



Puzzle Report

Competitive Research and Actionable Product Recommendations

TABLE OF CONTENTS

| | |
|----------------------------|-----------|
| STRATEGY INSIGHTS | 3 |
| Best Fiends Revenue Growth | |
| REVENUE DRIVERS | 9 |
| Level Unlock Discounts | |
| Task Lists | |
| LEVEL DESIGN | 18 |
| New Level Mechanics | |
| MARKET WATCH | 21 |
| Notable Releases | |
| APPENDIX | 24 |
| Player Motivations | |
| Puzzle Personas | |
| Data Collection Process | |

SEPTEMBER

2018

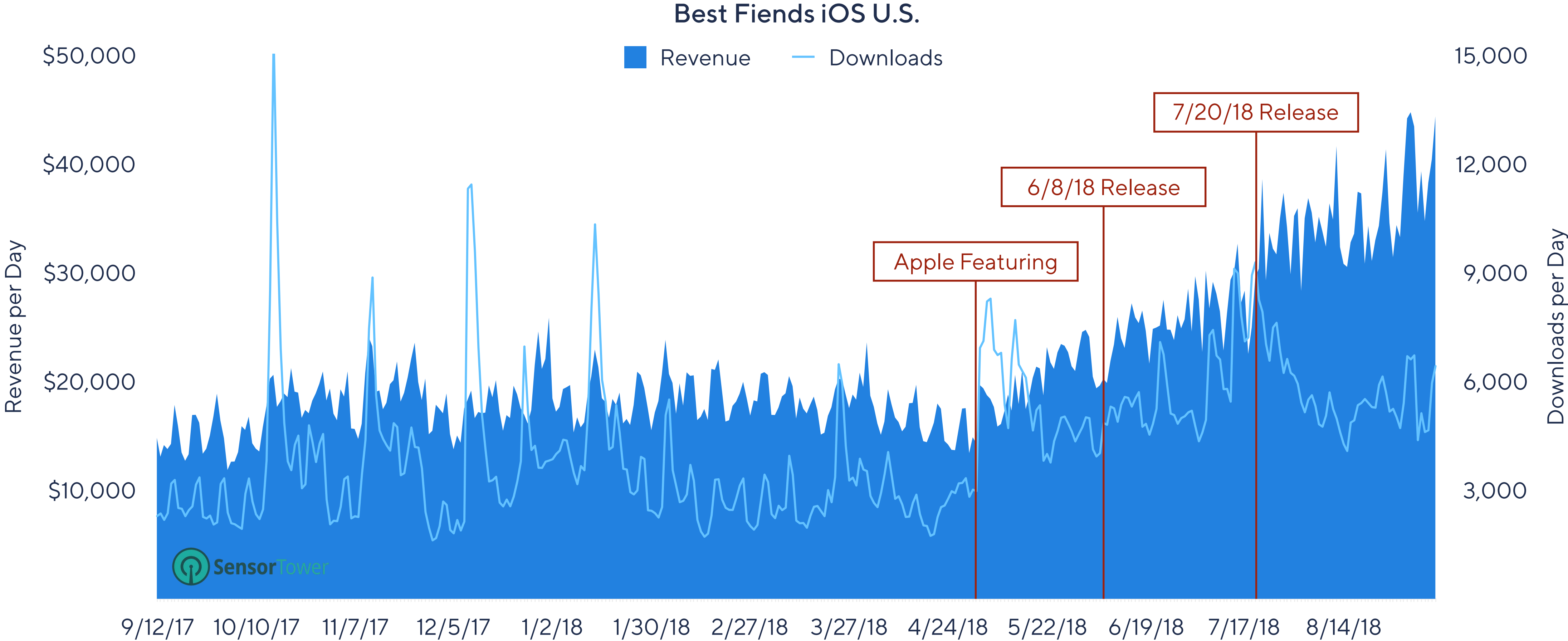
STRATEGY INSIGHTS



BEST FIENDS REVENUE GROWTH

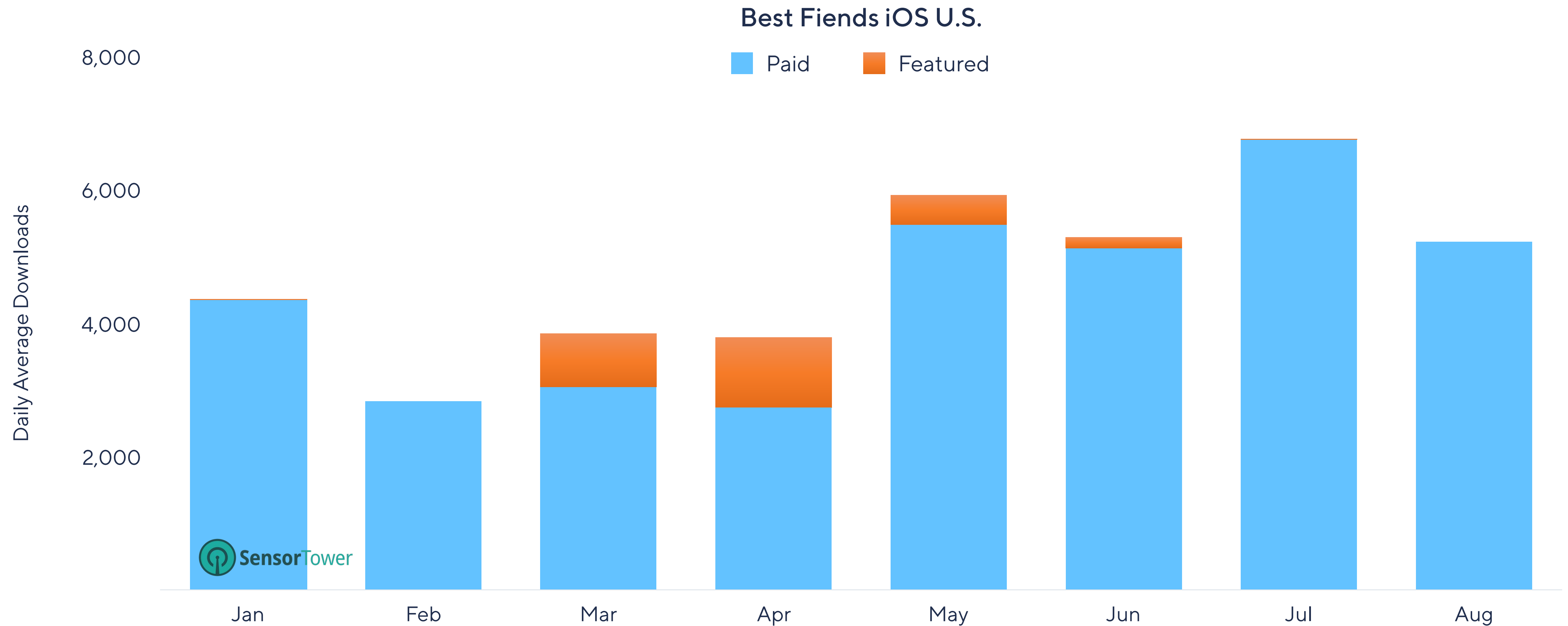
REVENUE GROWTH

Best Fiends iOS U.S. revenue rose 109% from a daily average of \$16.5K in April to \$34.5K in August. Downloads, Apple Featuring, and strong feature releases were major contributors to growth



