



LIQUID&GRIT

RPG REPORT

Competitive Research and Actionable Product Recommendations

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MARCH

2020

BREAKOUT APP

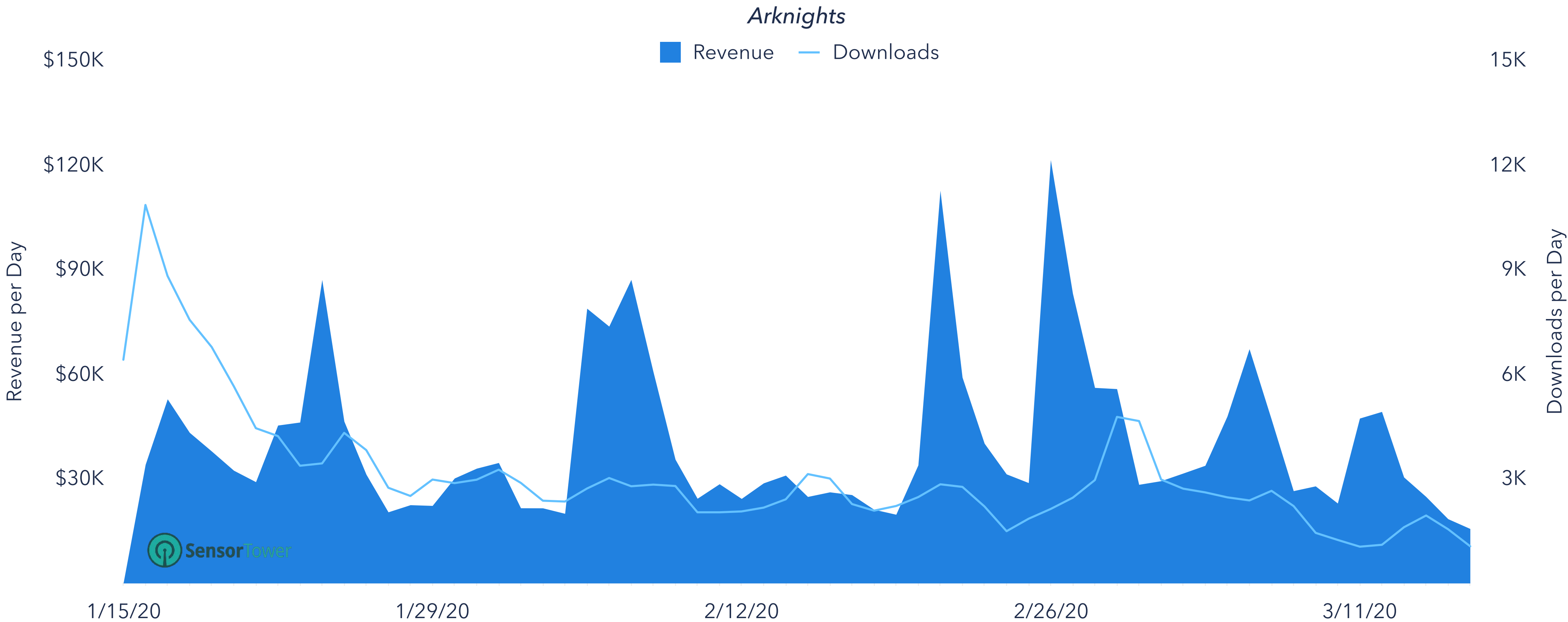


RPG > GAMES

***ARKNIGHTS* BY YOSTAR LIMITED**

REVENUE ANALYSIS

In February 2020, *Arknights* averaged \$44,535 in daily revenue (+118% MoM) and 2,635 daily downloads (-6% MoM).



Graph data is iOS U.S. only.
MoM = This month over last month.

