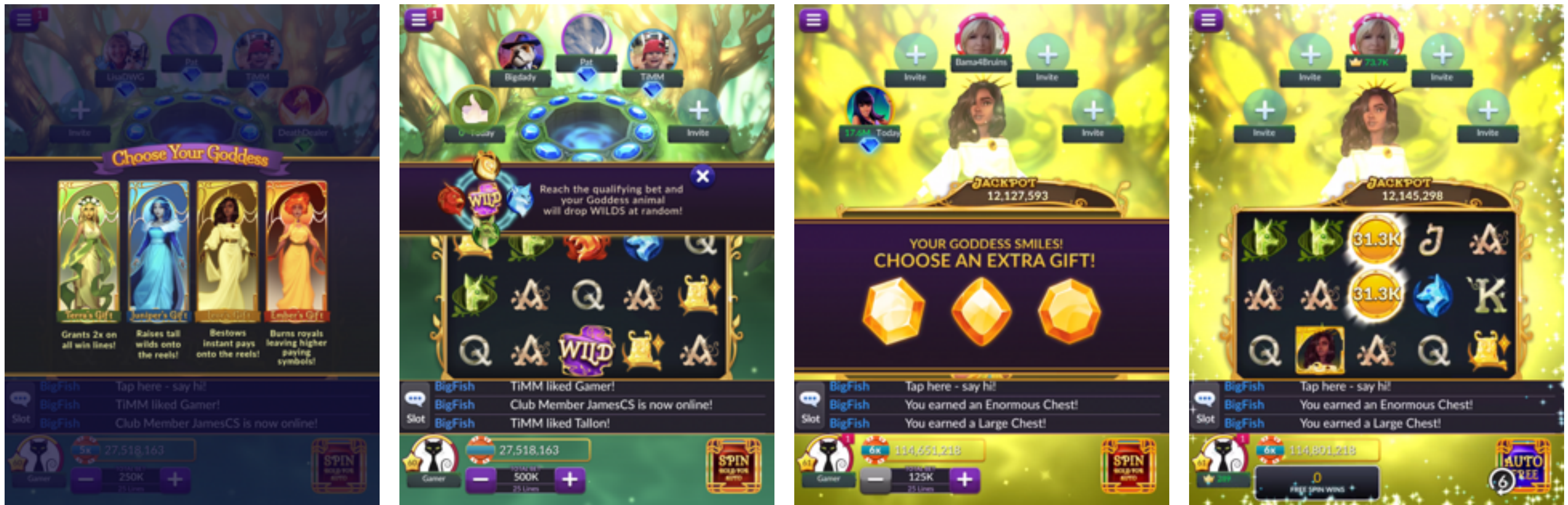


BRAND BUILDING CHARACTERS

Goddess Grove in Big Fish Casino

MECHANIC TEARDOWN

In *Goddess Grove* by Big Fish Casino, players select one of four *Goddesses* upon machine-entry. The *Goddess* determines the bonus game enhancement (as well as other machine aspects).



Feature Database:
[Goddess Grove](#) – Big Fish Casino

EXPERT INSIGHTS

Consider designing a strong set of characters that can be reused in machines and non-machine features. Best Fiends, a top grossing Puzzle app, has used this method to differentiate itself from other apps ... even releasing high-quality video Shorts about newly released characters.