IMPACT OF DOWNLOADS

Revenue growth is partially explained by an increase in paid downloads ... up 91% during that same time period (April to August). Apple Featuring contributed 13% of total iOS downloads from March to June, helping to kick off the early revenue growth

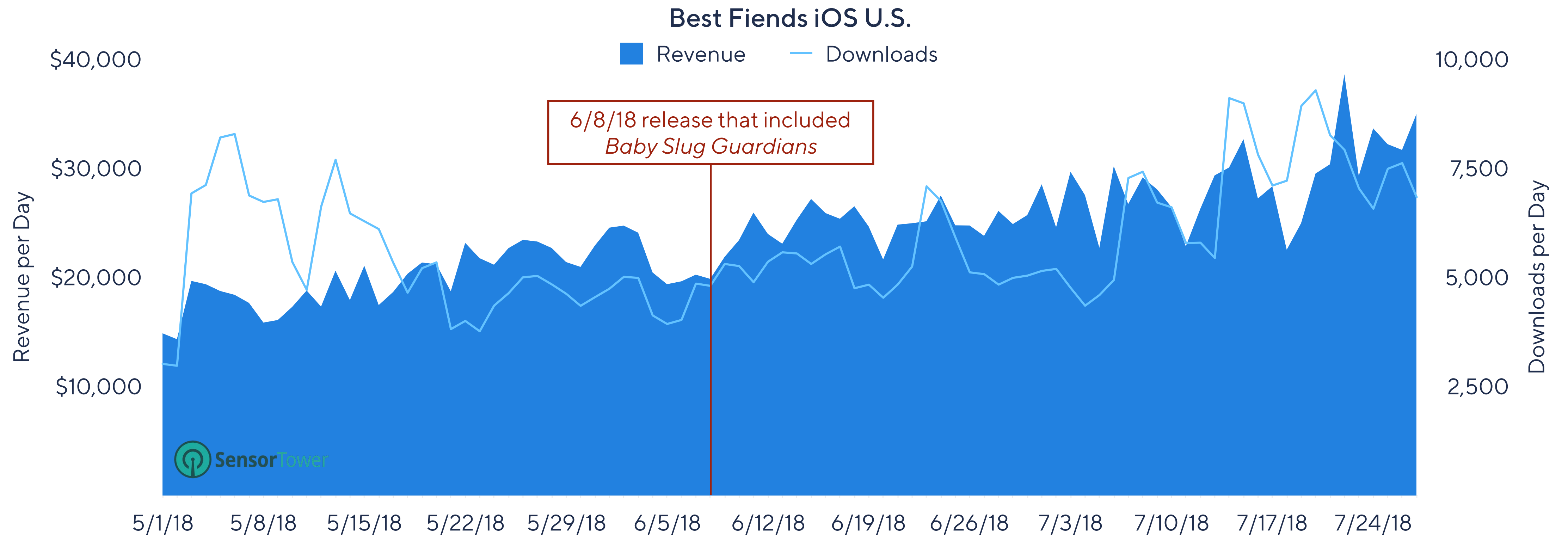


IMPACT OF FEATURES: JUNE

Revenue was up 13% 3Wo3W after a strong June release. The release included a play, collect, and feed mechanic *Baby Slug Guardians* ... with interwoven sales and a 'Collect' or 'Keep Going' option to push transactions

| Time Period | Impact |
|-------------|--------|
| WoW | 7% |
| 2Wo2W | 9% |
| 3Wo3W | 13% |