FEATURE TEARDOWN

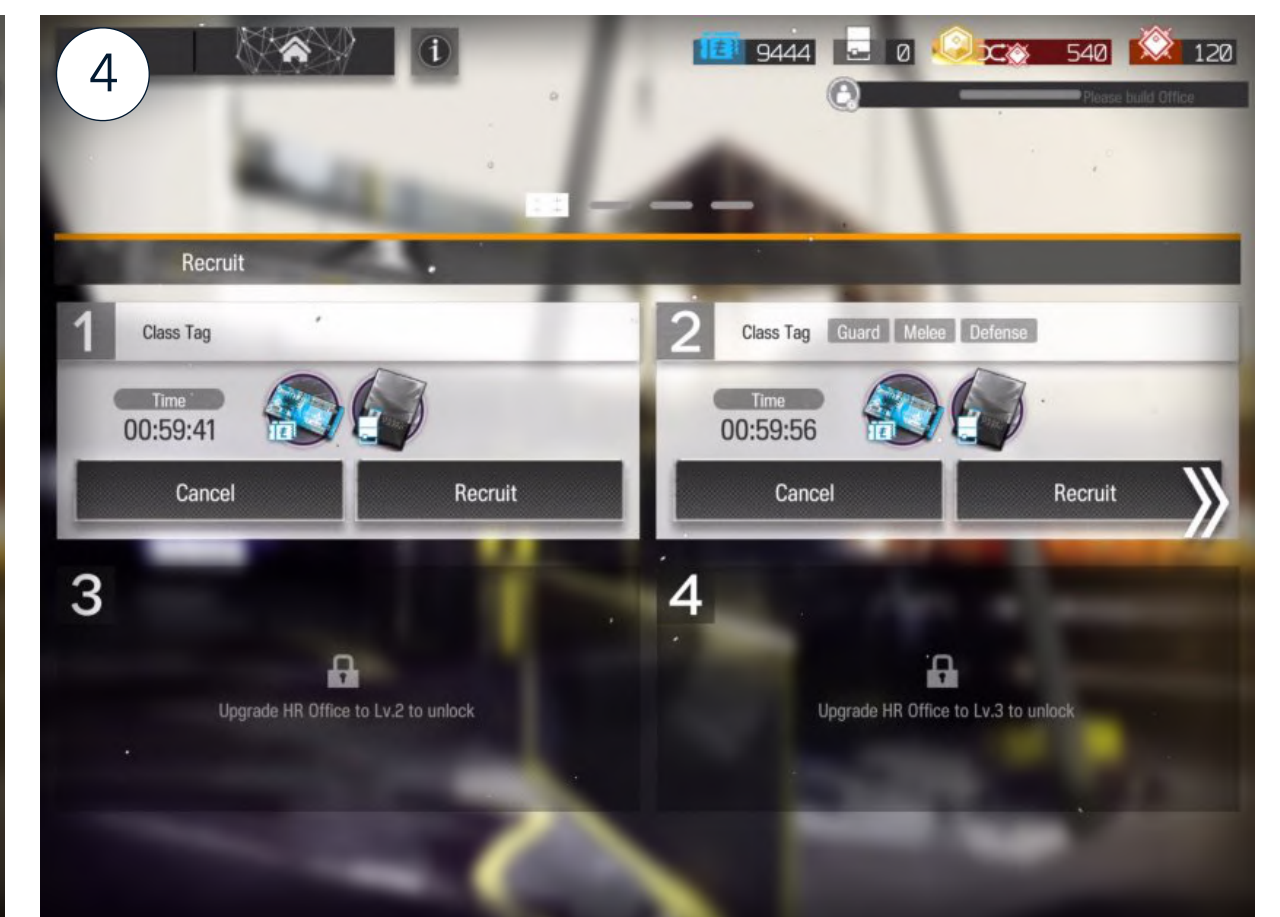
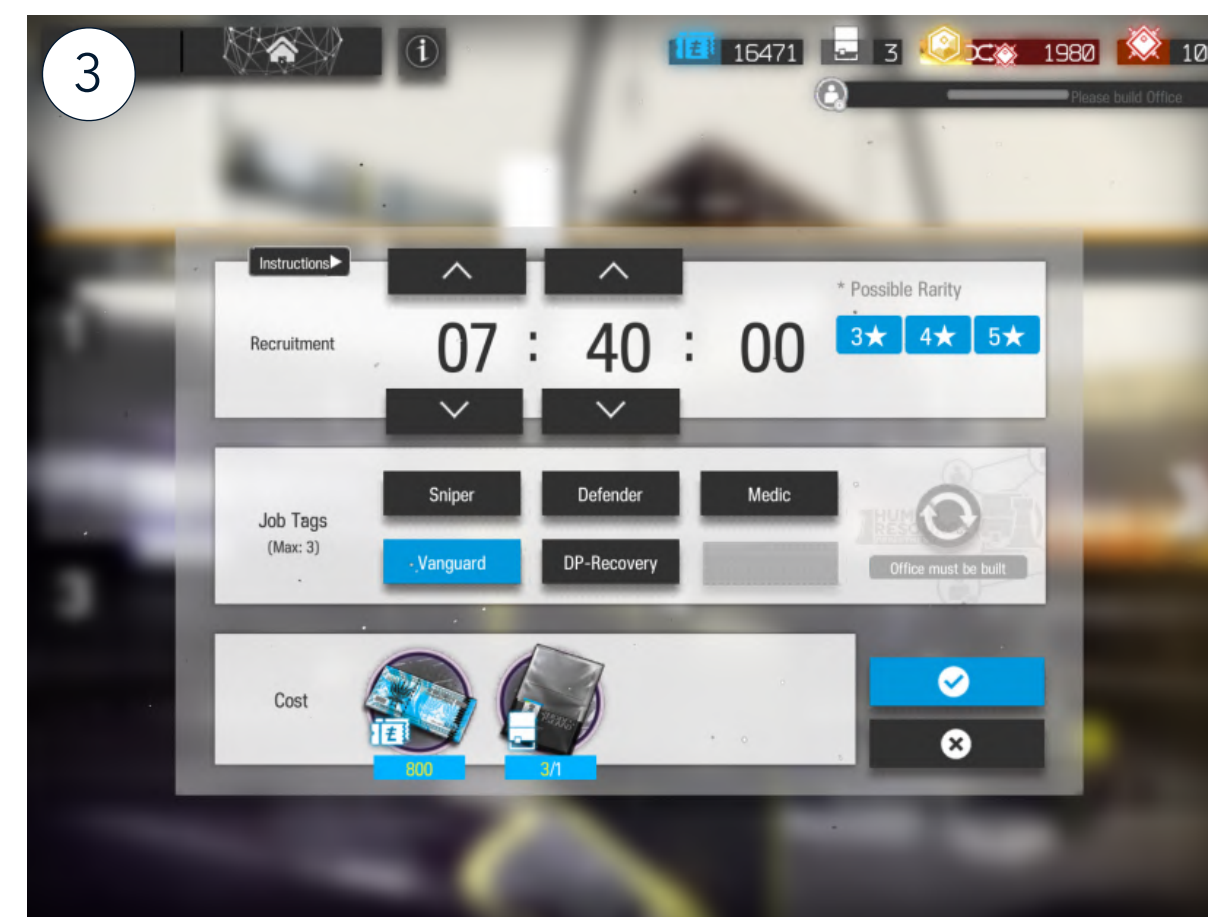
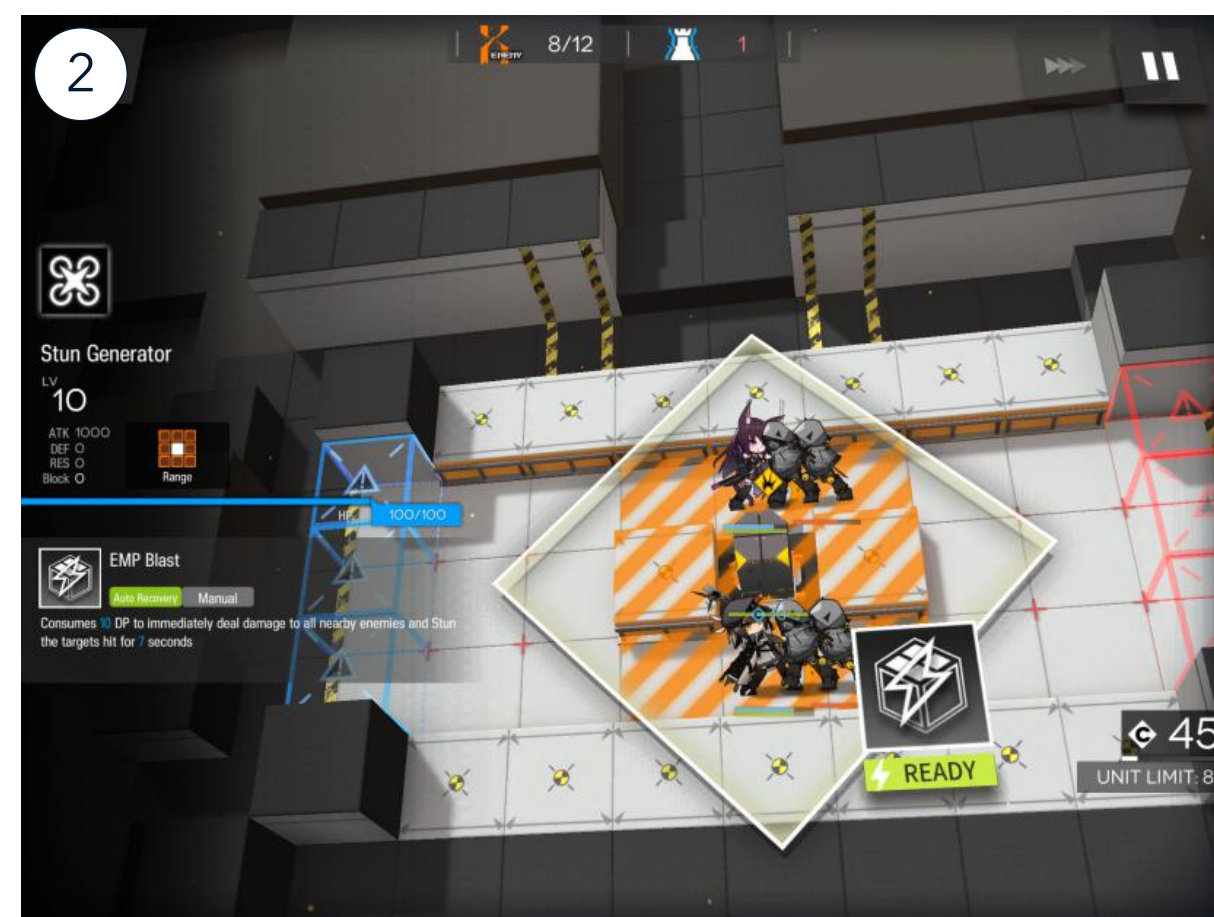
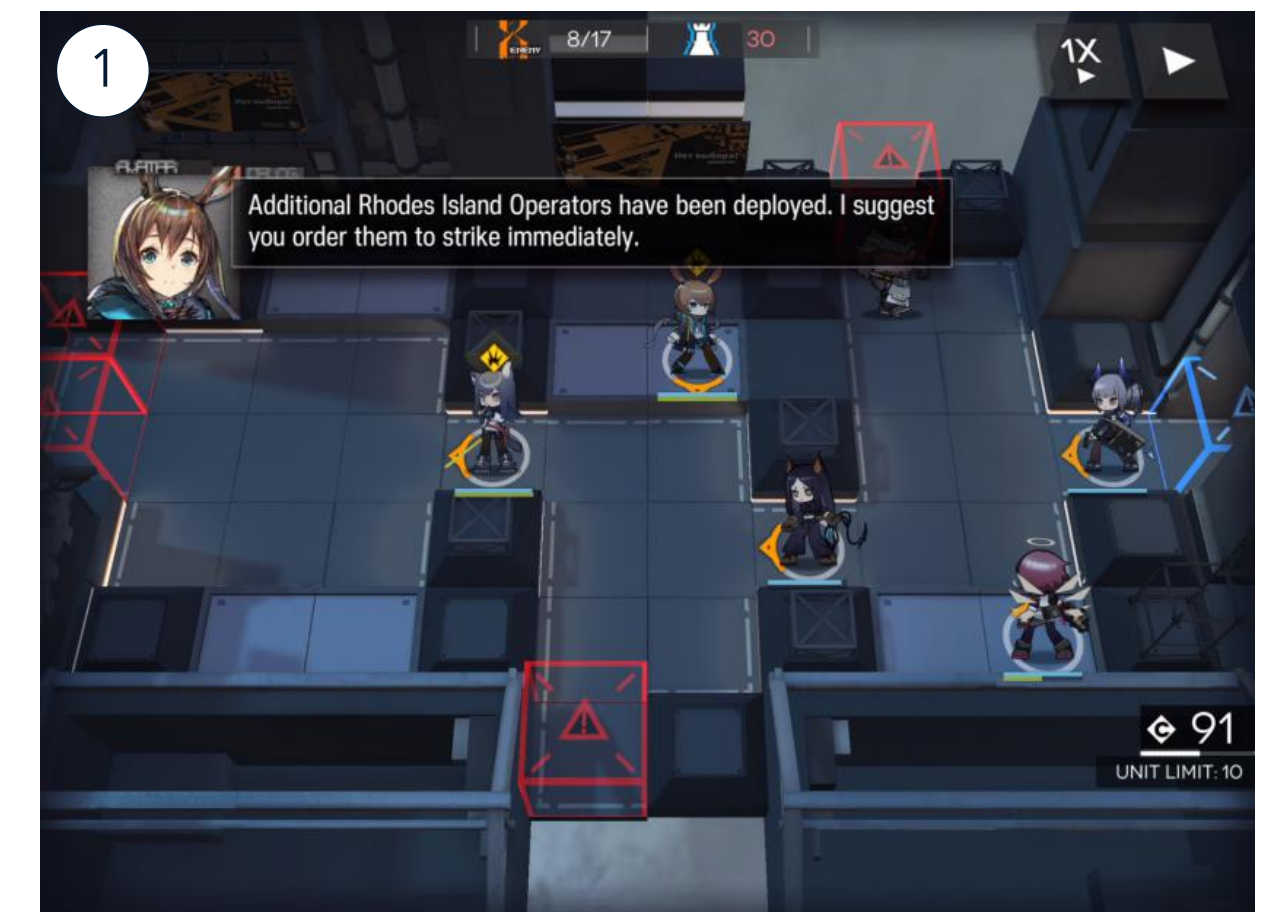
Arknight offers tower defense-style combat, a customizable summoning system, a store with progressive stages, and an innovative Sims-lite base-building system.

Combat

- Players position hero units in tower defense-style battles ([1](#) and [video](#)).
- Each hero has different abilities.
- Certain structures and terrain types act as combat tools or boosts ([2](#)).

Summons

- New heroes can be summoned through two mechanics: headhunting or recruitment.
- When headhunting, players spend premium currency to summon random heroes.
- Recruitment lets players specify up to three types of heroes they want to recruit ([3](#)).
 - Players set a length of time to recruit—up to nine hours.
 - Longer times cost more and award rarer heroes that more closely match the specified tags.
 - Players can unlock additional recruitment slots ([4](#)).



FEATURE TEARDOWN (CONT.)

Players must manage hero morale in an upgradeable base.