Expert Insights

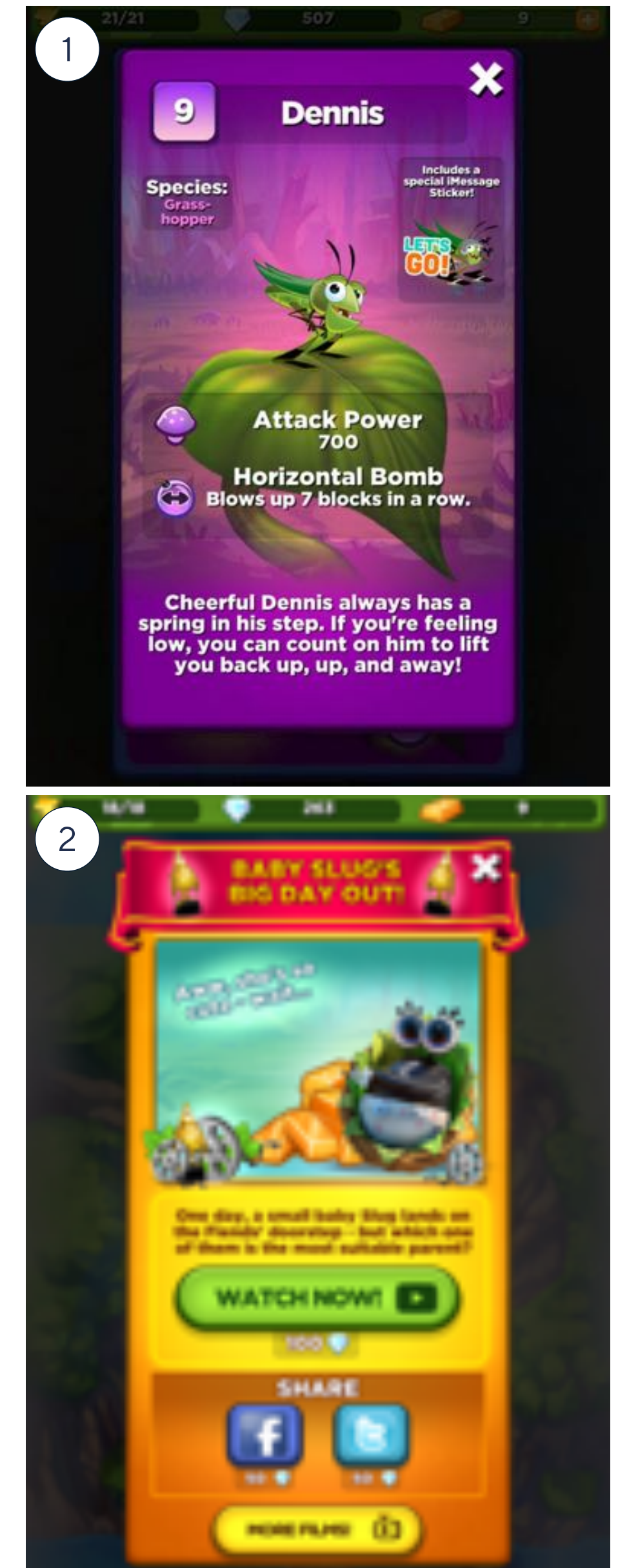
- **Creating strong characters can actually decrease costs.** In Best Fiends, the characters are re-used in levels, as well as features, like [Collections](#) (1). House of Fun has released several versions of the *All Stars* machines ... most recently [HOF All Stars 4](#).
- **Release video Shorts to establish the importance of each character.** See Best Fiends [Movie Shorts](#) and videos released with new features, like [Baby Slug's Big Day Out](#) (2).
- **Interconnect machines and features with a collection mechanic that improves a character's in-machine abilities.** This system is a strong monetizer in many mid-core games and will require partnering closely with the Product Team.

Persona Data

- **Target:** *Daydreamer Denise*
- **Reason:** *Daydreamer Denise* shows a clear preference for challenges, collections, and quests. She does not tend to spend a lot of money ... but uses game progression-based features as an escape from the pressures of everyday life.
- **Valuable Characteristics:** To satisfy her motivation to *Escape* during slots play, she enjoys long bonus games, like pick 'em bonuses with free spins and multiple consecutive bonuses.

Additional Information

- [Best Fiends](#) (then filter Game > Best Fiends)



NOTABLE MENTION

HIGH LOW BONUS GAME

Oh Toto! in Wizard of Oz

MECHANIC TEARDOWN

During the bonus game, a game of *High Low* can increase the bonus game multiplier. There are 10 sets and making a wrong guess ends the game. This is a proven mini-game feature added to a slots machine.



