



LIQUID AND GRIT SOCIAL CASINO REPORT

Competitive research and actionable recommendations for
product owners on innovations in social casino gaming

MARCH 2016

4

KEY FEATURES AND RECOMMENDATIONS

- **Daily Challenge Calendar**
- **PvP Quick Play**
- **Non-Slots Portfolio Strategy**

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ADDITIONAL FEATURES

- **Challenges and Quests: January 2016 report**
- **VIP for a Month: January 2016 report**
- **Big Win Tables: December 2015 report**

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APPENDIX

Introduction



Dear Product Owner,

Every day, the simple iOS game Solitaire is the most downloaded social casino game. This game did not come from a billion-dollar company, an IP-driven slots game, or even a top-grossing game. It was created by an 80-person company, MobilityWare, that recently blogged about their first ever company cookie exchange.

In this report, we examine how this straightforward game and small company continuously out-downloads wealthy competitors like DoubleDown, Big Fish Casino, and Slotomania...every...single...day.

Solitaire employs two powerful features you can incorporate into your game: a Daily Challenge Calendar mechanic to retain users and a PvP Quick Play mode to drive installs.

MobilityWare has also expanded on the now-popular portfolio strategy...only instead of releasing several slots games...MobilityWare grows users with non-slots games, paid games, and bundles. This technique is a new path for organic traffic that can be driven to your high-monetizing slots games.

Next month, we will return to slots.

All the best,

The Liquid and Grit Team

SOLITAIRE: GAME OVERVIEW

Solitaire provides players with a simple interface while boasting a few powerful retention mechanics. The game only monetizes from ads and incorporates a PvP mode for competitive play

Daily Challenge

- Upon app-entry, players receive the Daily Challenge dialogue
- There is a Daily Challenge Calendar to track and reward wins
- Players can sign up to receive a daily push notification at a player-specified time
- This feature is thoroughly reviewed in this report



Ads & Cross Promotion

- The game monetizes mostly from ads
- There is an up-sell to the Gold Edition of Solitaire, called Solitaire by MobilityWare
- Ads for Slots games surface automatically after players finish a solitaire game



PvP

- Players can compete 1-on-1 against friends and random players using Apple's Game Center
- Players compete on the same deal in Multiplayer mode
- This feature is thoroughly reviewed in this report



Leaderboard

- The Leaderboard includes a First Play, Best Score, and Fewest Move Leaderboard
- The Leaderboard is specific to that day's Daily Challenge



KEY FEATURES AND RECOMMENDATIONS

Identification of the most valuable and innovative features and recommendations for how to best apply these features to your game

FEATURE RECOMMENDATIONS SUMMARY

Solitaire is a simple game with powerful mechanics that can be applied to a slots game. MobilityWare’s growth strategy is also an opportunity to find increasingly valuable organic installs

Feature	Impact	Recommendations
Daily Challenge Calendar	<ul style="list-style-type: none">Increase retentionIncrease engagement	<ul style="list-style-type: none">Add a Daily Calendar to an important mechanic in your gameInclude a customizable push notificationReward players for daily <i>and</i> frequent game check-ins
PvP Quick Play	<ul style="list-style-type: none">Drive installsIncrease engagement	<ul style="list-style-type: none">Create PvP Quick Play mode with short, 1 minute sessionsBuild a UI that includes multiple players for fun and social interactions
Non-Slots Portfolio Strategy	<ul style="list-style-type: none">Grow organic users	<ul style="list-style-type: none">Expand your portfolio strategy into traditional casino games: table games, blackjack, and baccaratTest non-traditional casino games: solitaire, free cell, and bingoTry non-traditional tactics: paid and bundles

DAILY CHALLENGE CALENDAR

FEATURE SUMMARY

The Daily Challenge Calendar incentivizes players to return to the game daily...with a personalized push notification flow

Details

Calendar:

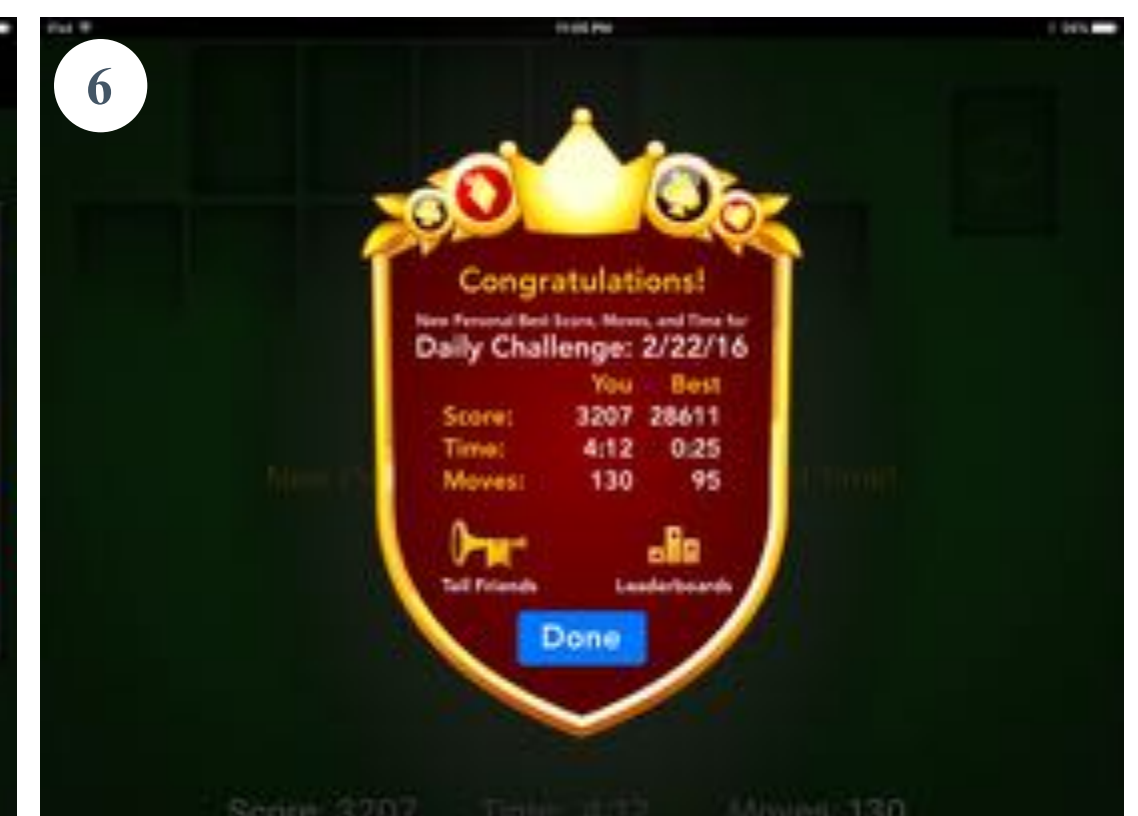
- Daily Challenge app-entry dialogue (image 1)
- Clicking ‘Play’ takes players to the Daily Challenge Calendar where they can select a challenge day (image 2)

Notifications:

- When players check, “Notify me about future challenges,” they are asked to turn on notifications via Apple’s notification dialogue (image 3)
- Players can set a specific time to receive a daily push notification (image 4)
- End result: players receive a daily push notification at their selected time saying, ‘You have a Daily Challenge waiting for you!’