Bases

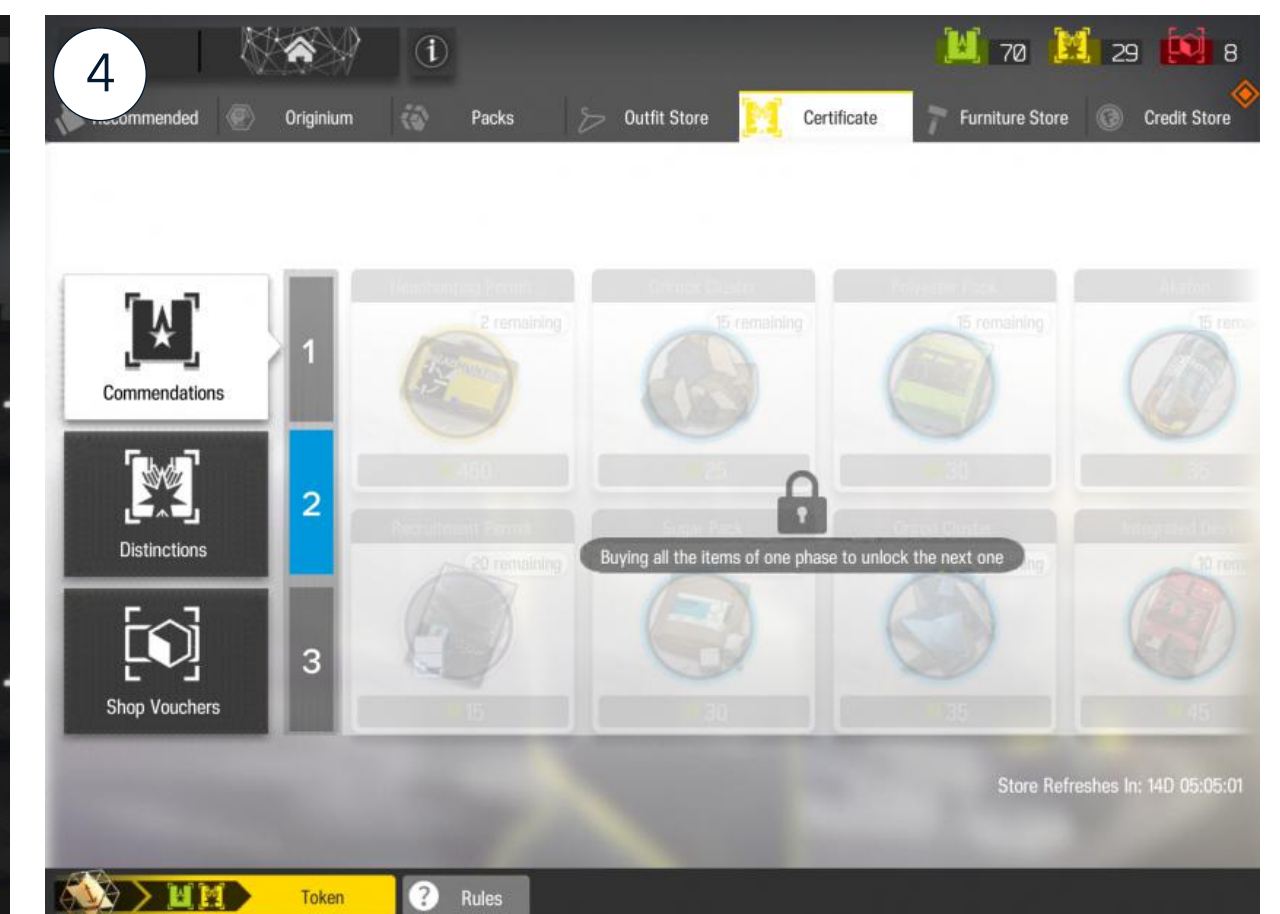
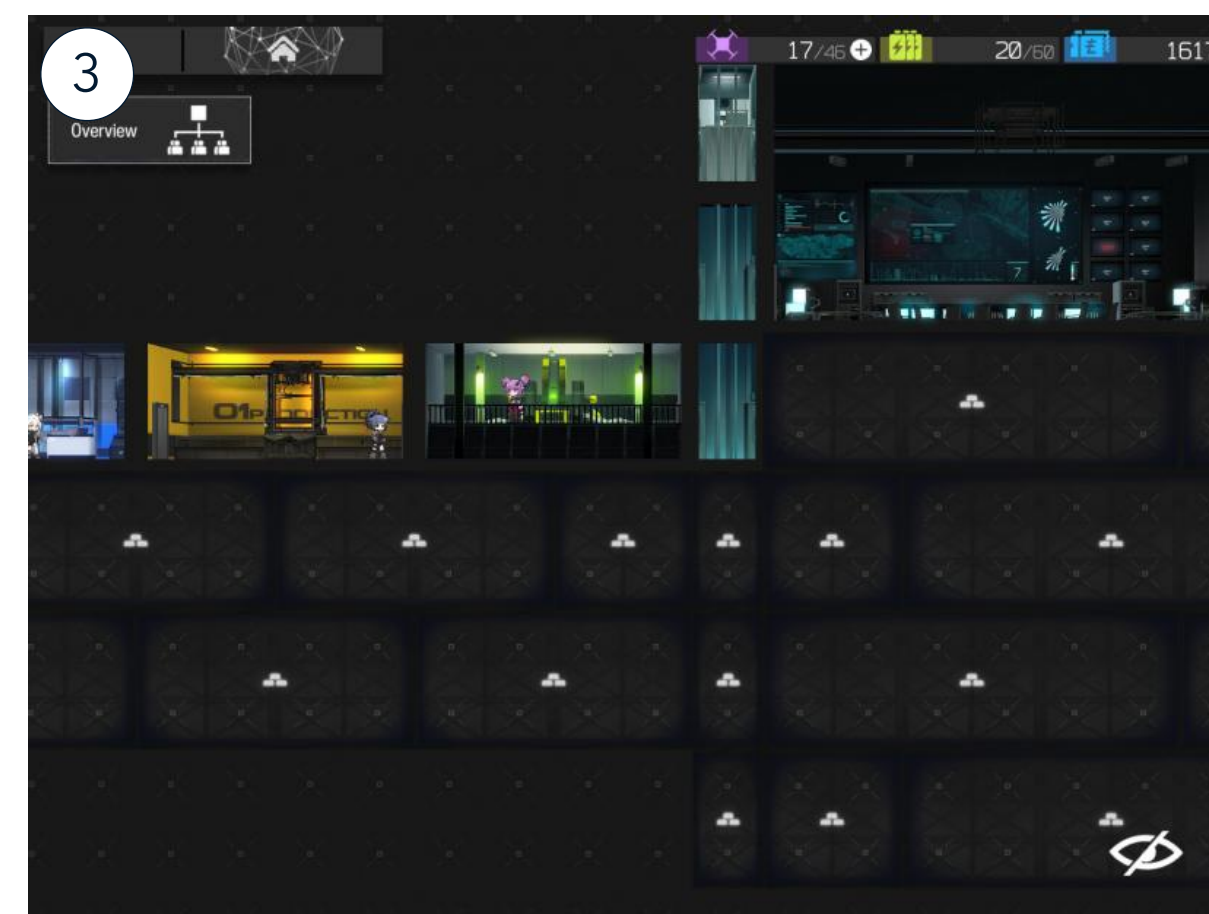
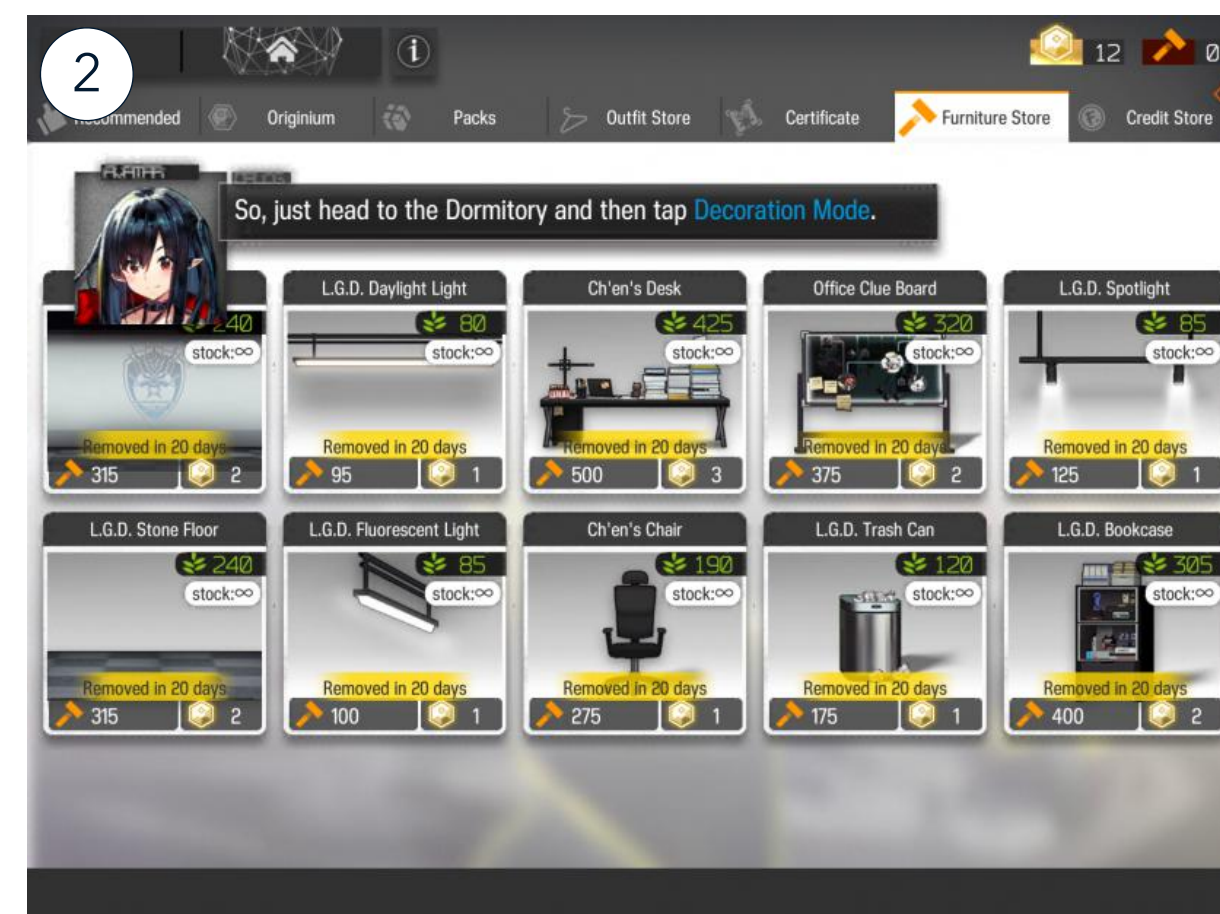
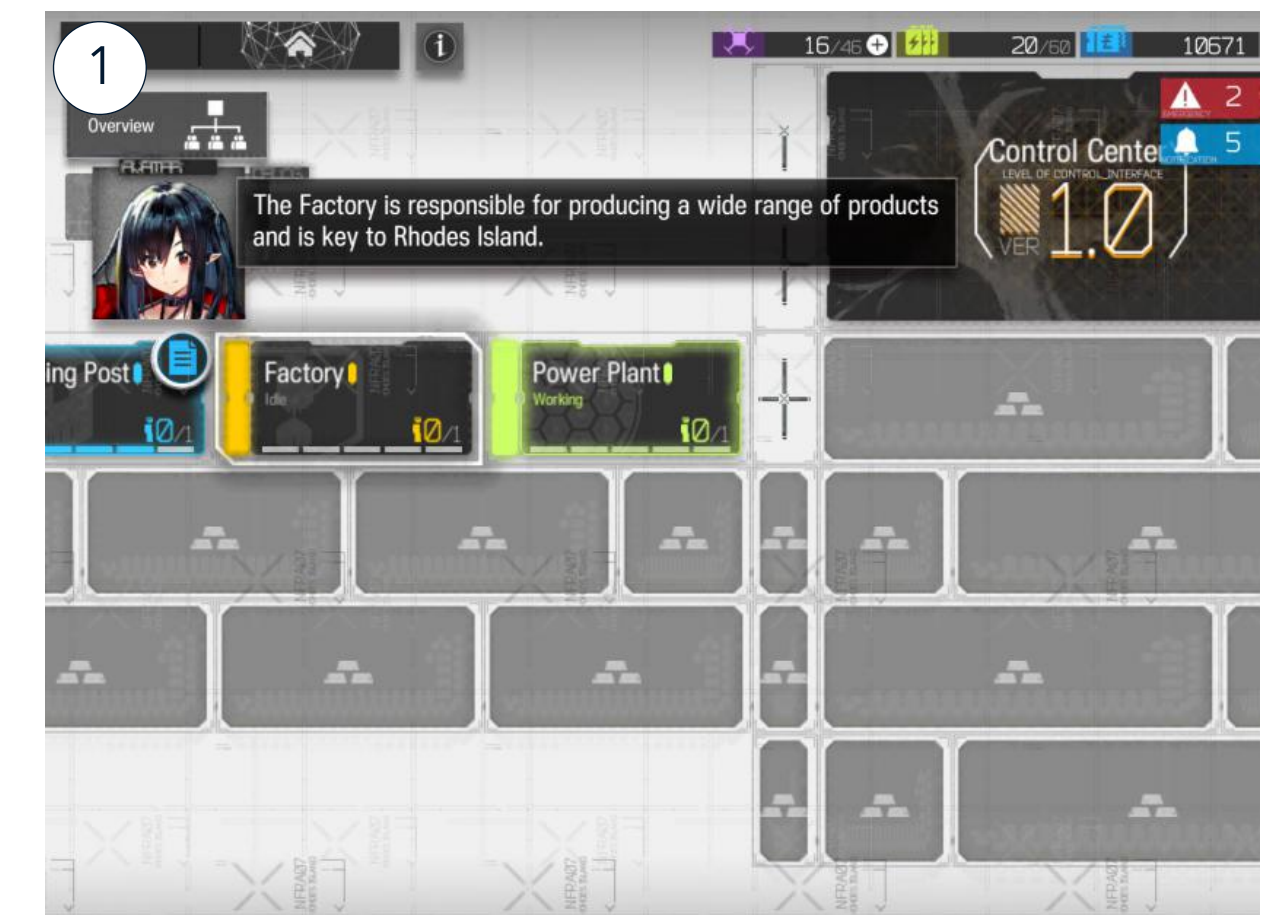
- Players build, upgrade, and decorate a base for their heroes ([1](#) and [2](#)).
- Heroes can be assigned to different facilities in the base ([3](#)).
- Each facility provides unique boosts.
- Players manage heroes to maintain their morale.