Feature Database:
[Oh Toto!](#) – Wizard of Oz

SLOTS TRENDS



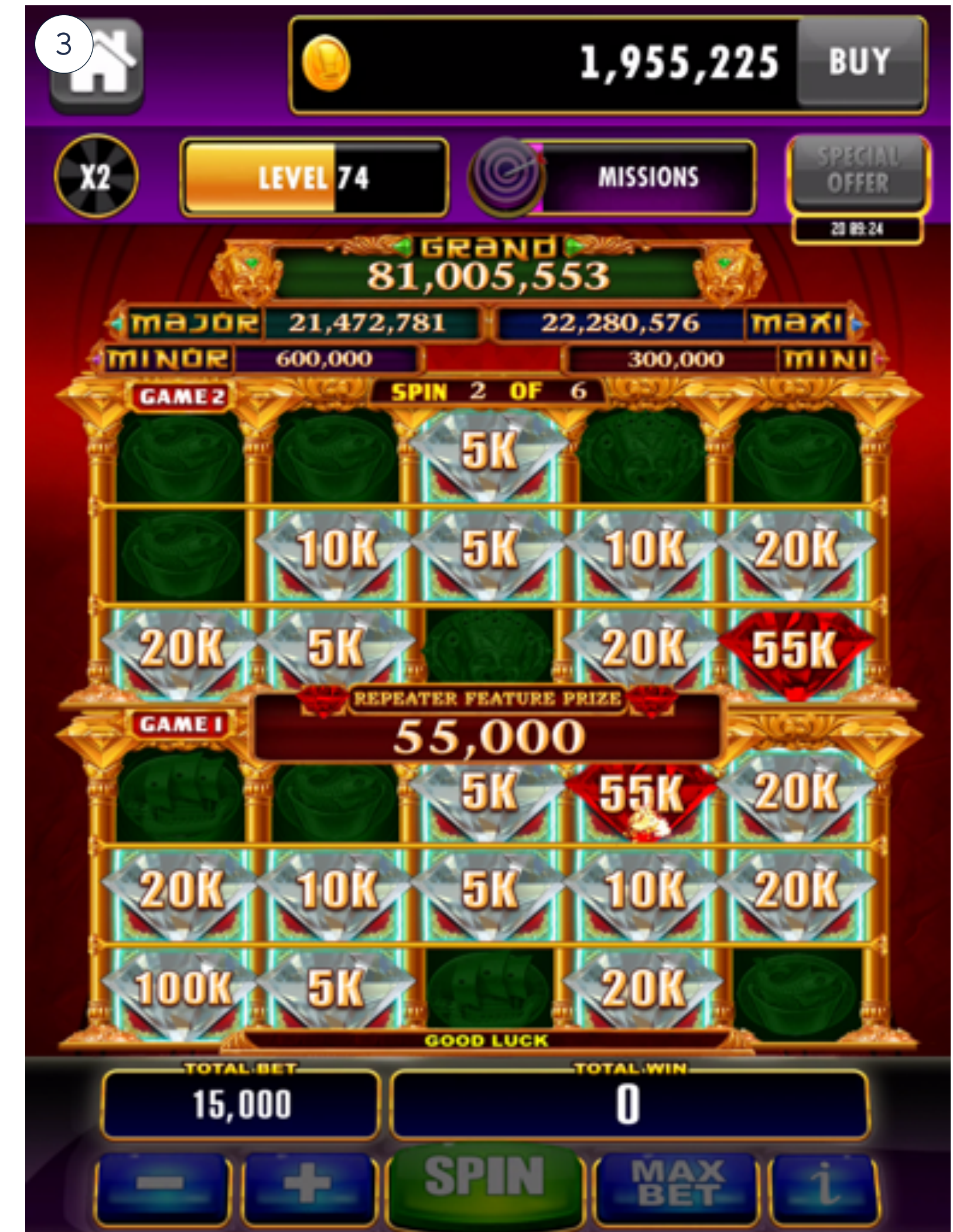
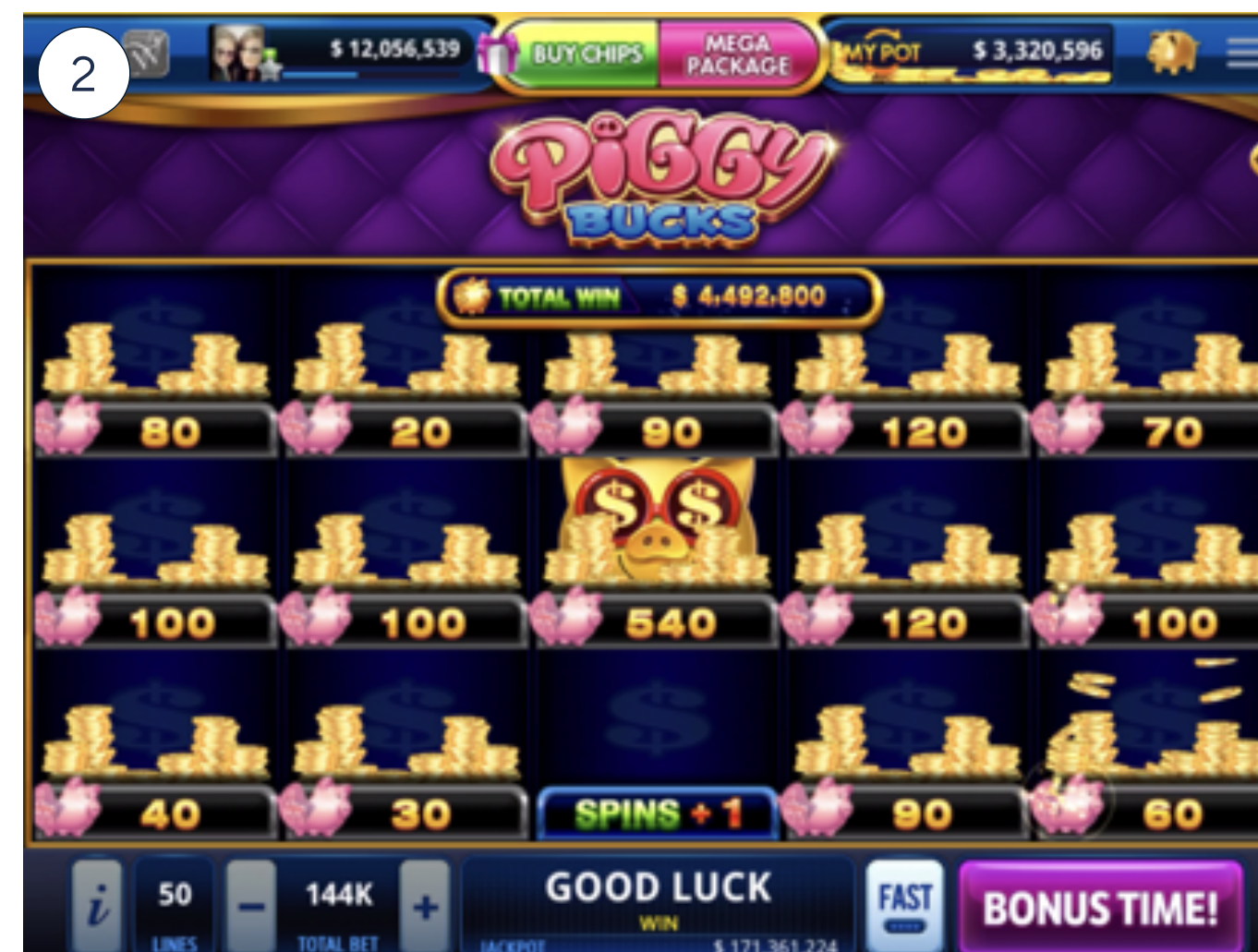
TRENDS SUMMARY