Game interaction:

- Players earn a jeweled crown on the calendar if they beat the Daily Challenge on the current calendar day (image 5)
- When players beat the Daily Challenge, they receive a congratulatory shield with their score, time, and moves...as well as best score, time, and moves for that Daily Challenge (image 6)





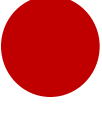
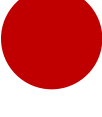
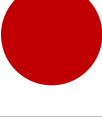

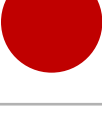
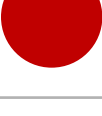


BACKGROUND DATA

Solitaire needs strong retention to buy players profitably *while* monetizing largely through in-game ads. The Daily Challenge Calendar surfaces on app-entry and is one of the only retention features in the game

Details	Feature	Contributing to success
<p>Source of installs:</p> <ul style="list-style-type: none">Solitaire acquires installs from organic search, paid-UA, x-promo, PvP Quick Play, and top charts discoveryTo <i>consistently</i> be the most downloaded casino game on iOS, MobilityWare must be purchasing tons of players profitably <p>Monetization</p> <ul style="list-style-type: none">Solitaire is free and has no IAP packages...therefore, monetization comes from ads-to-slots games and x-promotion to MobilityWare's paid gamesBlackjack and Blackjack Free are the only two MobilityWare games with IAPsThe most MobilityWare can make from one user on paid apps is \$5.99 (if player purchases all apps separately). That isn't a huge gain considering the cost of a loyal user is \$2.78 (according to Fiksui). <p>Retention:</p> <ul style="list-style-type: none">Thus, MobilityWare players must have high retention; returning often to the game to monetize on in-game ads	Daily Challenge Calendar	Yes. This feature is shown on app-entry and is added to MobilityWare's Spider game, the 3 rd highest casino category Paid app on iOS
	PvP Quick Play	Yes. This is one of the only in-game mechanics to grow users and drive retention (<i>other than the Daily Challenge Calendar</i>)
	X-promotion	Yes. X-promotion drives traffic to other MobilityWare games and is a key component of MobilityWare's growth
	Trophy Room	No. This feature is not surfaced to players and can only be found by clicking a button on the Daily Challenge Calendar
	Leaderboard	No. Like the Trophy Room, players can only find this feature by clicking a button on the Daily Challenge Calendar

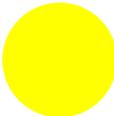

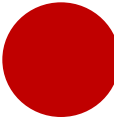
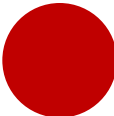
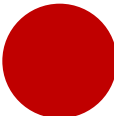
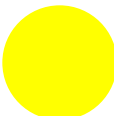


TOP GROSSING GAMES: MARKET INFORMATION

There are no top grossing games with a Daily Challenge Calendar

Game	Strength of feature	Comments
Big Fish Casino		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
DoubleDown		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
House of Fun		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Slotomania		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Heart of Vegas		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Wizard of Oz Slots		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Jackpot Party Casino		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Hit it Rich		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
GSN Casino		<ul style="list-style-type: none">GSN has Daily Challenges with time limits...but no Calendar mechanic
DoubleU		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic




BREAKOUT GAMES: MARKET INFORMATION

Scatter Slots and DoubleUp Slots have Daily Goals...but no Daily Calendar

Game	Strength of feature	Comments
Scatter Slots		<ul style="list-style-type: none">Scatter Slots has Daily Challenges and Quests for each level...but no Calendar mechanic
Caesars Slots		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Quick Hit Slots		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
KONAMI Slots		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Viva Slots Las Vegas		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
DoubleUp Slots		<ul style="list-style-type: none">DoubleUp Slots has Daily Goals...but no Calendar mechanic
Old Vegas Slots		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic
Slots - Classic Vegas Casino		<ul style="list-style-type: none">No Daily Challenge Calendar mechanic

RECOMMENDATIONS

Add a Daily Calendar to an important mechanic in your game. Include a customizable push notification. Reward players for daily *and* frequent check-ins

Details	Solitaire	Adventure Capitalist
<ul style="list-style-type: none">• Market your Daily Calendar upon app-entry (image 1)• Use the Daily Calendar for mechanics like: Secondary Coin Bonus; Challenges; Live Ops; VIP for a Month. <i>Additional information about Daily Challenges & VIP for a Month can be found in the Additional Features section this month</i>• Invite players to customize push notifications: if possible, allow customization of both (1) time of daily push notification, and (2) number of daily push notifications (image 2)• Generously reward players for daily check-ins• Reward smaller amounts for regular (but not daily) check-ins:• According to Gallup, 52% of smartphone owners check it a few times an hour or more<ul style="list-style-type: none">• On iOS, Adventure Capitalist has 57% D1 retention and 35% D7, largely driven by the return-to-play bonus• Adventure Capitalist's return-to-play bonus increases linearly based on the time since last play. It can be collected at any time, and has no cap to the bonus amount (image A)• Consider adding a similar system that resets daily...and sits on top of the daily reward	 	