Store

- Multiple currencies are used to buy boosts, outfits, furniture, and more.
- Parts of the store have progressive phases that unlock after all items in the previous phase have been purchased ([4](#)).

Launch Information

- Go [here](#) to see more features.



REVENUE DRIVER



RPG > EVENTS > MINI-GAMES

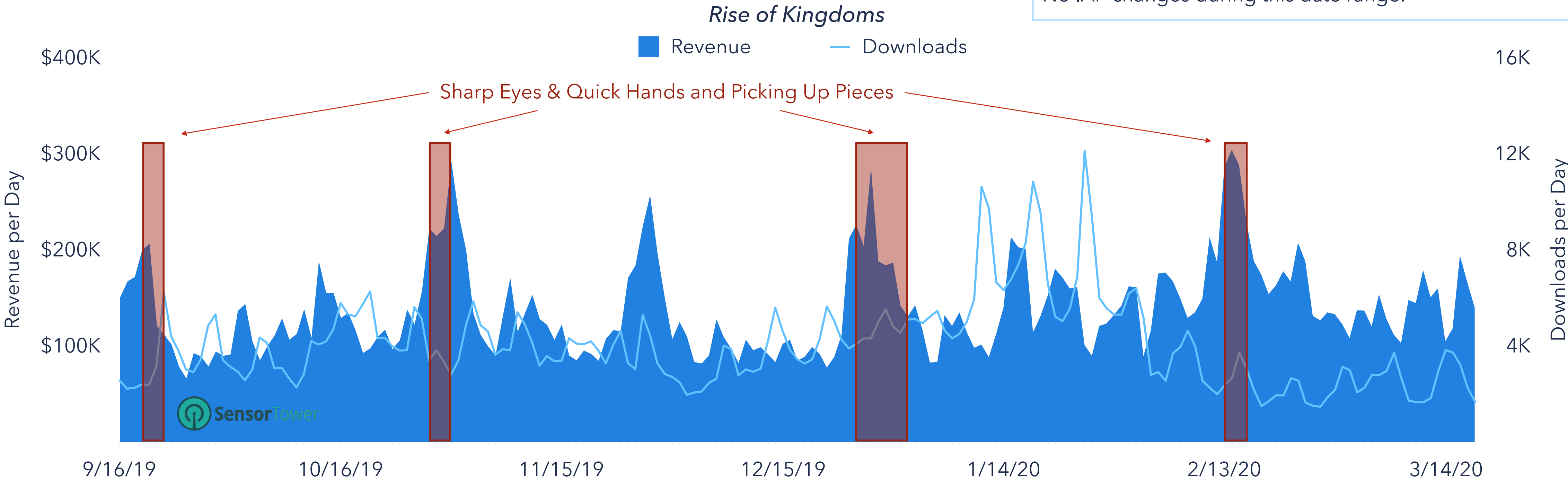
PUZZLE MINI-GAME EVENT

Sharp Eyes & Quick Hands and Picking Up Pieces in *Rise of Kingdoms*

REVENUE ANALYSIS

After the release of the Sharp Eyes & Quick Hands and Picking Up Pieces events in *Rise of Kingdoms*, revenue was +62% and downloads were +9% 4Do4D. The last four releases of these events have averaged +59% revenue for their durations.

Releases
2/10-2/17: Vow of Roses challenge event
2/10-2/19: Gifts of Affection interaction event
2/11-2/17: Recharge Rewards purchase event
2/12-2/17: Moonbreeze Romance purchase event
2/13: Overwhelming Strength accelerator event
2/13-2/16: Sharp Eyes & Quick Hands mini-game event
2/13-2/16: Picking Up Pieces collection event
2/14-2/15: Lord of War accelerator event
2/14-2/16: Ark of Osiris club event
2/15-2/16: Garden of Infinity mini-game event
2/15-2/17: Shadow Legion Invasion club event
No IAP changes during this date range.



Graph data is iOS U.S. only.
4Do4D = Four days of this week over the same four days of last week.

FEATURE TEARDOWN

Players complete tasks to collect puzzle pieces. Pieces are used to manually assemble puzzles with three reward tiers based on completion times.

Details

- Players earn puzzle pieces for helping alliance members, destroying barbarian forts, and making purchases ([1](#) and [video](#)).
- Collecting 35 pieces unlocks one of a series of three jigsaw puzzles ([2](#) and [3](#)).
- A timer tracks how quickly players manually complete the puzzle ([video](#)).
- Puzzles award three tiers of prizes based on completion times ([4](#)).
- The app tracks players' personal and kingdom-wide records ([5](#)).
- Players get 10 attempts to improve their times.

Additional Information

- See the [Sharp Eyes & Quick Hands](#) and [Picking Up Pieces](#) Libraries for more images and videos.



PRODUCT INSIGHTS

Design timed challenges with tiered reward goals and show players their personal records to boost engagement and reduce churn.