Players collect items to raise and care for a *Baby Slug* through multiple stages of life. [Baby Slug Guardians](#) events were also added to three days of the weekly [Event Calendar](#). Similar *Tamagotchi-like* mechanics made an impact in Candy Crush Saga ([Candy Pet](#)) and Angry Birds 2 ([Hatchlings](#))

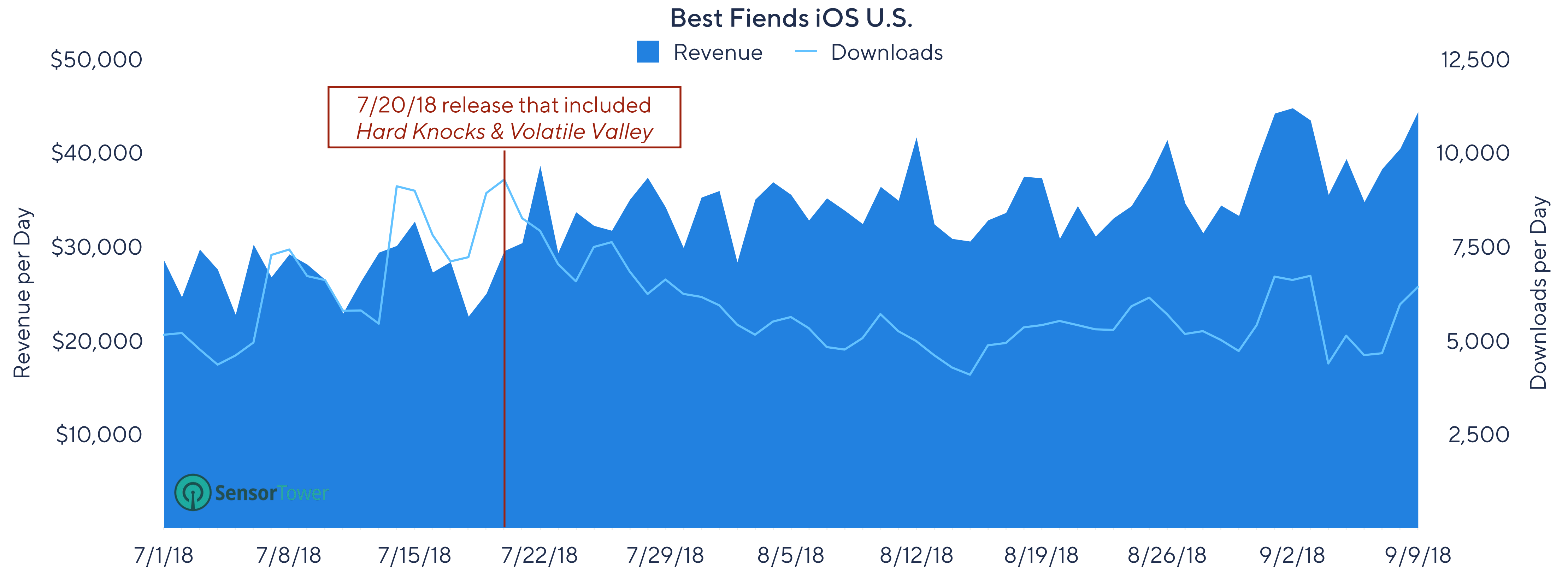


IMPACT OF FEATURES: JULY

Revenue rose 23% 3Wo3W in July after the 7/20 release, which added *Hard Knocks* missions and a new map area for high-level players

An animated YouTube video ([Fort of Hard Knocks](#)) was also released on 7/19 that now has over 1.8M views. [Volatile Valley](#) was the new map area unlocked to players at level 1,000

| Time Period | Impact |
|-------------|--------|
| WoW | 15% |
| 2Wo2W | 20% |
| 3Wo3W | 23% |