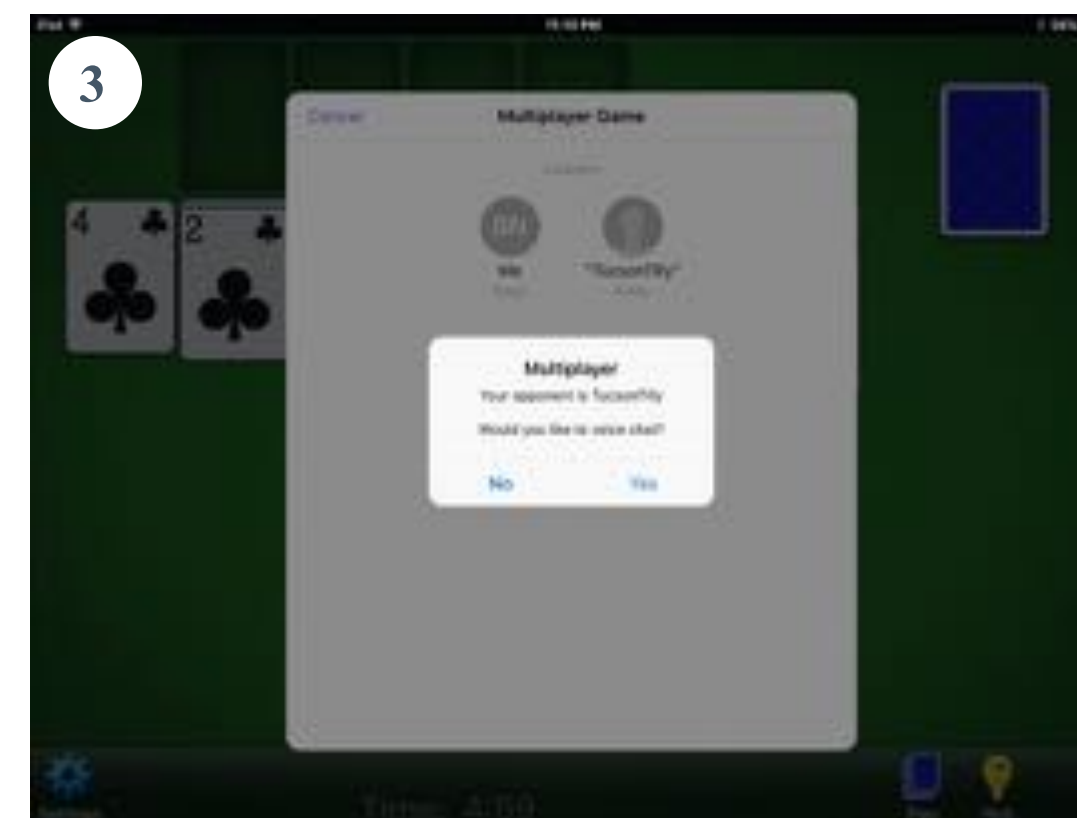
PvP QUICK PLAY

FEATURE SUMMARY

Solitaire provides a PvP mode to increase retention with competitive and social interactions

Details

- The Multiplayer feature allows PvP play (image 1)
- Clicking 'Multiplayer' takes players to Apple's Game Center where players can either, 'Invite Friend' or 'Play Now'
- If players choose 'Invite Friend,' the Game Center allows them to invite their friends to play (image 2)
- If players choose to 'Play Now,' the Game Center provides an auto-match. Players are paired with random opponents and given the option to voice chat...*No one accepted my voice chat, but this seems like an interesting opportunity* (image 3)
- Players then compete against each other to finish the game (image 4)
- When competing, the score is shown at the bottom and the progress bar fills up based on time remaining. Players can win either by completing the game or by having the most points when time runs out (image 5)
- After the game, players are asked to 'Disconnect' or 'Play Again' (image 6)



BACKGROUND DATA

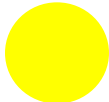








The PvP mode is one of the few mechanics in Solitaire that drives installs. It is also a proven growth mechanic in Fun Run and 8 Ball Pool

Details from other games	Feature	Contributing to success
Fun Run <ul style="list-style-type: none">Fun Run combines endless running, Mario Kart PvP social interactions, and a finish line to produce a fun, social, 1 minute core loop*According to a Casual Connect 2015 presentation, Fun Run was released <i>without</i> Facebook friend integration, push notifications, analytics, featuring, or paid user acquisition. Still, it became the top Free app 3 months after launchSocial interactions helped Fun Run create successful contests: The “Tweet about #funrun for a chance to win 10,000 coins” campaign produced 7k new downloads per day and 300k downloads total	Daily Challenge Calendar	Yes. This feature is shown on app-entry and is added to MobilityWare’s Spider game, the 3 rd highest casino category Paid app on iOS
	PvP Quick Play	Yes. This is one of the only in-game mechanics to grow users and drive retention (<i>other than the Daily Challenge Calendar</i>)
	X-promotion	Yes. X-promotion drives traffic to other MobilityWare games and is a key component of MobilityWare’s growth
8 Ball Pool <ul style="list-style-type: none">8 Ball Pool is the 19th top grossing iPhone gameThe game combines pool, PvP social interactions, and a bet mechanic to produce a fun, social, short core loop	Trophy Room	No. This feature is not surfaced to players and can only be found by clicking a button on the Daily Challenge Calendar
	Leaderboard	No. Like the Trophy Room, players can only find this feature by clicking a button on the Daily Challenge Calendar

*Source: Casual Connect Europe 2015. The Fun Run Formula, Aurora BERG, Fredrik HANSEN


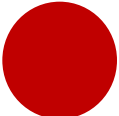
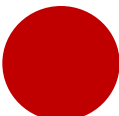

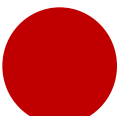
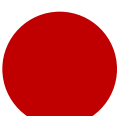
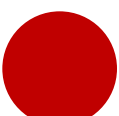
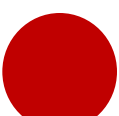
TOP GROSSING GAMES: MARKET INFORMATION

There are no top 10 grossing slots games with PvP Quick Play mode

Game	Strength of feature	Comments
Big Fish Casino		<ul style="list-style-type: none">No PvP mode...but group play in each room. No connection to Game Center
DoubleDown		<ul style="list-style-type: none">No PvP mode
House of Fun		<ul style="list-style-type: none">No PvP mode
Slotomania		<ul style="list-style-type: none">No PvP mode
Heart of Vegas		<ul style="list-style-type: none">No PvP mode
Wizard of Oz Slots		<ul style="list-style-type: none">No PvP mode
Jackpot Party Casino		<ul style="list-style-type: none">No PvP mode
Hit it Rich		<ul style="list-style-type: none">No PvP mode
GSN Casino		<ul style="list-style-type: none">No PvP mode
DoubleU		<ul style="list-style-type: none">No PvP mode

