LIQUID&GRIT

CASUAL REPORT

Competitive Research and Actionable Product Recommendations

Table of Contents

May

2022

IMPACT DRIVER

Features and events that boost revenue, retention, or downloads

Chain Reward Purchase Event

Endless Marathon in *Toon Blast*

Purchase events are events in which the main mechanic involves players spending money in exchange for currency or other rewards.

4

REVENUE ANALYSIS

After the release of the Endless Marathon purchase event, *Toon Blast*'s revenue grew 21% MoM and 19% 2Mo2M. Endless Marathon usually runs for 1–4 days with 1–7 days between each release.

This event significantly boosted *Toon Blast*'s peak revenue days as well as its revenue floor. Comparing the two months after the release of Endless Marathon to the two preceding months, *Toon Blast*'s 10 highest single-day revenue numbers were 32.5% higher and the 10 lowest were 11.7% higher.

Toon Blast

Revenue — Downloads
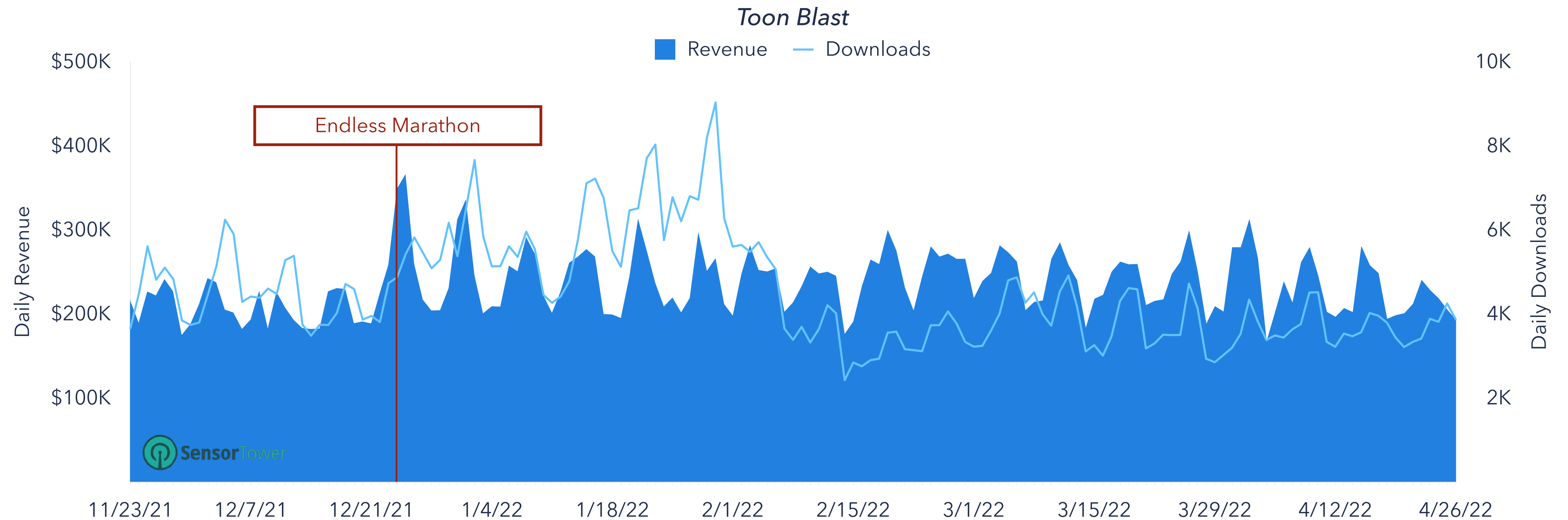
Graph data is iOS, U.S. only.

XMoXM = X months over the preceding X months.

5

FEATURE TEARDOWN

In Endless Marathon, players claim an unlimited series of free rewards with intermittent paid offers that they must buy in order to continue the series.

Details
- A page shows a series of six rewards (1 and video).
  - The fourth reward is a paid offer; the other five rewards are free.
- Players must claim the rewards in order.
- Claiming a reward removes it from the page and adds another reward to the end of the series.
- When players reach a paid offer, they must buy it to continue advancing (2).
  - After players buy the first paid offer, every sixth reward is a paid offer.
- Players can advance through an unlimited number of rewards until the event ends.
- In an alternate version of the event, players are shown three rewards at a time (3 and video).
  - In this version, every third reward is a paid offer.

Additional Information
- See the Endless Marathon gallery for more images and videos.

PRODUCT INSIGHTS

By offering the majority of rewards for free, *Toon Blast*'s Endless Marathon makes players feel like they're getting a better value.

Studies show that people perceive free rewards to be more valuable, which makes any spending required to obtain those rewards seem less costly.[1] As a result, players feel like it's a smart decision to spend a small amount of money to gain access to a whole series of "free" rewards (1).

Events that chain together a mix of free and paid rewards are a big trend in the casual market: They appear in *Wheel of Fortune: Show Puzzle*'s Sweet Fortune, *Royal Match*'s Endless Treasure, *Bubble Pop Origin!*'s Infinite Treasure, and *Harry Potter: Puzzles and Spells*' Dervish and Banges Tower of Treasure. Collectively, these events produced an average revenue impact of 6.1% WoW across 10 releases.

Right now, all of these events are extremely similar, so we expect to see significant experimentation in the future. For example, apps could introduce novel progression systems or different ratios of free and paid rewards.