REVENUE DRIVERS

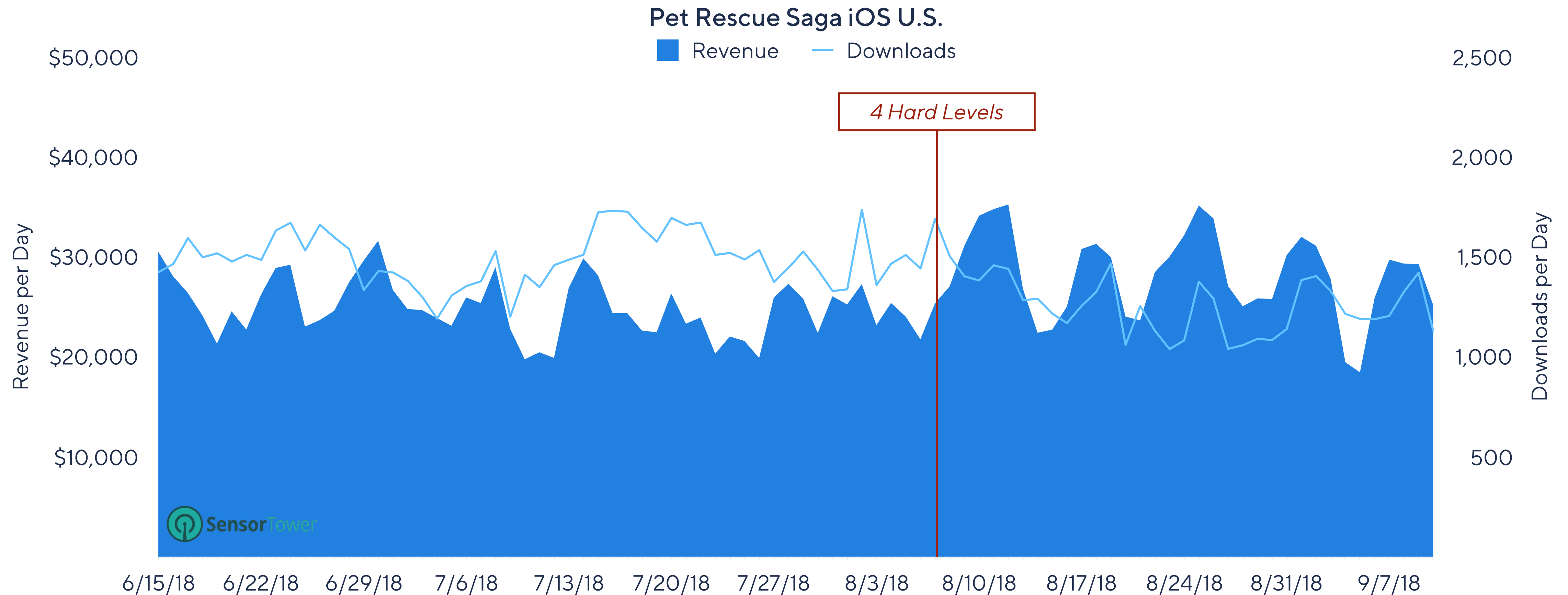


LEVEL UNLOCK DISCOUNTS

IMPACT ANALYSIS

Pet Rescue Saga revenue increased 20% 3Wo3W after the release of *4 Hard Levels*, which is still active in the app (as of 9/19)

| Time Period | Impact |
|-------------|--------|
| WoW | 21% |
| 2Wo2W | 18% |
| 3Wo3W | 20% |



INSIGHTS & ADVICE

Unlocking discounts after tough challenges makes players feel like they've *earned* the right to purchase ... thus, increasing transactions per player