BREAKOUT GAMES: MARKET INFORMATION

There are no breakout slots games with PvP Quick Play mode

Game	Strength of feature	Comments
Scatter Slots		<ul style="list-style-type: none">No PvP mode (friends shown along map like Candy Crush)
Caesars Slots		<ul style="list-style-type: none">No PvP mode
Quick Hit Slots		<ul style="list-style-type: none">No PvP mode
KONAMI Slots		<ul style="list-style-type: none">No PvP mode
Viva Slots Las Vegas		<ul style="list-style-type: none">No PvP mode
DoubleUp Slots		<ul style="list-style-type: none">No PvP mode
Old Vegas Slots		<ul style="list-style-type: none">No PvP mode
Slots - Classic Vegas Casino		<ul style="list-style-type: none">No PvP mode

RECOMMENDATIONS

Create PvP Quick Play mode with short, 1 minute sessions. Build a UI that includes multiple players for fun and social interactions

Details

- Use Apple's Game Center to reduce cost (image 1)
- Provide one-click entry for player vs. strangers: Add player vs. friend and player vs. 3 players in V2 (image 2)
- Make games short: Aim for 1 minute sessions like Fun Run 2
- Use competition *or* collaboration to create social interactions: For competition, use a tournament structure. For collaboration, see the Appendix for details on Big Fish Casino's Big Win Tables
- Place a wager between players: Consider this a V2 feature (image 3)
- Create a UI that shows all players: Fun Run 2 built the UI with Mario Kart in mind, allowing players to feel the competition (image 4)
- Conclude the game with prompts to watch-an-ad and post-to-Facebook: 8 Ball Pool's share dialogue states, "I won a match in 8 Ball Pool!" in the header and, "I won 200 coins playing in Sydney...Do you think you can beat me? Play me now!" in the sub-header. Fun Run 2 has a chat dialogue to market the watch-an-ad feature (image 5)
- Cater to the gambler and build an all-in room: Also a V2 experience but a great way to sink wallets for heavy spenders (image 6)
- Consider adding power-ups to make gameplay super fun and monetize players



NON-SLOTS PORTFOLIO STRATEGY

FEATURE SUMMARY

MobilityWare uses in-game banners to x-promote players between 9 free games, 6 paid games, and 2 bundles in multiple different non-traditional genres

Details

Bundles

- MobilityWare sells two App Bundles: 1) A \$2.99 Casino Bundle with Blackjack, Video Poker, and Pai Gow Poker, and 2) A \$1.99 Solitaire Bundle with Solitaire by MobilityWare, Spider Solitaire by MobilityWare, FreeCell, and Pyramid
- Bundles are *not* a popular mechanic: only three of the top-50 Paid apps are bundles (image 1)

X-promo & ads

- Solitaire markets other MobilityWare games when players select to play a Daily Challenge (image 2)
- Solitaire also markets the Paid version when players click on the Settings button (image 3)

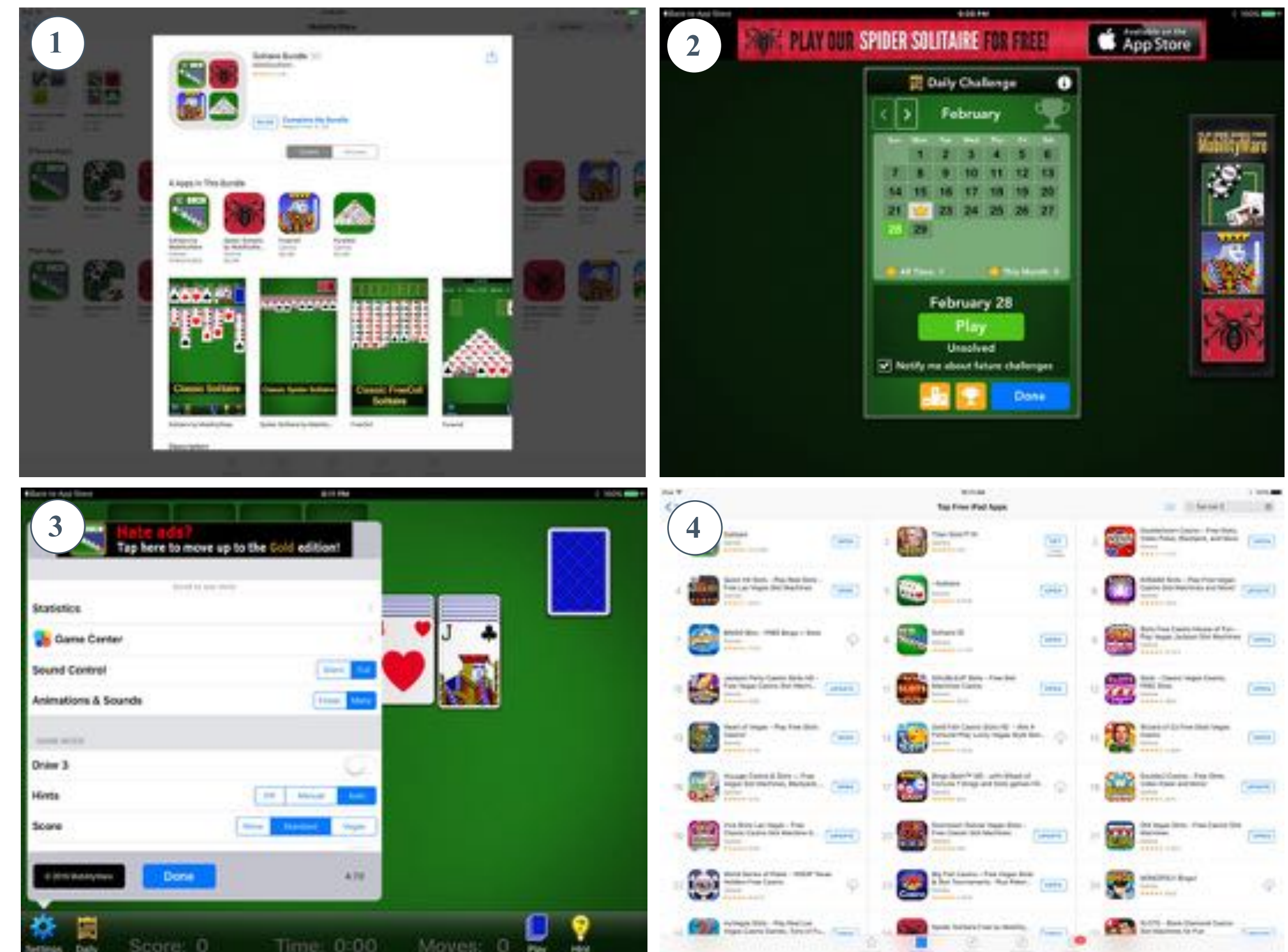
Paid apps

- Solitaire by MobilityWare is the top-paid Casino category iOS app. Solitaire Bundle is the third, Spider Solitaire by Mobility is the fifth, FreeCell is the 21st, and Blackjack is the 37th