Revenue Analysis

- *Progressive Jackpots* and *Jackpots* continue to be the most popular form of jackpot system, utilized in 56% of the machines in the top apps in April.
- *Progression Systems* within the *Reel or Symbols* nearly doubled MoM ... a potential sign of an upcoming trend. Examples of these progressions are in [Dance Rabbit Dance](#) in Slotomania (1), [Piggy Bucks](#) in DoubleU Casino (2), and [Mighty Cash Double Up Endless Diamonds](#) in Cashman Casino (3).

Additional Insights

- For more trend insights, download the [05 2019 SDR Trend](#) spreadsheet.
- See the most recent data online in the Feature Database > [Data](#) tab.
- Apps used in this trend analysis: Slotomania, DoubleDown Casino, Jackpot Magic Slots, House of Fun, Heart of Vegas, Cashman Casino, Huuuge Casino, POP! Slots, Big Fish Casino, Caesars Slots, DoubleU Casino, and Hit it Rich.



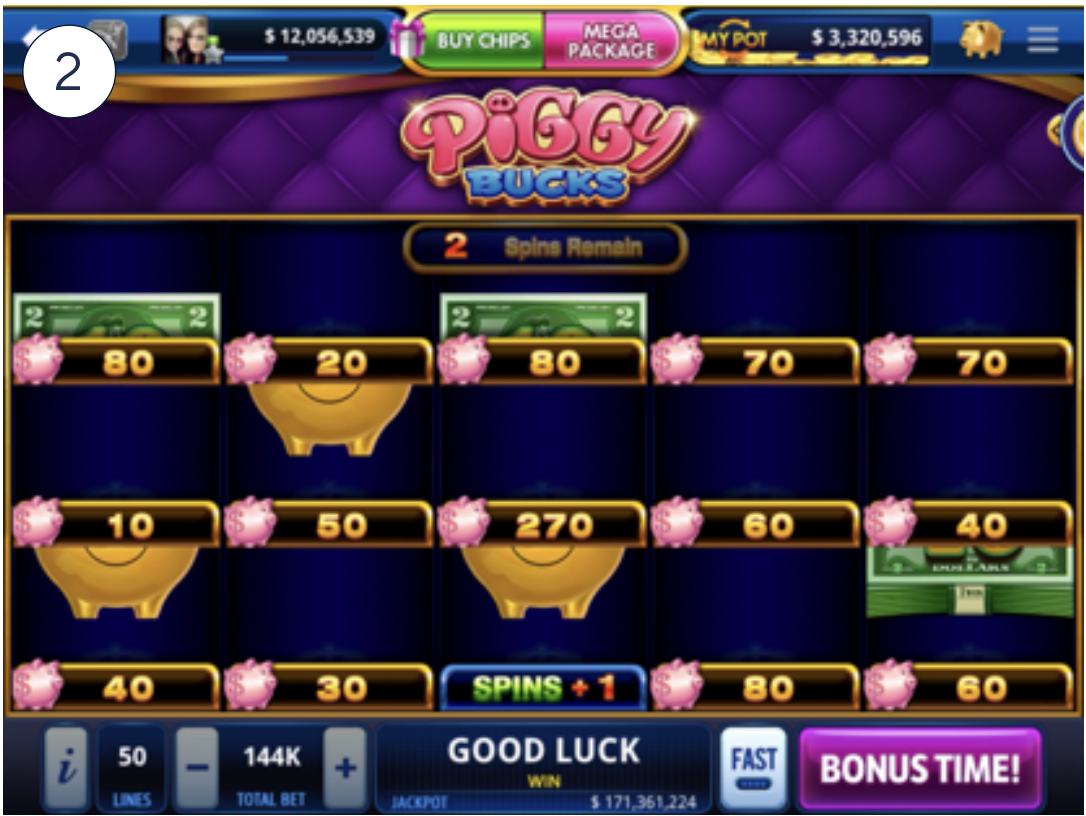
MARKET WATCH



4/1/19 - 4/30/19

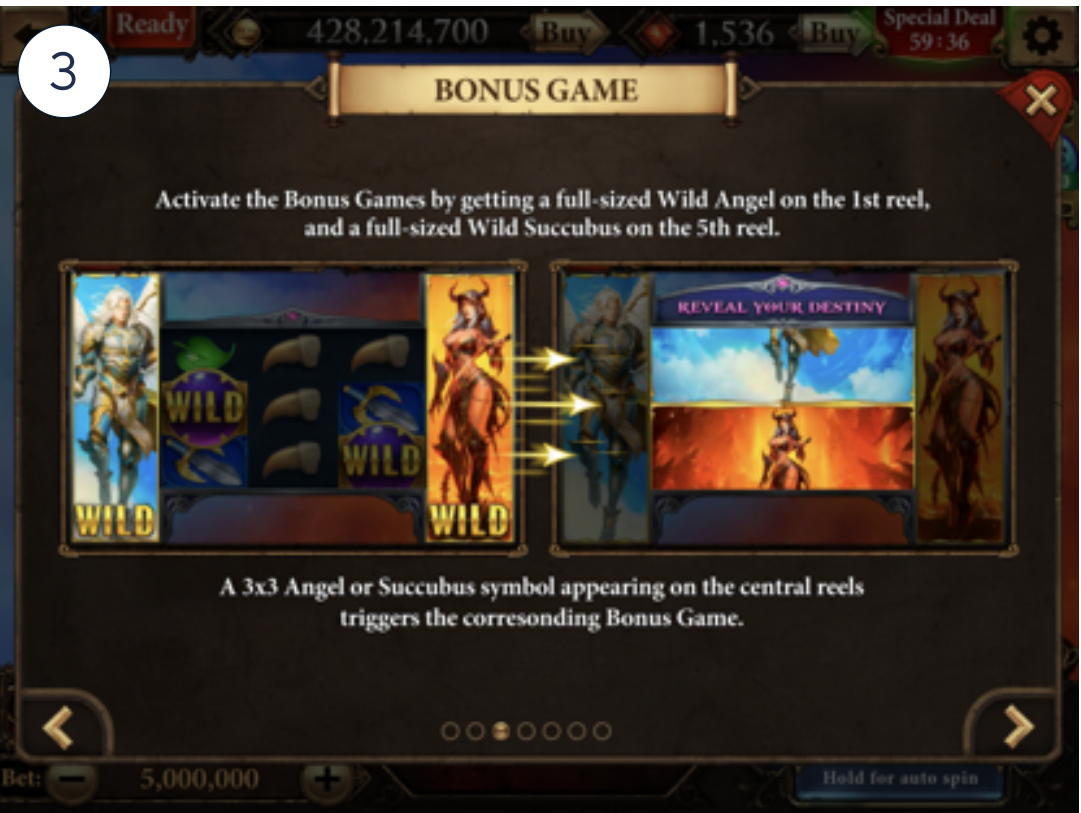
RESPIN VARIATIONS

App	Machine	Description
Caesars Slots	Extravagant Easter	Respins with a tumbling and collection mechanic (1).
DoubleU Casino	Piggy Bucks	Respins with a bank-like mechanic (2).
	Pompeii Cash	Respins with symbols that clear locked prize symbols (3).
Cashman Casino	Mighty Cash Double Up Endless Diamonds	Respins in two reel arrays.
Lotsa Slots	Farm Moolah	Respins that players collect Water Drops to harvest Crops (similar to Caesars Slots' Farming Fortunes).



GENERAL RELEASES

App	Machine	Description
POP! Slots	Buffalo Blast	Players are assigned a reel during the social bonus. Multipliers and Gems are awarded when symbols collapse (see this video) (1).
Heart of Vegas	Big Red Gold	Players win a prize (and increases the subsequent Repeat Win amount) when a Repeat Win symbol lands during the free spins (see the Gold Feature) (2).
Scatter Slots	Immortal Warpath	A full reel wilds on reels 1 and 5 trigger an on-reel wheel to spin and determine the bonus (see Bonus Game Activation) (3).
All Features Released		
Use the Data tool in the Feature Database to see all the machines recently released.		



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
<p>Game Design and Math Innovator Consultant</p> <p>LinkedIn Profile</p> <p>Arthur Lee is a leading slots consultant in social casino.</p> <p>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>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>

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	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



“Success usually comes to those who are too busy to be looking for it.”
– Henry David Thoreau

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