- **Add time pressure to boost engagement.** Research has found that time pressure increases player engagement and the frequency of flow states. This effect is even greater when players *fail* to accomplish the task.¹

This effect doesn't need to be limited to mini-games like Sharp Eyes & Quick Hands. In *Slotomania*'s [Leprechaun](#) event (+9.4% revenue WoW), players who make a purchase can win an additional percentage of that purchase by filling a meter within a time limit.

- **Reduce churn with replayable tiered challenge levels.** One study showed that tiered performance increased players' excitement by 34% compared to completion rewards.² By having three tiers of time goals and allowing multiple attempts, Sharp Eyes & Quick Hands ensures that the challenge is difficult, exciting, and achievable ([1](#)).

Panda Pop!'s [Panda Rescue](#) events let players opt in to three different challenge difficulties. These events averaged +11% revenue across 11 releases compared to the preceding periods.

- **Increase intrinsic motivation with personal best goals.** Sharp Eyes & Quick Hands further enhances motivation by showing players' personal best times for each puzzle alongside the best times in the kingdom ([2](#)). Multiple studies have found that the use of personal best goals is strongly correlated to increased intrinsic motivation, effort, and achievement.³

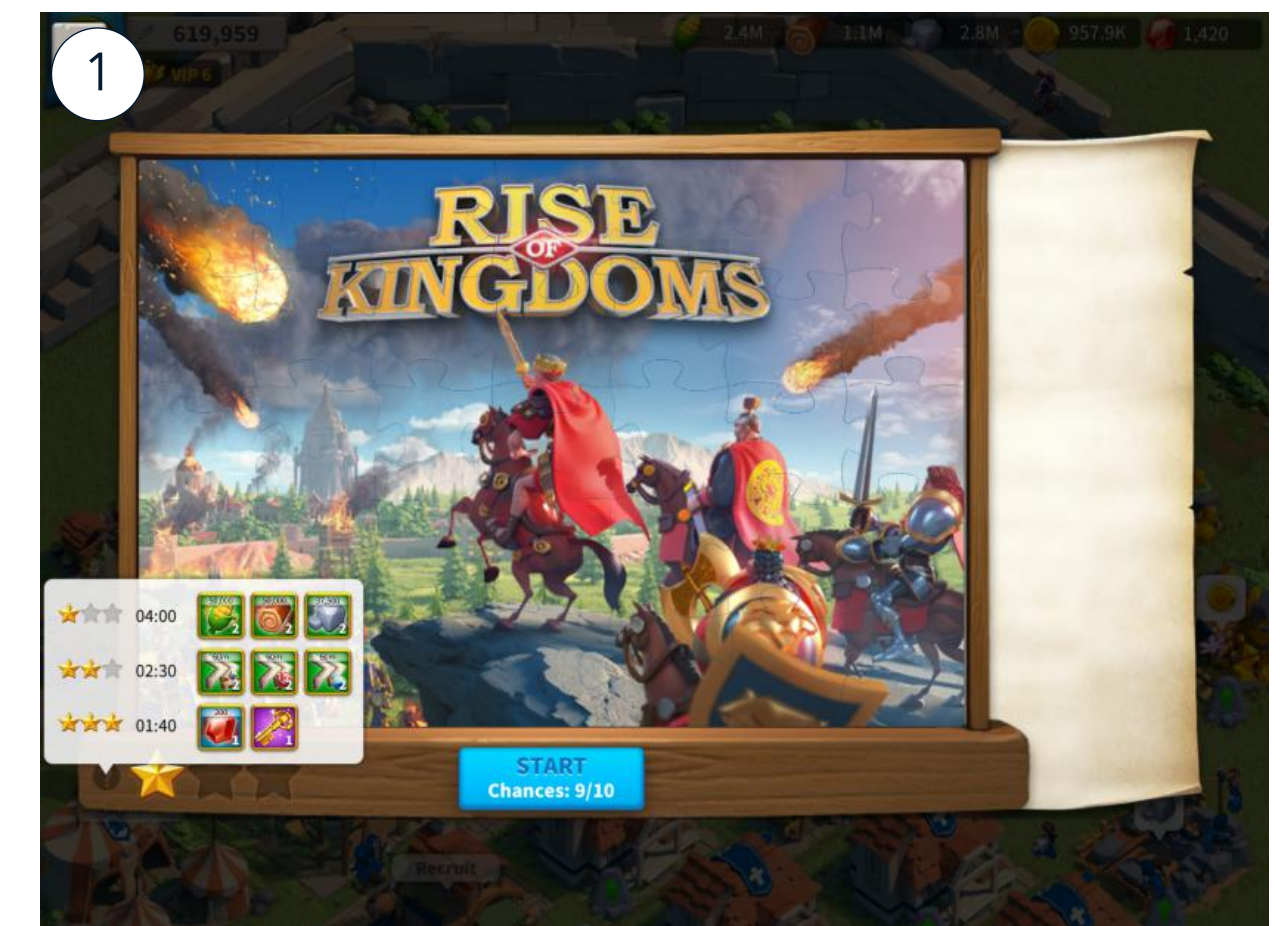
Personal best goals have the added benefit of mitigating any potentially demotivating effects from social comparison within leaderboards by ensuring that players always have an achievable goal to strive for.⁴ While not everyone can be the fastest in the kingdom, all players can aspire to improve their performance.

¹ [Time Pressure as Video Game Design Element and Basic Need Satisfaction](#), p. 33

² [Achievement-Based Rewards and Intrinsic Motivation: A Test of Cognitive Mediators](#), p. 647

³ [The interface between EFL learners' personal best goals and intrinsic motivation in predicting effort-regulation and language achievement](#), p. 27

⁴ [Personal bests \(PBs\): A proposed multidimensional model and empirical analysis](#), p. 27



NEW INNOVATION



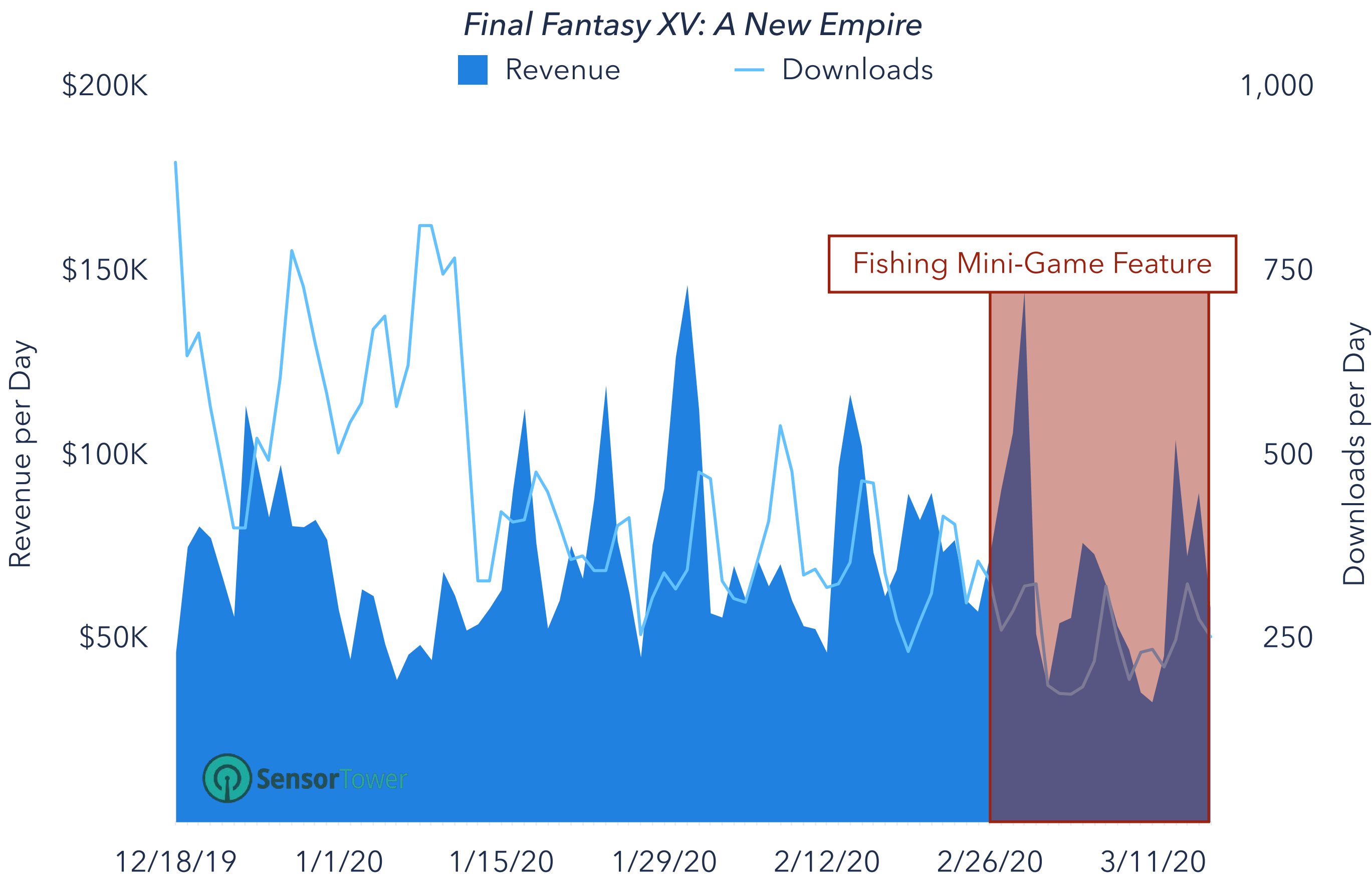
RPG > FEATURES > MINI-GAMES

FISHING MINI-GAME FEATURE

Fishing Mini-Game in *Final Fantasy XV: A New Empire*

REVENUE ANALYSIS

In the three weeks following the release of the fishing feature, revenue was -11% and downloads were -34% 3Wo3W.