Free apps

- Solitaire is the top Free app. However, the only other MobilityWare game in the top 50 is Spider Solitaire Free at 21st (image 4)

Images of Bundles, X-Promo, and Ads



BACKGROUND DATA

Non-slots games comprise 25% of the top 40 Free and 50% of the top 20 Paid casino category games

Top Free non-slots games in casino category <i>25% are non-slots</i>			Top Paid non-slots games in casino category <i>50% are non-slots</i>			
Rank	Game	MobilityWare	Rank	Game	Price	MobilityWare
1	Solitaire	Yes	1	Solitaire by MobiliyWare	\$0.99	Yes
4	Solitaire ()		2	Solitaire Bundle	\$1.99	Yes
5	* Solitaire		3	FreeCell	\$0.99	Yes
6	Bingo Blitz		6	Spider Solitaire by MobilityWare	\$0.99	Yes
7	Monopoly Bingo!		10	Solebon Solitaire – 50 Card Games	\$3.99	
9	Bingo Bash		11	Slingo Supreme HD	\$0.99	
21	Spider Solitaire Free by MobilityWare	Yes	14	Star Mania	\$2.99	
22	CLUB Bingo		15	*Solitaire	\$1.99	
24	>Spider Solitaire		17	Blackjack 21	\$4.99	
40	Deal or No Deal		18	Bunco Classic for iPad	\$0.99	

TOP GROSSING GAMES: MARKET INFORMATION

Most companies of top grossing games focus on a small number of games. Big Fish Games and Scientific Games’ Phantom EFX are the exception

Game	Strength of feature	Comments
Big Fish Casino		<ul style="list-style-type: none">Big Fish Games has hundreds of games in all genres
DoubleDown		<ul style="list-style-type: none">IGT has 1 game (1 slots)
House of Fun		<ul style="list-style-type: none">Pacific-Interactive has 1 game (1 slots)
Slotomania		<ul style="list-style-type: none">Playtika has 7 games (5 slots, 2 poker)
Heart of Vegas		<ul style="list-style-type: none">Product Madness has 3 games (3 slots)
Wizard of Oz Slots		<ul style="list-style-type: none">Zynga has 32 games (5 slots, 3 poker, 24 non-casino)
Jackpot Party Casino		<ul style="list-style-type: none">Phantom EFX (Scientific Games) has 91 games (91 slots)
Hit it Rich		<ul style="list-style-type: none">Zynga has 32 games (5 slots, 3 poker, 24 non-casino)
GSN Casino		<ul style="list-style-type: none">GSN has 4 games (2 casino, 1 solitaire, 1 non-casino)
DoubleU		<ul style="list-style-type: none">DoubleUGames Co. has 2 games (1 slots, 1 bingo)

BREAKOUT GAMES: MARKET INFORMATION

Super Lucky Casino, creator of DoubleUp Slots, has several slots games in addition to other casino genres like solitaire, blackjack, and video poker

Game	Strength of feature	Comments
Scatter Slots		<ul style="list-style-type: none">Murka has 9 games (8 slots, 1 poker)
Caesars Slots		<ul style="list-style-type: none">Playtika has 7 games (5 slots, 2 poker)
Quick Hit Slots		<ul style="list-style-type: none">Scientific Games has 3 games (2 slots, 1 poker)
KONAMI Slots		<ul style="list-style-type: none">Playstudios has 3 games (3 slots)
Viva Slots Las Vegas		<ul style="list-style-type: none">Rocket Games has 40 games (37 slots, 2 bingo, 1 car racing)
DoubleUp Slots		<ul style="list-style-type: none">Super Lucky Casino has 12 games (7 slots, 1 solitaire, 1 blackjack, 1 baccarat, 1 bingo, and 1 video poker)
Old Vegas Slots		<ul style="list-style-type: none">DGN Games has 1 game (1 slots)
Slots - Classic Vegas Casino		<ul style="list-style-type: none">Ford Wang has 19 games (18 slots, 1 word game)

RECOMMENDATIONS

Expand your portfolio strategy into traditional casino games: table games, blackjack, and baccarat. Test non-traditional casino games: solitaire, free cell, and bingo. Try non-traditional tactics: paid and bundles

Details	Market information																								
<ul style="list-style-type: none">• Consider adding * () and other tricks to app names: Solitaire () and * Solitaire are the 2nd and 3rd most popular Free solitaire games• Table games have the largest gap between Nevada revenue and active Facebook players interested:<ul style="list-style-type: none">• Active Facebook players in the table games category were interested in Roulette (53%), Keno (28%), and Craps (17%)• Table games generate 59% of slots revenue in Nevada• Blackjack has the 2nd most active Facebook players interested:<ul style="list-style-type: none">• 63% of slots players are active Blackjack players• Blackjack is not a large revenue-driving game in Nevada largely due to the style of game• Blackjack 21 is the only Blackjack game in the top 20 Paid casino apps• Baccarat is an under-represented game on Facebook:<ul style="list-style-type: none">• Baccarat revenue is 21% of Slots revenue in Nevada• Baccarat is not represented in the top Free or Paid apps• Non-traditional games are sources of growth:<ul style="list-style-type: none">• Solitaire, Bingo, Coin Dozer, Slingo, and FreeCell are all opportunities for organic installs	<div><p>Las Vegas revenue and Facebook users: % of total</p><p>■ Nevada revenue (avg amount for last 5 yrs)</p><p>■ Active Facebook players (played past 14 days) with these interests</p><table><tr><th>Game</th><th>Nevada revenue (avg amount for last 5 yrs)</th><th>Active Facebook players (played past 14 days) with these interests</th></tr><tr><td>Slot Machines</td><td>49%</td><td>47%</td></tr><tr><td>Table Games</td><td>29%</td><td>7%</td></tr><tr><td>Baccarat</td><td>10%</td><td>4%</td></tr><tr><td>Blackjack</td><td>8%</td><td>29%</td></tr><tr><td>Craps</td><td>3%</td><td>1%</td></tr><tr><td>Sports Books</td><td>2%</td><td>0%</td></tr><tr><td>Poker</td><td>1%</td><td>13%</td></tr></table></div>	Game	Nevada revenue (avg amount for last 5 yrs)	Active Facebook players (played past 14 days) with these interests	Slot Machines	49%	47%	Table Games	29%	7%	Baccarat	10%	4%	Blackjack	8%	29%	Craps	3%	1%	Sports Books	2%	0%	Poker	1%	13%
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Blackjack	8%	29%																							
Craps	3%	1%																							
Sports Books	2%	0%																							
Poker	1%	13%																							