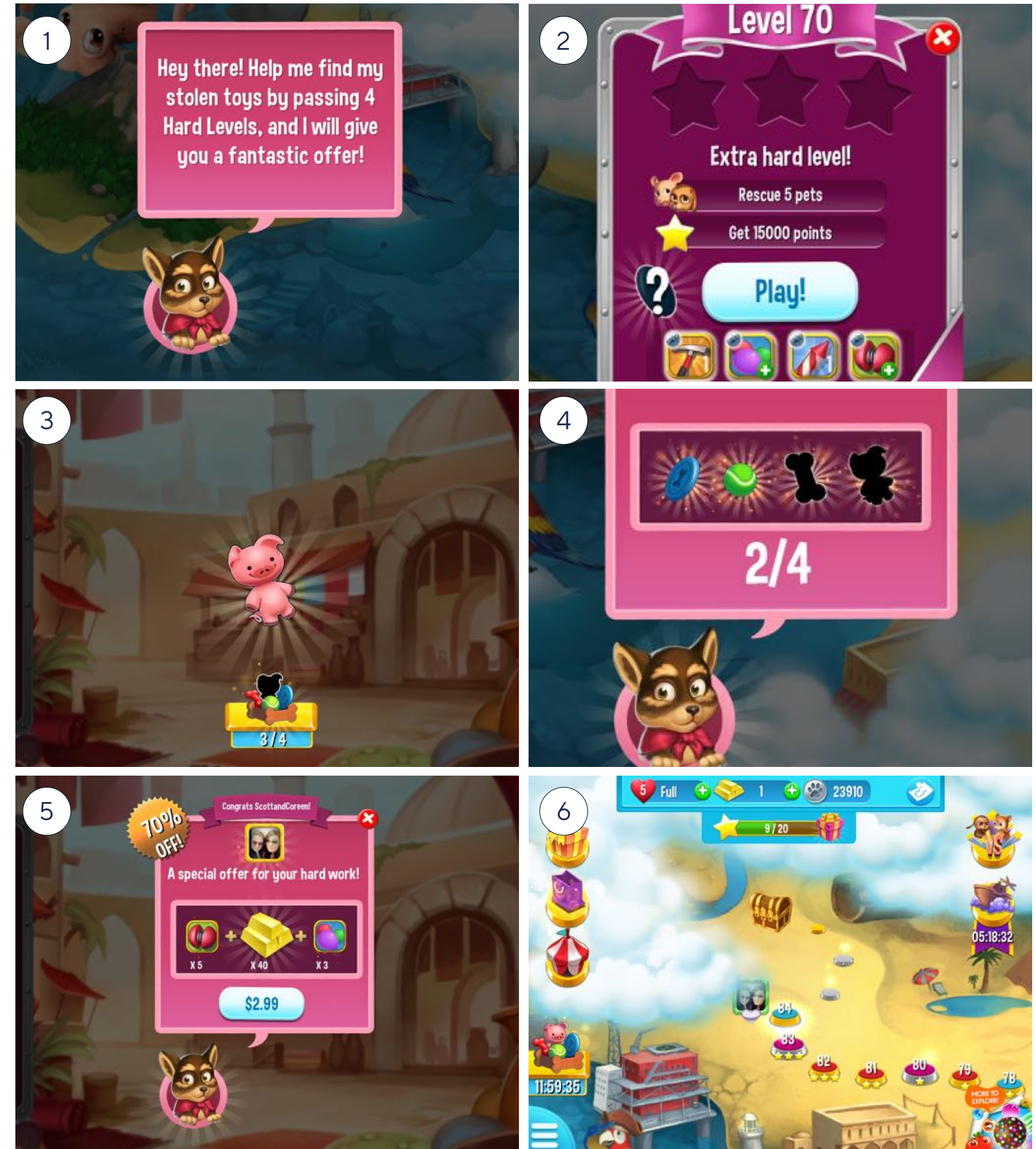
Feature Details

- Upon app-entry, a dialogue informs players that passing *4 Hard Levels* unlocks a special offer (1)
- The *Hard Levels* entry message first displays a question mark ... which reveals a *Toy* that is awarded upon level completion (2 & 3)
- Players collect 4 *Toys* to fill a meter (4)
- When all the *Toys* are collected, a special discount unlocks (5)
- The offer remains active for 12 hours (even if players make a purchase). After the time expires, players must complete another *4 Hard Levels* to unlock the offer (6)

Key Takeaways

- Add multiple levels of difficulty that unlock increasingly better discounts in the second iteration ... after testing this feature
- Personalize the discount amount based on previous spend behavior. In the *4 Hard Levels* offer dialogue, the "70% Off!" text is clearly written with code. This allows Pet Rescue Saga to change the discount amount per-user (different pricing was also observed at \$1.99 and \$2.99) ** *make sure to comply with GDPR for EU players who have not opted-in to personalization*
- To maintain spending-retention, push players toward more frequent, mid-sized transactions vs. less frequent, larger transactions ... so, be careful not to move the price-per-transaction up too high in the personalized pricing dialogue. More frequent transactions lead to less-inflated wallets, better data, and lower likelihood to spend-lapse

[More Images and Videos](#)



SIMILAR FEATURE REFERENCES

Candy Crush Saga released a similar feature *Hard Levels Cake Climb* in May that spiked revenue 49% WoW. CCS's variation made unlocking the discount even harder: Players were given 1 life to beat 6 *Hard Levels* for boost rewards

Target Audience

- Motivation: Ownership
- Personas: Friendly Fran, Adventuring Adrian, Prospecting Polly

Report References

- *Hard Levels* in CCS: [May 2018 Puzzle Report](#)
- *Hard Levels* in Farm Heroes: [February 2018 Puzzle Report](#)

Similar Features

- [Hard Levels Cake Climb](#) - Candy Crush Saga
- [Golden Tickets](#) - Candy Crush Soda Saga
- [Hard Level Prize Wheel](#) - Family Guy AFMG

[Ask Liquid and Grit a Question](#)