Graph data is iOS U.S. only. 3Wo3W = 3 weeks over the previous 3 weeks.

Fishing Event Releases (through 3/20)	
2/26:	Fishing Mini-Game mini-game feature
2/26-2/27:	Fishing! mini-game event
2/27-2/28:	Ultimate Event Rewards rewards event
2/28-3/3:	Fishing For Days collection event
2/29:	Fishing! mini-game event
3/2:	Fishing! mini-game event
3/2-3/3:	Ultimate Event Rewards accelerator event
3/4-3/5:	Anglers Run mini-game event
3/6-3/13:	Ultimate Event Rewards accelerator event
3/7:	Anglers Run: Pink Jade Gar! mini-game event
3/8:	Keeping it Real collection event
3/10:	Anglers Run: Lucian Catfish! mini-game event
3/11:	Anglers Run: Golden Trout! mini-game event
3/12:	Anglers Run: Tide Grouper! mini-game event
3/13:	Anglers Run: Lucian Catfish! mini-game event
3/14:	Anglers Run: Snakehead! mini-game event
3/15:	Anglers Run: Nebula Salmon! mini-game event
3/16:	Anglers Run: Pink Jade Gar! mini-game event
3/16-3/17:	Ultimate Event Rewards accelerator event
3/17-3/18:	Anglers Run: Horned Bluegill! mini-game event
3/19:	Anglers Run: Snakehead! mini-game event
3/20:	Anglers Run: Pink Jade Gar! mini-game event

FEATURE TEARDOWN

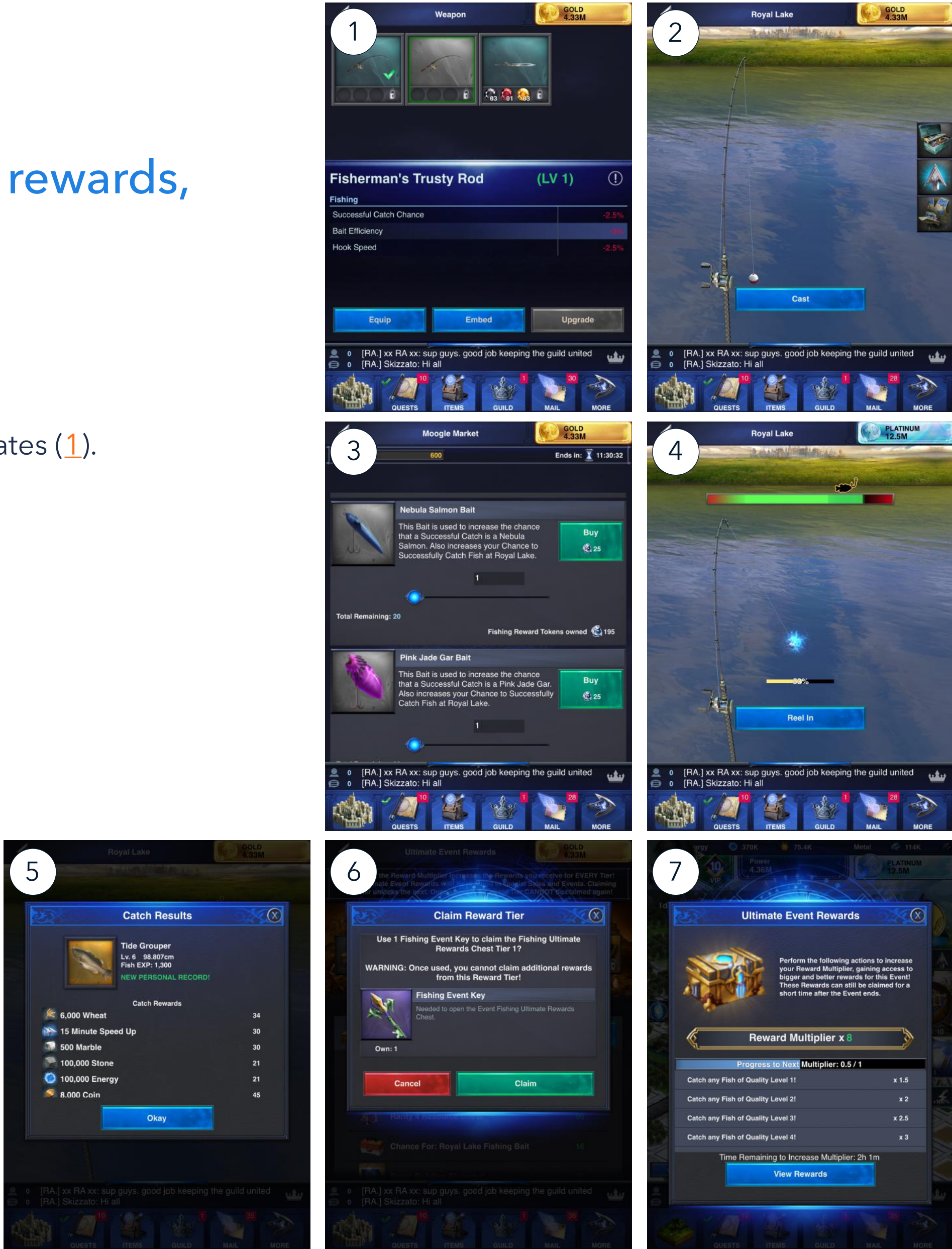
A skill-based fishing mini-game allows players to catch fish for rewards, level up their skills, and craft and upgrade equipment.

Details

- Fishing locations offer different challenges, fish, and rewards.
- Players level up their fishing skill to earn boosts and improve rewards.
- Gear can be crafted and upgraded to use less bait, increase bite frequency, or improve success rates (1).
- Players equip bait and cast their lines (2).
 - Different types of bait attract different kinds of fish (3).
 - Once a fish is hooked, a “Reel In” button appears.
 - Players tap or hold the button to keep a green meter aligned with a target area (4 and video).
 - If the meter reaches either end of the bar, the fish escapes.
 - Keeping the meter in the target area reduces the fish’s stamina.
 - Fully depleting the stamina meter allows players to catch the fish.
 - Fish award resources, currency, and boosts (5).
- Players purchase fishing keys with feature-specific currency to unlock timed reward chests (6).
- Caught fish add multipliers to chests (7).
- Players can view a collection of their best catches.

Additional Information

- See the [Fishing Mini-Game](#) Library for more images and videos.



PRODUCT INSIGHTS

Fishing mini-games are an RPG staple that offer a fun diversion from core content *and* a meaningful secondary progression. When making large feature investments, don't overlook less exciting components like event-specific promotions and purchase dialogues.

Product Insights

- Fishing mini-games add excitement and depth through novel mechanics and secondary progressions. Fishing mini-games are popular in RPGs across platforms, including *The Legend of Zelda* franchise, *Warframe*, *Final Fantasy XV*, *World of Warcraft*, and *Stardew Valley*, among others (1).⁵

The variety of fish, gear, skill levels, locations, exclusive loot, and competitions can form the basis for long-term progressions that parallel core gameplay. Because players are most intrinsically motivated to complete *optional* challenges,⁶ the secondary nature of these progressions is likely a key contributor to their popularity with fans.

- Drive revenue using event-specific IAP bundles that accelerate player progress. Despite a deep progression and robust daily event calendar, *Final Fantasy*'s revenue decreased by 11% in the three weeks following the release of its fishing mini-game. This contrasts starkly with the success of *Sharp Eyes & Quick Hands*—a comparatively simple puzzle mini-game that has seen an average revenue increase of 58% during its last four releases.

One possible explanation is a less effective IAP system. *Final Fantasy* offers bundles that consist of long, text-heavy lists of resources (2). These resources are not targeted to players' current context or the requirements of the fishing mini-game events. By comparison, *Rise of Kingdoms* allows players to purchase exactly the resources they want from a visually appealing store, while *Star Trek Fleet Command*'s *Mirror, Mirror* challenge event increased revenue by 11% by offering three tiers of event-specific IAP bundles in a highly visual format (3).

Get More Mini-Games Insights

Check out our [Mini-Games Wiki](#) for an in-depth look at all of our revenue drivers, innovations, and insights across genres.