Source: UNLV Center for Gaming Research Long-Term Trends and Facebook Ad platform

ADDITIONAL FEATURES

- Challenges and Quests: January 2016 report
- VIP for a Month: January 2016 report
- Big Win Tables: December 2015 report

CHALLENGES AND QUESTS

CHALLENGES AND QUESTS: FEATURE SUMMARY

Scatter Slots has a daily challenge system that includes five daily tasks and a quest system that allows players to level up by completing a quest

Details

Challenges:

- There are five tasks players must complete for the daily challenge...e.g., play a bonus game, get a free spin, and spin at max bet (image 1)
- Upon completion, players are rewarded 2.5M coins (worth \$1.04), 5 gems (worth \$1.25), and 1 upgrade. When players complete a task, a message appears over the top of the slot machine with a progress bar, clearly notifying players that they completed one of the tasks. When players complete all the tasks and therefore the daily challenge, the bar comes down again and remains over the machine until players collect the reward (image 2)

Quests:

- Players can complete a level by either leveling up through spins or by completing the level-specific quest. Quests include spinning 100 times, winning 20M coins, and spinning 20 times at max bet (image A)
- Once a player completes a quest, the level is finished and players cannot go back and play the level again (image B)

Challenges in Scatter Slots



Quests in Scatter Slots



CHALLENGES AND QUESTS: MARKET COMPARISON

GSN and Scatter Slots are the only top grossing iOS slots games with challenges or quests

Game	Strength of feature	Comments
DoubleDown		<ul style="list-style-type: none">No challenges or quests
Heart of Vegas		<ul style="list-style-type: none">No challenges or quests
Wizard of Oz Slots		<ul style="list-style-type: none">No challenges or quests
MyVegas		<ul style="list-style-type: none">No challenges or quests
House of Fun		<ul style="list-style-type: none">No challenges or quests
Big Fish Casino		<ul style="list-style-type: none">No challenges or quests
Hit it Rich		<ul style="list-style-type: none">No challenges or quests
Slotomania		<ul style="list-style-type: none">No challenges or quests
DoubleU		<ul style="list-style-type: none">No challenges or quests
GSN Casino		<ul style="list-style-type: none">Daily challenges with time limits
Scatter Slots		<ul style="list-style-type: none">Daily challenges and quests for each level

CHALLENGES AND QUESTS: RECOMMENDATIONS

Adopt successful features from other genres such as hidden object games. Consider owning the challenges and quests product category within slots games

Details

- **Test the quest concept but then own the category:** Successful games like Big Fish Casino go deep on a product category (e.g., social) to create a long-term advantage. Consider personalizing the quests toward preferred behaviors...such as social quests for social players (image 1)
- **Remove risk by copying hidden object games:** To remove risk, build a hidden objects-based challenge game; potentially placing hidden objects onto the background images of each slot machine (image 2)
- **Add quests and challenges with timers...then add a purchase to speed-up mechanic to monetize players:** This mechanic will increase retention with a timer mechanic and drive revenue with a purchase to speed-up mechanic (image A)
- **Build a story that works with open graphs...then add an open graph to all steps:** Like Criminal Case, add an open graph to challenges and a story that fits with the Actor, App, Action, and Object open graph format (image B)

Scatter Slots and Criminal Case examples



VIP FOR A MONTH

VIP FOR A MONTH: FEATURE SUMMARY

VIP for a month is a powerful purchase mechanic that gives players coins, gems, and upgrades every day, with a catch... Players must return daily to the game to collect the bonus

Details

- The VIP for a month package is a \$2.99 package that gives players 6.0M coins (worth \$2.50), 10 gems (worth \$2.50), and 1 upgrade every day for 30 days straight (image 1)
- The package is an excellent deal; the total value is ~\$150.00 if collected every day. Interestingly, there is actually no VIP program in Scatter Slots
- After players purchase the VIP for a month package, the message on the buy page turns from, “\$2.99 Buy” to, “VIP days remaining: x days”...where “x” is the number of days remaining
- The important part of the feature is that players must log into the game daily to collect the VIP bonus. When players log in, they receive a notification dialogue upon game entry (image 2)
- In Heroes Charge, a mid-core game, the fiction behind this type of feature is a monthly card and there is a first purchase bonus included in the package (image A)
- Summoners War, another mid-core game, includes multiple different price points for this kind of package, ranging from \$9.99 to \$99.99 (image B)

VIP for a month in Scatter Slots



Versions of this feature in other games



VIP FOR A MONTH: BACKGROUND DATA

The VIP for a month package is the top selling package for Scatter Slots and was for most of 2015

Current rank		
#	Most transactions (all packages)	Price
1	VIP for a month	\$2.99
2	Mini coins pack	\$4.99
3	Holiday sale package	\$24.99
4	Advanced coin pack	\$14.99
5	Holiday sale package	\$0.99
6	Holiday sale package	\$9.99
7	Pro coins package	\$4.99
8	Package of 20 gems	\$4.99
9	Medium coins pack	\$9.99




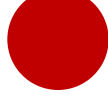
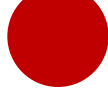
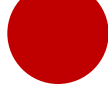
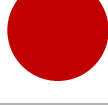






Source: iOS App Store In-App Purchases tab. For more information see the data collection process description in the appendix

Source: Priori Data. For more information see the data collection process description in the appendix

VIP FOR A MONTH: MARKET INFORMATION

VIP for a month-like features are not utilized by other top grossing iOS slots games. Some games have features built into their VIP program but have no direct-purchase package to drive additional transactions