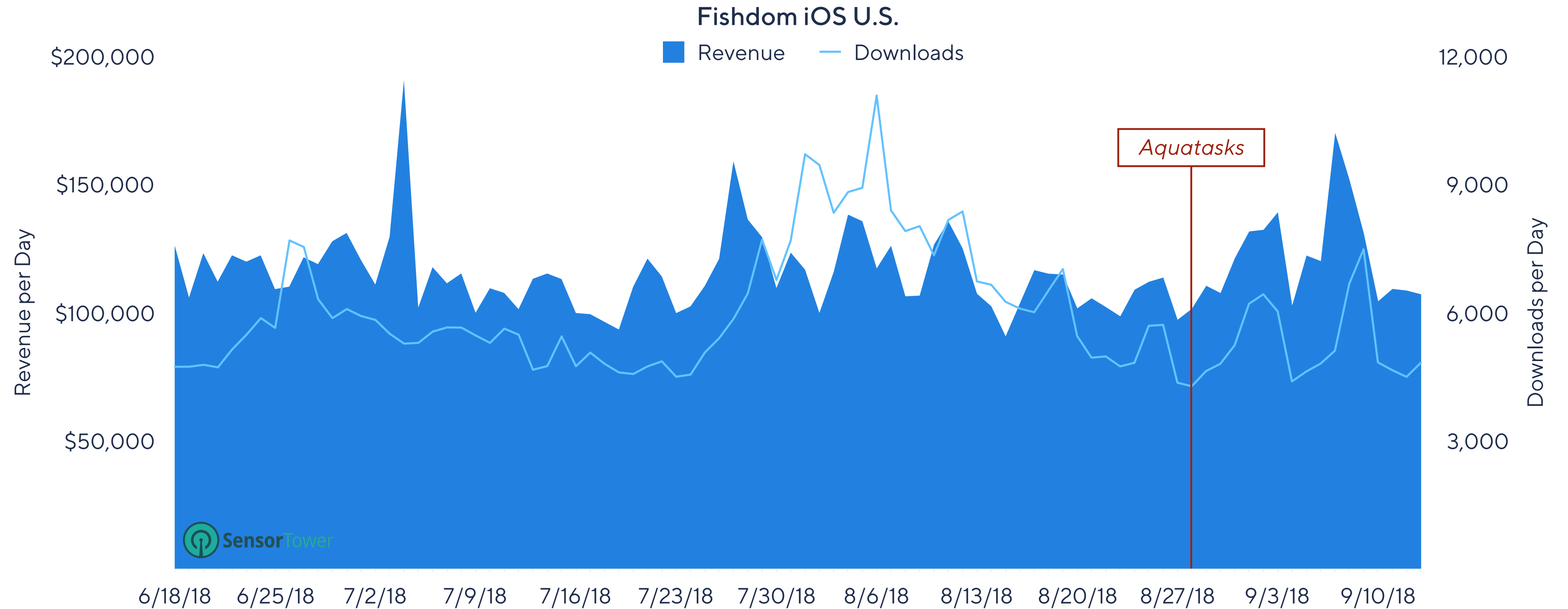


TASK LISTS

IMPACT ANALYSIS

Aquatasks, which replaced *Achievements*, bumped revenue 16% 2Wo2W in Fishdom

| Time Period | Impact |
|-------------|--------|
| WoW | 8% |
| 2Wo2W | 16% |



INSIGHTS & ADVICE

Identify a real-life element to replicate and make the game experience a *happier, more idyllic* experience