⁵ [The Five Best Fishing Mini-Games](#)

⁶ [The Gamer's Brain, Part 3: The UX of Engagement and Immersion \(or Retention\)](#), 24:55

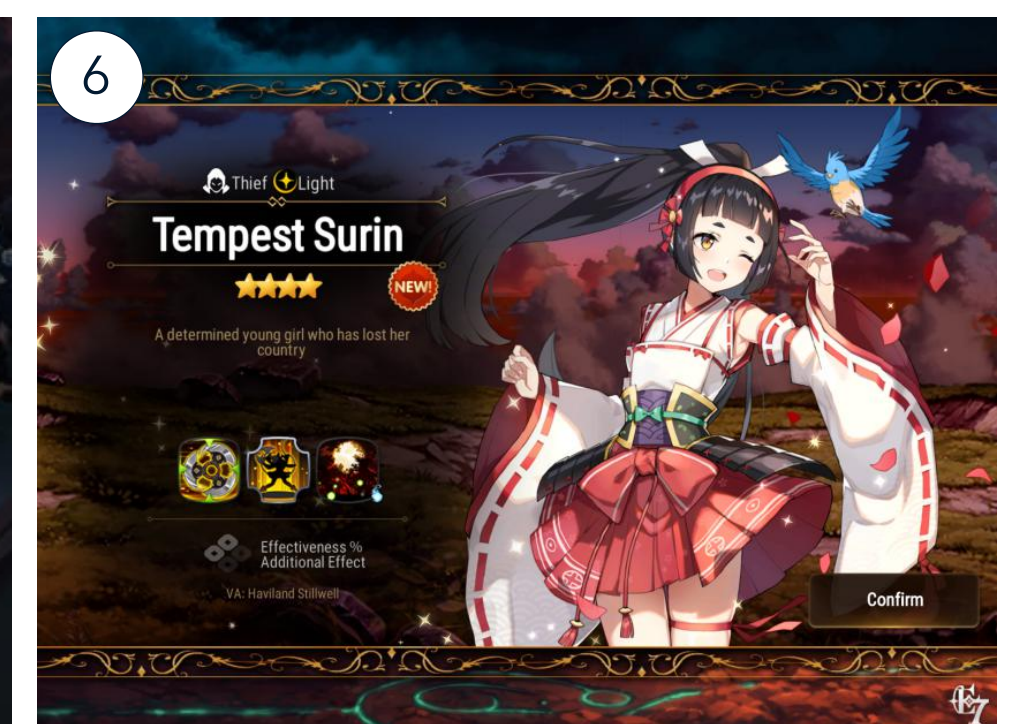
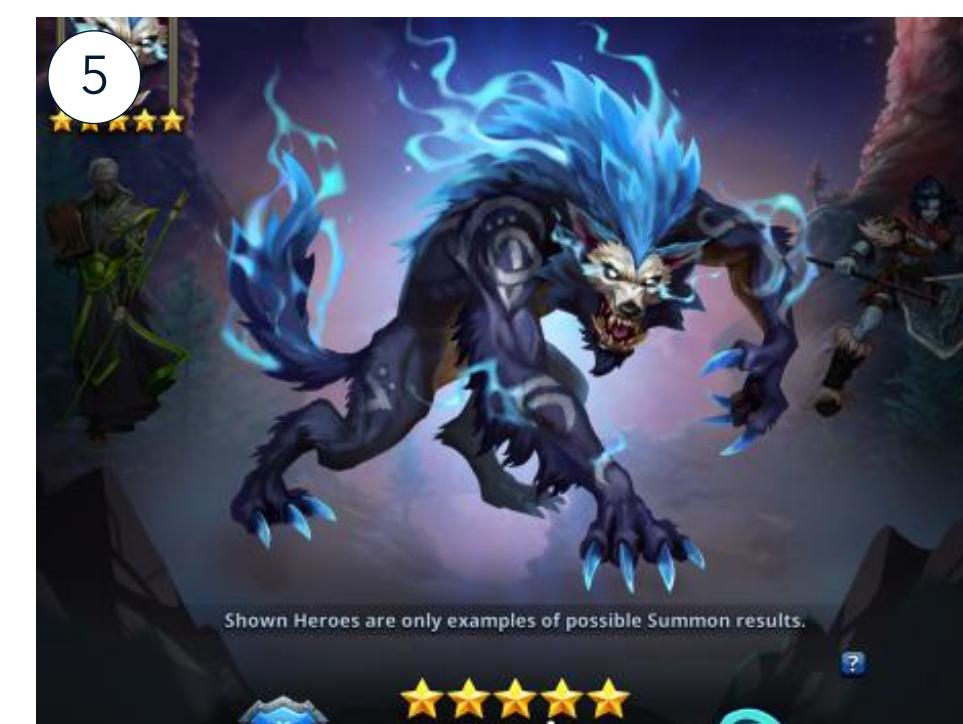
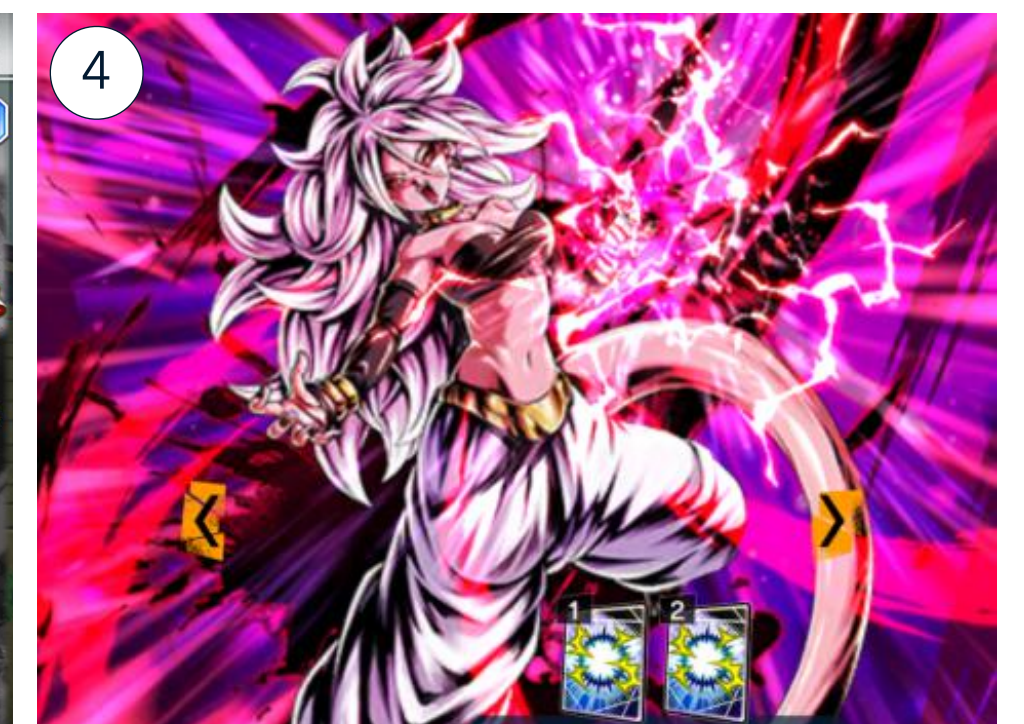
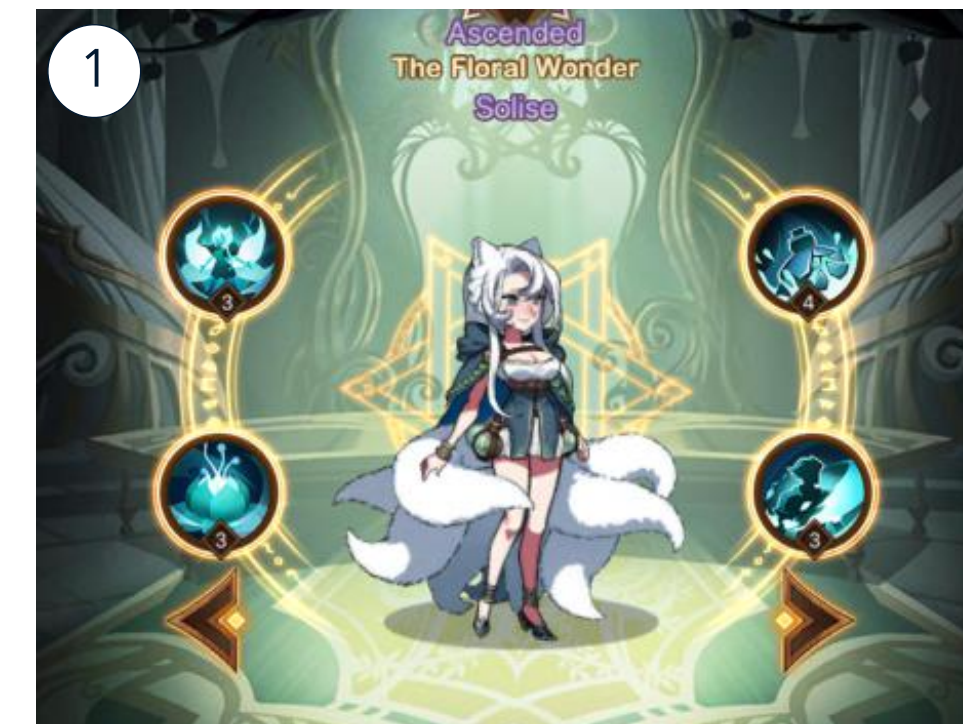
NEW CONTENT



CONTENT RELEASES I

RPG > Content > Abilities, Equipment, and Heroes

- 2/10: [Solise](#) – AFK Arena hero (1)
2/24: [Cecilia](#) – AFK Arena hero (2)
2/12: [2 New Accessories](#) – BLEACH Brave Souls equipment
2/16: [CFYOW Summons: Uncovered Truths: Wisdom](#) – BLEACH Brave Souls heroes (3)
2/29: [Thousand-Year Blood War Round 8](#) – BLEACH Brave Souls heroes
2/5: [You've earned yourself a little reward!](#) – Dragon Ball Legends equipment
2/12: [Android #21 and Android #21: Evil](#) – Dragon Ball Legends heroes (4)
2/12: [What does it matter?!](#) – Dragon Ball Legends equipment
2/12: [Awakened Oh, relax, will you? No. 1](#) – Dragon Ball Legends equipment
2/26: [Awakened I'm an Elite No. 1](#) – Dragon Ball Legends equipment
2/26: [Syn Shenron](#) – Dragon Ball Legends hero
2/26: [Baby Vegeta](#) – Dragon Ball Legends hero
2/1: [Jean-Francois](#) – Empires & Puzzles hero
2/27: [Valhalla Summon Heroes](#) – Empires & Puzzles heroes (5)
2/5: [New Exclusive Equipment](#) – Epic Seven equipment
2/20: [Tempest Surin](#) – Epic Seven hero (6)
2/20: [Hero Balance Adjustments](#) – Epic Seven abilities
2/20: [Mercenary Helga Specialty Change](#) – Epic Seven abilities
2/20: [Restrict Debuff](#) – Epic Seven ability
2/20: [Golden Cocoa Cookie](#) – Epic Seven equipment
2/20: [Bittersweet Dessert Festival](#) – Epic Seven equipment
2/27: [Cerise](#) – Epic Seven hero
2/27: [Guiding Light](#) – Epic Seven equipment
2/7: [Ravus Mastery Skills](#) – Final Fantasy XV: A New Empire abilities