Game	Strength of feature	Comments
DoubleDown		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
Heart of Vegas		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
GSN Casino		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
MyVegas		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
House of Fun		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
DoubleU		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
Wizard of Oz Slots		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
Hit it Rich		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
Slotomania		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
Big Fish Casino		<ul style="list-style-type: none">No direct-purchase feature like the VIP for a month
Scatter Slots		<ul style="list-style-type: none">VIP for a month

VIP FOR A MONTH: RECOMMENDATIONS

Build a version of this golden mechanic that fits best with your game. Few features increase transactions *and* retention this well. Test this feature's limits...explore price points, time horizons, multiple offerings, and fiction

Details

- **Release with a low-priced offering:** To drive new buyer conversion, like Scatter Slots, have a low-priced package (image 1)
- **Add a new buyer bonus:** Like Heroes Charge, include a new buyer bonus to drive additional conversion (image A)
- **Add multiple price points:** Like Summoners War, add four price points to increase revenue and retention in heavy payers (image B)
- **Test the time length of this feature:** There is no reason this feature would not work for 7, 60, 90, 180 days...or possibly hourly
- **Consider different fiction if you already have a VIP program:** Like both mid-core examples, the fiction of the package can simply be a monthly card or a monthly bonus package (images A and B)

VIP for a month in Scatter Slots



Mid-core versions of the feature



BIG WIN TABLES

BIG WIN TABLES OVERVIEW

Big win tables are a key driver of spend for whales. All three whales said that big bet tables are the main reason for their purchases

Big Win Tables

Big Win tables have default bets of 675k (~\$40 adjusted for VIP bonuses) with minimum bets of 67k (~\$5), but the wins are in the millions with jackpots in the billions



[Why do you purchase?]

“Don't get enough with the bonuses to play enough like I want to or bet the amounts I like in order to get the payouts that make me feel like I'm winning.”

- *Whale C, LTS >\$1,500*

[Why do you make purchases?]

“To play the bigger rooms...I get bored in the little rooms... [why?] ...Because you can't win anything big.”

- *Whale B, LTS >\$3,000*

[What games do you play?]

“Aztec, Fates of Fortune, Pharoah, Vinyard”

[What amounts do you bet?]

“100k to 1 million”

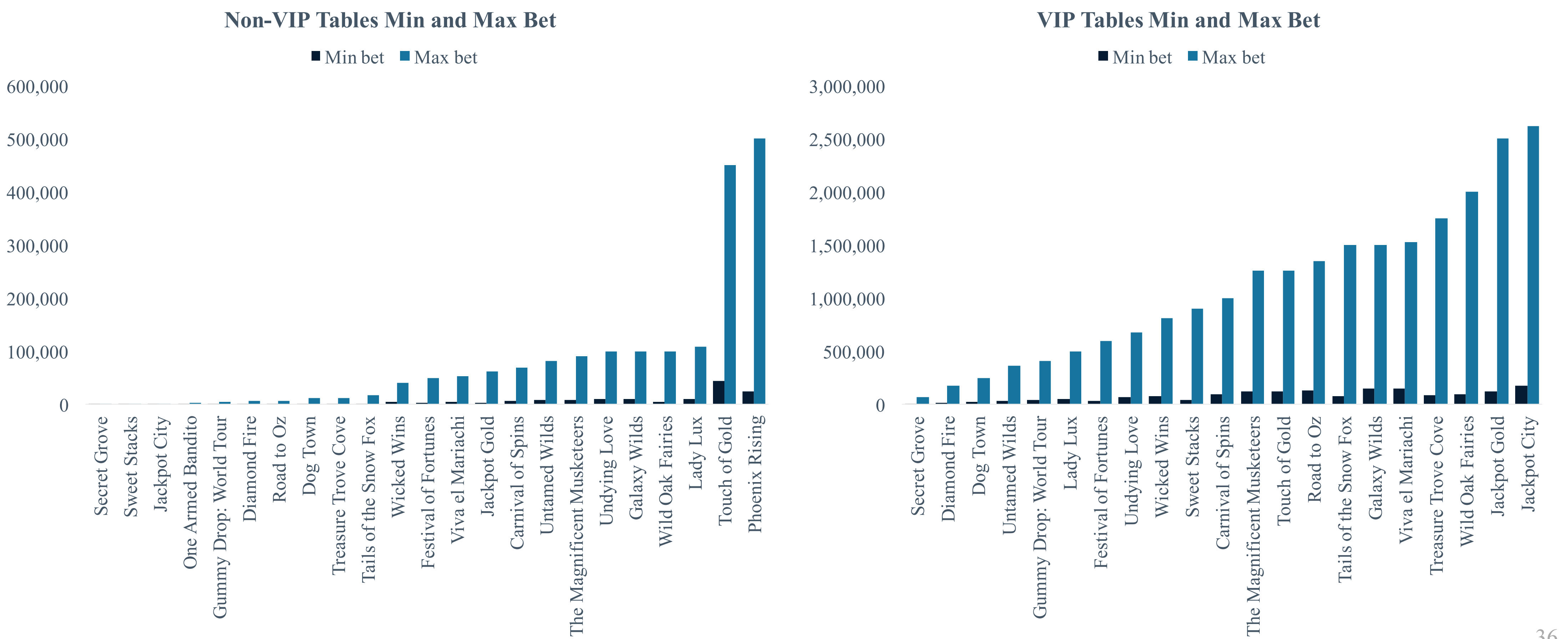
- *Whale A, LTS >\$7,750*

Source: Liquid and Grit interviews with Big Fish Casino whales (lifetime spend over \$1,500)

TABLES COMPARISON

Non-VIP machines average max bet is 81k (~\$7) and highest max bet is 500k (~\$45). VIP machines average max bet is 1.1M (~\$100, VIP adj.) and highest max bet is 2.63M (~\$240, VIP adj.)