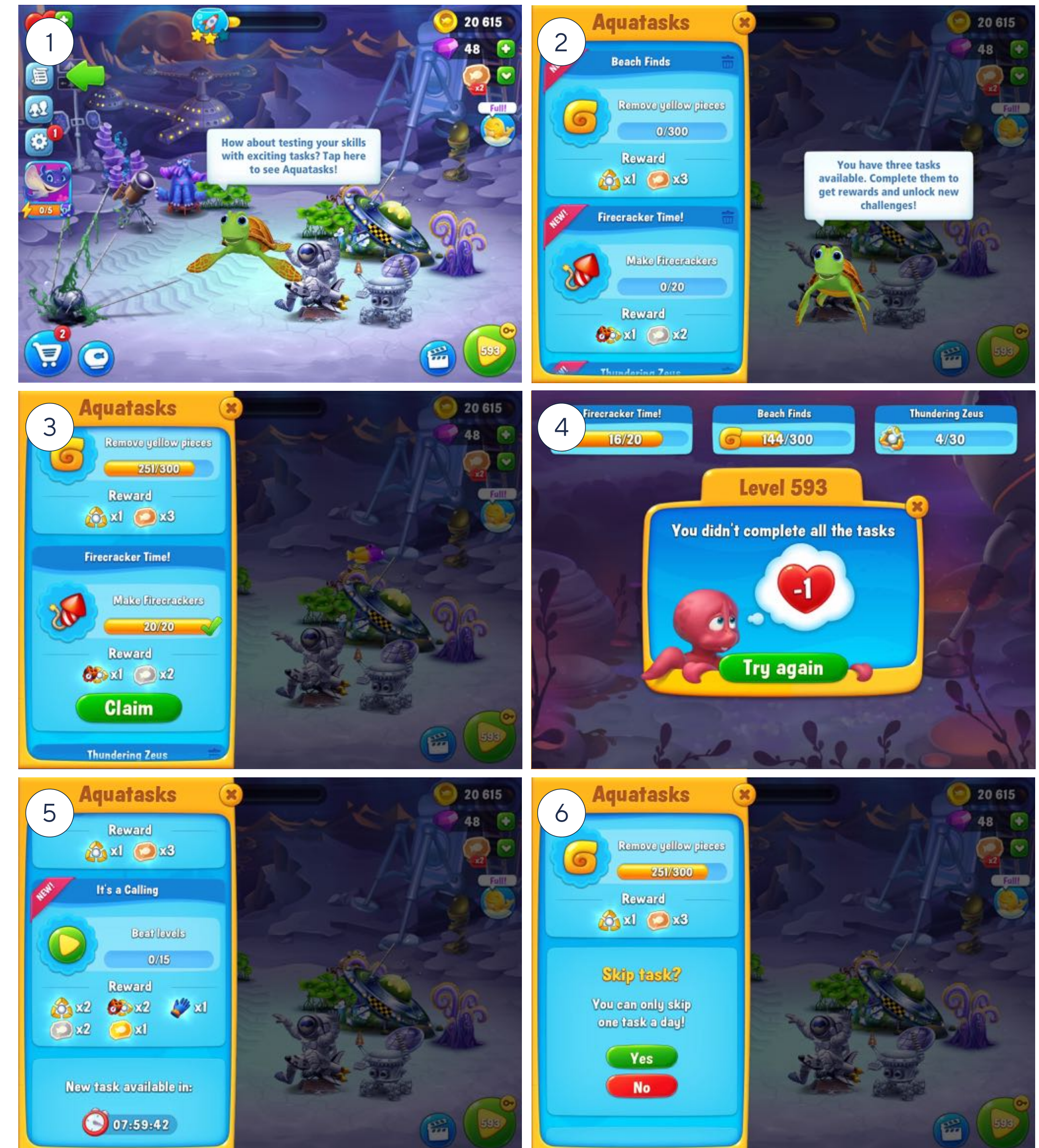
Feature Details

- *Aquatasks* unlock to players after level 32 (1)
- A tutorial explains the new feature, showing players a list of 3 tasks to complete for prizes (2)
- Rewards include combinations of *unlimited lives*, *boosters*, or *vouchers* (3)
- Players have an unlimited amount of time to complete *Aquatasks* (4)
- A new task is unlocked 8 hours after a task is completed (5)
- Players can skip one task each day ... and it is replaced by a new one (6)

Key Takeaways

- Allowing players to skip certain tasks will increase feature-retention by removing tasks that players dislike and/or are too difficult to complete. Opt-In Personalization, or player experience customization, is very often a win for any feature
- Clearly understand the motivations of your audience and make sure to harness that emotional trigger. If your players desire the feeling of *achievement* and *accomplishment*, which many parents (or mothers with older kids) covet, consider adding this type of checklist-style feature ... this will invoke those rewarding feelings that come from accomplishing a real-life checklist
- Once a set of tasks (list) is completed, show players their hard work is appreciated. In *Fishdom*, players only receive a message of, "Excellent". A character *showing* their gratitude would make players feel *loved* (a reward often lacking when parents accomplish tasks in the real-world)

[More Images and Videos](#)



SIMILAR FEATURE REFERENCES

Dragon Ball Z *3rd Anniversary Celebration* is a similar feature that included over 30 days of events and an event-specific daily bonus that drove a *massive* increase in revenue: over 1,000% 2Wo2W

Target Audience

- Motivations: Achieve
- Personas: Prospecting Polly, Stealthy Steve

Report References

- *Month-Long Event Calendars*: [August 2018 Puzzle Report](#)
- *Daily Streak Events*: [March 2018 Casino Report](#)

Related Features

- [Achievements](#) - Wizard of Oz Magic Match
- [Showroom](#) - Caesars Slots
- [Achievements](#) - Bingo Drive

[Ask Liquid and Grit a Question](#)



LEVEL DESIGN



NEW LEVEL DESIGNS

Dark Chocolate in Candy Crush Saga

- This blocker mechanism is similar to [Chocolate](#) but differs in how it spreads. Additional *Dark Chocolate* squares and layers are added to existing squares if none are removed. See this [Fandom write up](#) for details on this fairly involved mechanic (1 & 2)

Vase in Toon Blast

- Players must collapse cubes that are (1) the same color as the *Vase* and, (2) adjacent to the *Vase*, in order to break it and reveal a *Money Bag*. Boosts or adjacent collapses of any color collect a *Money Bag* from the board (3 & 4)

Plasma Globe in Homescapes

- The *Plasma Globe* is charged with three adjacent matches, exploding and removing all the pieces of a random color from the board

Oil Pitcher in Homescapes

- Adjacent matches will cause an *Oil Pitcher* to spill *Oil* onto the board. Players then must make matches to clear the *Oil*

Ring in Homescapes

- Adjacent matches unlock and open *Ring Boxes*. Only some *Ring Boxes* will contain a *Ring*. Once opened, adjacent matches next to a *Ring* removes it from the board, collecting it as a level goal (5 & 6)



NEW LEVEL DESIGNS

Double Acorn in Gardenscapes

- A layered hazard ... players must make two adjacent matches to break down, and then remove, *Double Acorns* from the board

Flowers in Home Design Makeover!

- After the first adjacent match, a *Flower* splits into two smaller *Flowers*, which travel to random spots on the board. Players remove the smaller *Flowers* with adjacent matches or boosts (1 & 2)

Fritter in Cookie Jam

- A *Fritter* is a stationary element requiring multiple adjacent matches to break down. If the third adjacent match is a color match, the *Fritter* explodes to remove surrounding elements from the board (3 & 4)

Double Vertical Bomb in Best Fiends

- New character *Thorn* includes a *Double Vertical Bomb* boost that explodes, clearing two adjacent columns of elements from the board ... when included in a match-link sequence (5 & 6)