CONTENT RELEASES II

RPG > Content > Abilities, Equipment, and Heroes

- 2/14: [Cindy Mastery Skills](#) – Final Fantasy XV: A New Empire abilities
2/28: [Luna Mastery Skill](#) – Final Fantasy XV: A New Empire ability
2/7: [Lovely Gifts](#) – Fire Emblem Heroes heroes (1)
2/8: [Silque: Selfless Cleric](#) – Fire Emblem Heroes hero
2/10: [Resplendent Lyn: Lady of the Plains](#) – Fire Emblem Heroes hero
2/17: [The Dread Isle](#) – Fire Emblem Heroes heroes (2)
2/18: [Heath: Wandering Knight](#) – Fire Emblem Heroes hero
2/25: [Resplendent Cordelia: Knight Paragon](#) – Fire Emblem Heroes hero
2/27: [Chrom: Crowned Exalt](#) – Fire Emblem Heroes hero
2/3: [Shadow Gemstone](#) – Guns of Glory equipment
2/19: [Netherfall Summoning](#) – King of Avalon: Dragon Warfare heroes (3)
2/1: [Cyclops](#) – MARVEL Strike Force hero
2/11: [Symbiote Spider-Man](#) – MARVEL Strike Force hero (4)
2/20: [Toad](#) – MARVEL Strike Force hero
2/10: [Valla](#) – Raid: Shadow Legends hero (5)
2/12: [Battle Pass Season 1 Champions](#) – Raid: Shadow Legends heroes
2/12: [Battle Pass Season 1 Buffs and Debuffs](#) – Raid: Shadow Legends abilities
2/12: [Champion Rebalances](#) – Raid: Shadow Legends abilities
2/13: [Valentine's Champions](#) – Raid: Shadow Legends heroes
2/14: [Rotos the Lost Groom](#) – Raid: Shadow Legends hero
2/19: [The Vi'dar](#) – Star Trek Fleet Command hero
2/12: [Raddus](#) – Star Wars: Galaxy of Heroes hero
2/27: [Veteran Han and Chewie Update](#) – Star Wars: Galaxy of Heroes abilities
2/28: [Finalizer](#) – Star Wars: Galaxy of Heroes hero (6)
2/28: [Hunted](#) – Star Wars: Galaxy of Heroes ability



MARKET WATCH



NOTABLE RELEASES I

App	Library	Description
AFK Arena	Floral Flirtation competition event	<ul style="list-style-type: none">• Players earn roses by making purchases or replaying the labyrinth.• Roses can be gifted to other players.• Players are ranked by how many roses they receive.• The event awards four exclusive Valentine’s Day frames based on ranks (1).
	Wu Kong – The Monkey King interaction feature	<ul style="list-style-type: none">• An in-app sharing feature lets players post accomplishments on Facebook (video).• Using the feature twice awards an elite hero (2).
Empires & Puzzles	Season III expansion feature	<ul style="list-style-type: none">• This new season unlocks after players progress to a certain point in the previous season.• The season includes a major expansion of the world map, new heroes, new summons events, and a new match-3 mechanic.
Epic Seven	Bittersweet Dessert Festival Side Story quest event	<ul style="list-style-type: none">• This side story—a reskinned event—adds puzzle piece rewards.• Pieces are used to complete albums of artwork for rewards and story content (3 and video).• The event consists of six stories, with two released each week.
Fire Emblem Heroes	Feh Pass rewards feature	<ul style="list-style-type: none">• This \$9.49 monthly subscription grants two heroes per month, access to exclusive quests, a redo turn option, two additional support slots, and an automatic replay option (4).

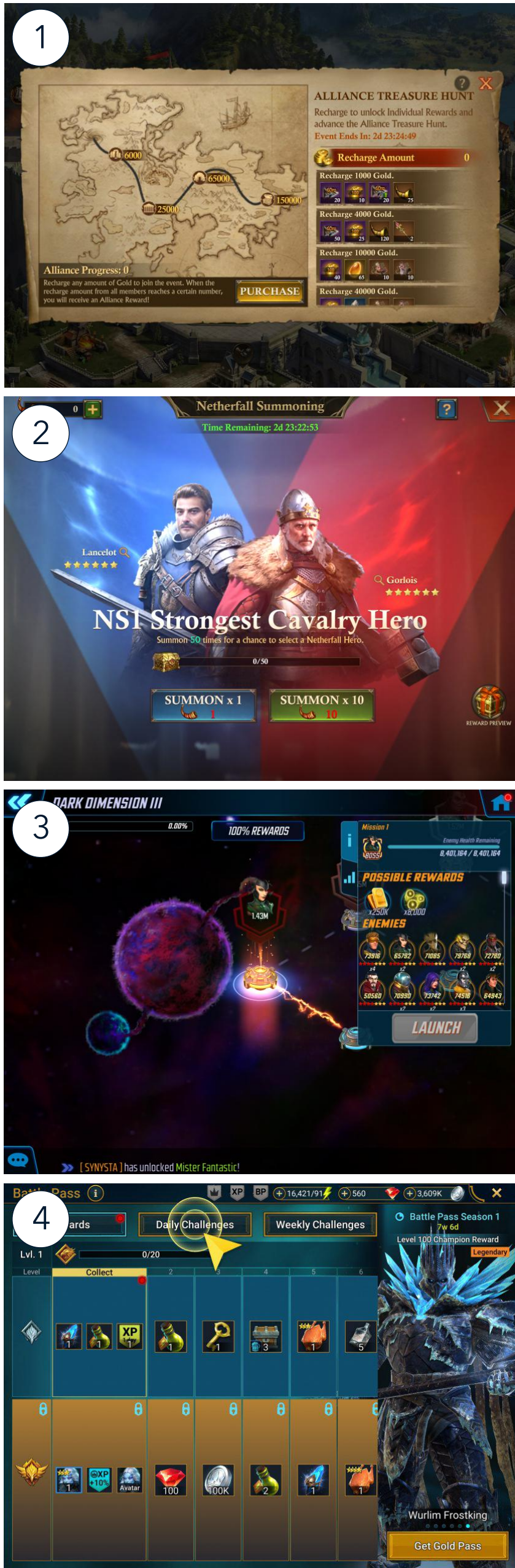


NOTABLE RELEASES II

App	Library	Description
King of Avalon	Alliance Treasure Hunt purchase event	<ul style="list-style-type: none">• Players purchase gold to earn individual and alliance rewards at milestones (1).<ul style="list-style-type: none">• Rewards include currency, hero fragments, and summoning horns.• During the concurrent Netherfall Summoning event, legendary summoning horns award resources and hero fragments.<ul style="list-style-type: none">• Players can exchange hero fragments for horns or purchase horns from the store.• Completing 50 summons awards the chance to summon one of two new heroes (2).
MARVEL Strike Force	Dark Dimension III expansion feature	<ul style="list-style-type: none">• This expansion to the quest map includes 16 missions (3).• After completing all missions, players can replay a timed run for an exclusive summons reward.• The first person to complete the expansion will be recognized by the developer in a future event.
Raid: Shadow Legends	Battle Pass missions feature	<ul style="list-style-type: none">• Players complete challenges to level up a battle pass.• Each level triggers rewards (4).• A \$24.99 gold pass adds a second tier of rewards.
Star Trek Fleet Command	Ceasefire conflict feature	<ul style="list-style-type: none">• Following server downtime, players will not be able to attack other players' stations for a certain amount of time.• Players can attack ships, but doing so will remove their own ceasefire protection.
Summoners War	Mission! Bingo Event mini-game event	<ul style="list-style-type: none">• Players beat challenges to complete bingos on a tic-tac-toe-style board.

Quickly review all features and events

Filter the [Library Tool](#) by month and year to see all new releases.



APPENDIX



PREMIUM PARTNERSHIPS

Liquid & 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</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</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 with economists, psychologists, game scholars, and data scientists.</p>	<p>Mobile App Store Intelligence</p> <p>Sensor Tower</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.



RPG MECHANICS TAXONOMY

Family	Definitions
Accelerators	Increases the power, impact, or efficiency of play
Banks	Saves a % of spend that can be unlocked later
Bonuses	Free bonuses given to players (e.g., retention or W2E)
Challenges	Goal-oriented tasks for players to complete
Clubs	Groups that accomplish goals or compete with other groups
Collections	A set of items players collect (often for a completion prize)
Competitions	Players competing against other players
Conflicts	Players engaging in battle with their characters
Cosmetics	Improvements or updates to the app or a feature
Currencies	Changes to currencies, economies, stores, and items
Custom Design	Options to customize aesthetics
Expansions	Additional rooms, worlds, play modes, VIP lounges, etc.
Flows	Specific flows, like the NUX, ratings, and surveys

Family	Definitions
Hazards	Level elements/blockers that make levels more difficult
Interactions	Social features with direct or indirect interaction
Leaderboards	Stand-alone leaderboards
Levels	Anything to do with leveling
Mini-Games	Smaller, shorter games within a game (e.g., scratcher cards)
Missions	Linear sets of tasks that players must complete
Notices	Feature or product announcements
Other	Miscellaneous features and outliers
Profiles	Players' setups, profiles, settings, and controls
Purchases	Anything to do with purchases
Quests	Tasks that players complete to progress along a map.
Rewards	Rewards players receive for engagement or spend (other than those in the bonuses family)

"If there is nothing but what we make in this world ... let us make good."

– Beta Ray Bill, *The Green of Eden Vol. 1*

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