The ratio between min and max bet is between 10x and 20x regardless of VIP or non-VIP machines. When comparing the VIP and non-VIP version of each game, the ratio between min and max bet ranges dramatically, from 3x to 2,100x



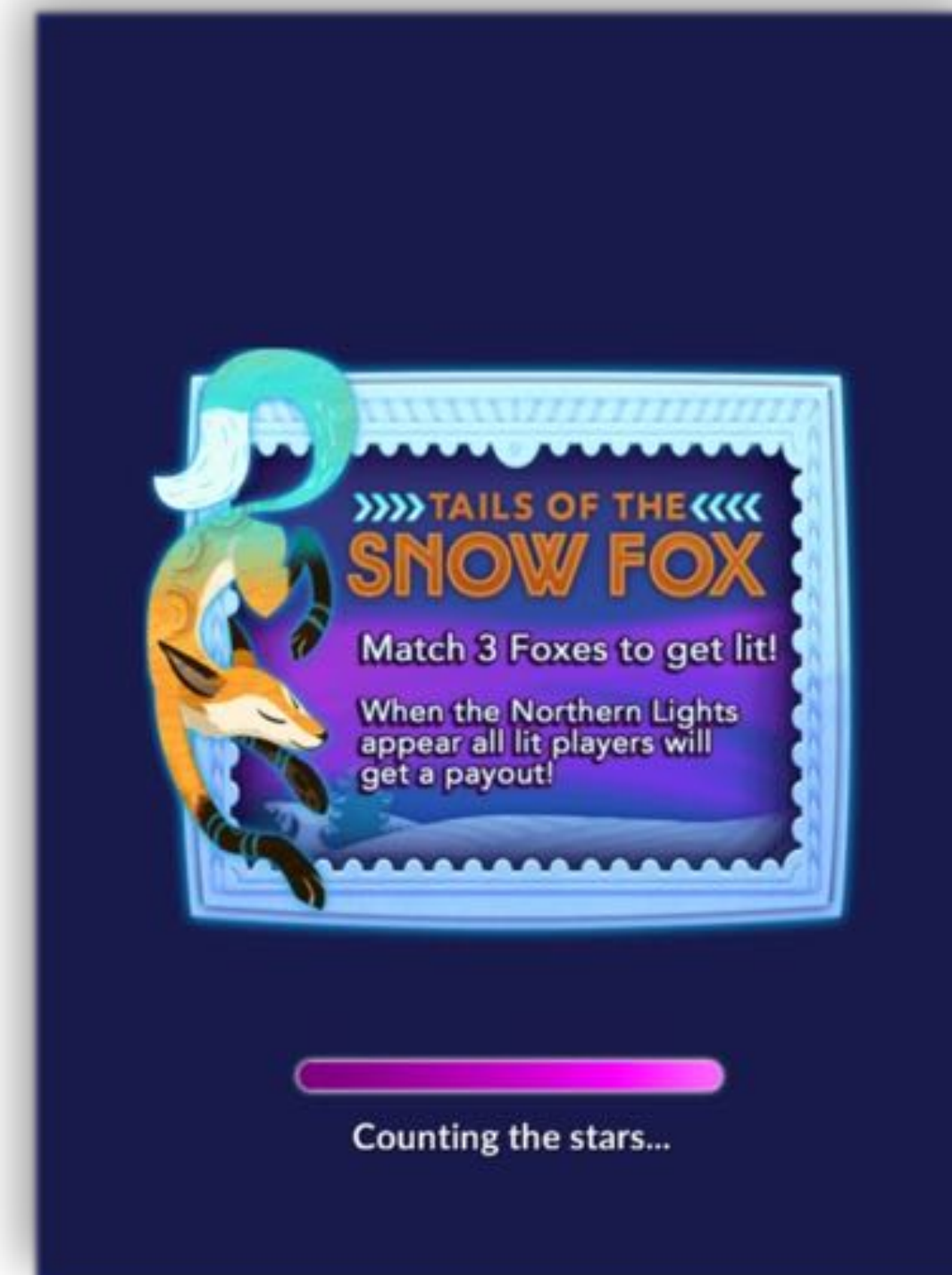
GROUP INCENTIVES

Group incentives drive whales and payers to play at high-bet tables and invite their friends to do the same – a sophisticated and highly valuable revenue driving feature

Scatter Games

Gummy Drop Scatter: The players are working together to build a monument. Every spin has the potential to have one or multiple worker symbols that help complete the monument. Once the monument is complete, everyone gets a shared reward and the process starts over.

Tails of the Snow Fox: If any player gets three of a particular symbol (snow foxes/scatters), the player becomes lit for a period of time. If the player is in this state when a random event happens (Northern lights appear), then all the players in that state get free chips.



“We make friends only tables so you don't have 1 liners screwing your scatter pots up. When someone needs chips you buy them some with your gold”

- Whale A, LTS >\$7,750



Source: Liquid and Grit interviews with Big Fish Casino whales (lifetime spend over \$1,500)

APPENDIX

DATA COLLECTION PROCESS

Data is collected from market research, app intelligence tools, and a deep dive analysis of the game

Market research	Analysis of Competing Hypotheses	Game information
<ul style="list-style-type: none">• Transaction information comes from the iOS App Store, In-App Purchases tab. These packages are ranked based on number of transactions• User demographic information comes from Facebook Ad Manager• Trending revenue, downloads, and package-rank data comes from Priori Data, a Liquid and Grit partner• Las Vegas player insights come from online sources like the Las Vegas Convention and Visitors Authority and the UNLV Center for Gaming Research• Mobile user insights from Gallup.com• Progressive Jackpot information comes from online research...specifically from the Wizard of Odds	<ul style="list-style-type: none">• <i>“Analysis of competing hypotheses (ACH) requires an analyst to explicitly identify all the reasonable alternatives and have them compete against each other for the analyst's favor, rather than evaluating their plausibility one at a time.” – CIA.gov</i>• In our analysis, all the components of DoubleUp Slots: features, economy, theme, etc., compete against each other to determine the most impactful features• In the Wallet Experience and Progressive Jackpots sections, we illustrate how these components compete against each other to determine the most valuable features• We also incorporate the uniqueness of a feature in the market, comparing the feature across both top grossing slots games and 2015 breakout slots games on iOS	<ul style="list-style-type: none">• Game information comes from a deep dive analysis of each game• Return-to-player (RTP) and win percentage is found by tracking over 500 spins from a machine at a certain bet amount• In the economy section and economy-related slides, the coin value is determined by converting coins into money using \$1.00 worth of non-sale purchasable coins in each game. For example, if the minimum bet is 1,000 coins and players can purchase 500 coins for \$1.00, the value of the minimum bet is \$2.00. For games without a \$1.00 package, the next closest package is used

**He will win who, prepared himself, waits to take the enemy
unprepared**

– Sun Tzu, The Art of War

LiquidandGrit.com



Brett.Nowak@LiquidandGrit.com