MARKET WATCH



8/1/18 - 8/31/18

NOTABLE RELEASES

| App | Feature | Description |
|---------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Candy Crush Saga | Buddy Challenge | A 2-player cooperative challenge including win streaks, and boost rewards. Players completing their portion earn the win, with further play contributing to the other player's progress (1) |
| Toy Blast | Leagues | A tiered <i>League</i> system added to the <i>Star Tournament</i> . Rankings on the leaderboard are based on <i>Stars</i> collected (2) |
| Homescapes & Gardenscapes | Homescapes Profiles & Gardenscapes Profiles | Players can now change their profile picture, name, and pet name (3) |
| Solitaire TriPeaks | Choose Your Event | Players select 1 of 3 events to play within a time limit |



NOTABLE RELEASES

| App | Feature | Description |
|------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Angry Birds 2 | Hatchlings Update | Rainbow Feathers (Wild Feathers) are added as Hatchling awards, giving players a choice of Bird to rank up (1) |
| Candy Crush Jelly Saga | Happy Hour | A new bonus awarded to players who login during certain hours of the day (2) |
| Cookie Jam | Teamwork Treasure | Team event where players are randomly selected into groups to collect Striped Cookies to fill a team meter for rewards (3) |
| Bubble Witch 3 Saga | Summer Duel | PvP tournament with booster rewards based on the number of duels won against other players (similar to Tractor Dash in Farm Heroes Saga) |
| Gummy Drop | Comic Con | An event area featuring a <i>Comic Con</i> theme and a superhero-themed sale |

[Full List of Content Released this Month](#)



APPENDIX



PLAYER MOTIVATIONS

Understand emotional motivations to generate growth. The most impactful features are those that trigger strong, positive emotional responses

“Most companies segment their markets by customer demographics or product characteristics and differentiate their offerings by adding features and functions. But the consumer has a different view of the marketplace. She simply has a job to be done and is seeking to 'hire' the best product or service to do it. Jobs aren't just about function—they have powerful social and emotional dimensions.” - Clayton Christensen, co-author of [Jobs to be Done](#) framework

To create new innovations, focus on the emotional jobs that people want to accomplish. This is very applicable to our industry, where there is little practicality about playing a non-paying casino game. Therefore, we have to know the emotional drivers of our players.

Liquid and Grit has formulated key player motivations.

Player Emotional Motivations

- [Achieve](#) - Players who want to accomplish a goal
- [Thrill](#) - Players who want the excitement and stress of taking a risk
- [Surprise](#) - Players who want to uncover an unknown, see new opportunities, and try new things
- [Awe](#) - Players who want to experience quality production value
- [Flow](#) - Players who want to get into the zone and escape
- [Relationship](#) - Players who want to connect with other people
- [Association](#) - Players who want to identify with something for familiarity and comfort
- [Ownership](#) - Players who want to have things belong to them
- [Create](#) - Players who want to be creative and produce something

PUZZLE PERSONAS

| | Stealthy Steve | Friendly Fran | Destructive Derek | Adventuring Adrian | Prospecting Polly | Daring Dan | Gathering Grace |
|-----------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------------------|
| Gender | 76% male | 72% female | 73% male | 55% male | 78% female | 69% male | 71% female |
| Mean age | 31.6 | 40.8 | 37.8 | 31.5 | 42.3 | 39.6 | 45.3 |
| Highest preference(s) | Assault | Care and Manage | Manage | Journey | Journey and Coordinate | Assault and Coordinate | Coordinate |
| Lowest preference(s) | Care | Assault | Care | Manage and Care | Assault and Care | Journey and Care | All except Coordinate |
| Likes | Stealth, strategy, being the protagonist, skill progression, and exploration | Befriending non-playable characters (NPCs), creating an avatar, skill progression, and city or village handling | Strategy, city or base construction, and large-scale handling of NPCs | Creating an avatar, skill progression, being the protagonist, exploration and secrets, and befriending NPCs | Collecting rare items and treasures, exploration, skill progression, and tile matching | Racing, explosions, and stealth | Tile matching, platforming, and collecting rare items |
| Dislikes | Rhythm mechanics and pet training | Killing, war, weaponry, and explosions | Theft, illegal activities, stealth, retreating, and rhythm mechanics | Racing, sports, tile matching, instruments, dancing, and pet training | Theft, explosions, and retreating | No strong dislike for any particular mechanic | Killing, theft, destruction, and war |

DATA COLLECTION PROCESS

Recommendations, information, and data come from market research, app intelligence tools, and deep analysis of the apps

Market Research

- Each app is reviewed daily for updates, regardless of whether the app has been updated through the App Store
- Transaction information comes from the iOS App Store's In-App Purchases tab. These transactions are ranked based on the number of transactions
- Trending revenue, downloads, and package-rank data come from Sensor Tower's Store Intelligence

Game Information

- App information comes from a deep-dive analysis of each app
- In the Economy Analysis and economy-related slides, the currency value is determined by converting currencies into money using \$5 worth of non-sale purchasable currencies in each app
- For example, if an item costs 1,000 of the primary currency and players can purchase 500 for \$5, the value of the item is \$10. For apps without a \$5 package, the next closest package is used

“We keep moving forward, opening new doors, and doing new things, because we're curious and curiosity keeps leading us down new paths.”

– Walt Disney

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