**Endless Marathon's unlimited rewards create a sense of incompleteness that makes those rewards more memorable.**

True to its name, Endless Marathon's reward progression continues indefinitely as long as players keep making purchases. Research has found that incomplete tasks like Endless Marathon are easier to remember than completed ones.[2] This effect makes players more likely to think about the rewards they could collect–and therefore more likely to make a purchase to collect them.

Farm Heroes Saga's Chain Deal! also makes good use of this effect by grouping rewards into sets of one free reward and two paid offers. Then, the event awards additional currency when players complete a set (2).
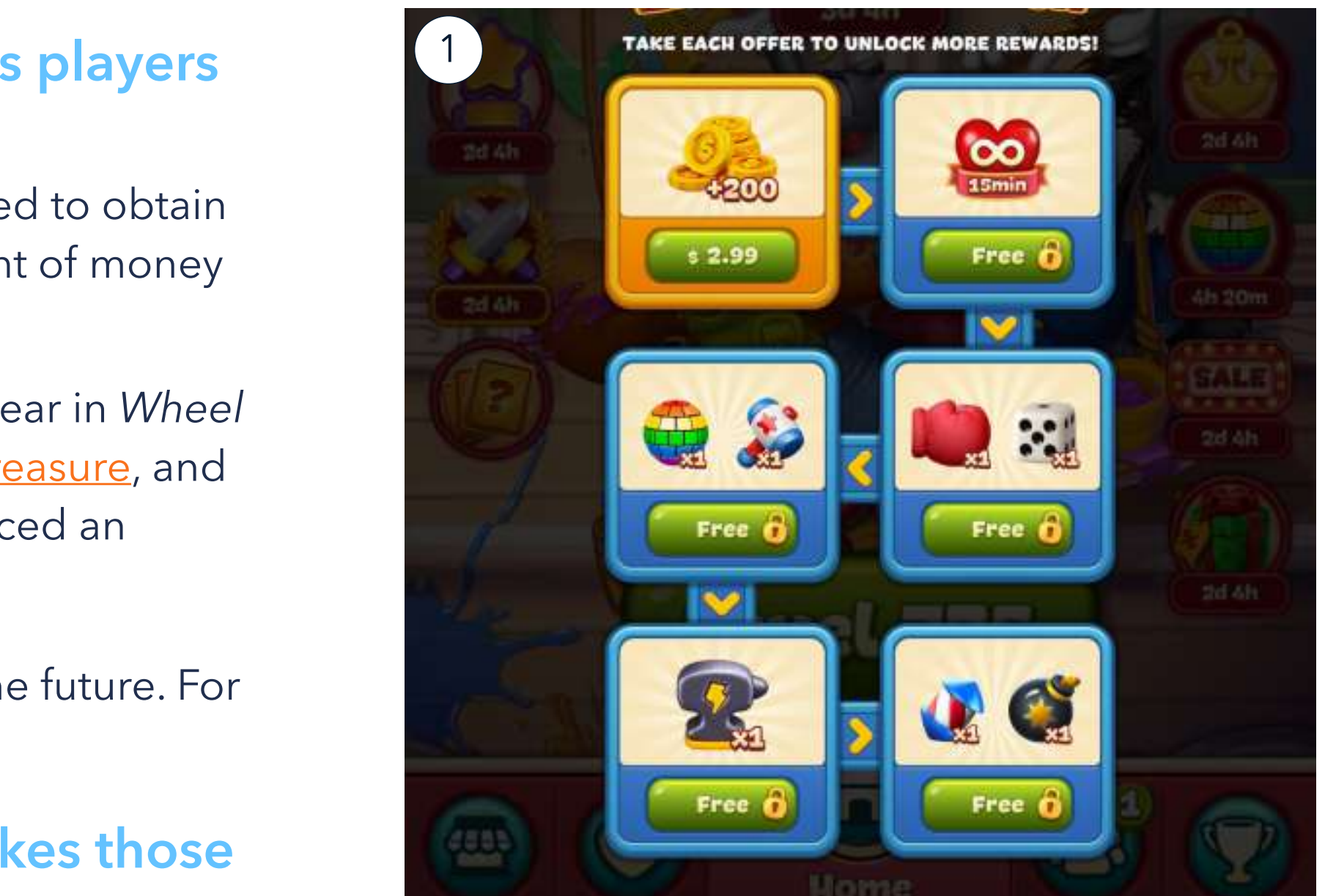
WoW = Week over the preceding week.

RELEASE TRENDS
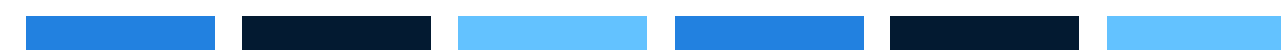
Revenue impacts and trends for features and events

Tracked puzzle apps: *Angry Birds 2*, *Angry Birds Dream Blast*, *Angry Birds Friends, Best Fiends, Bubble Pop Origin!*, *Bubble Shooter - Pop Bubbles*, *Bubbles Empire Champions, Bubble Witch 3 Saga, Candy Crush Saga, Candy Crush Soda Saga, Elevate, Evermerge, Farm Heroes Saga, Fishdom, Gardenscapes, Gummy Drop!, Harry Potter: Puzzles & Spells, Hidden City, Homescapes, Jeopardy! Trivia Quiz Game, June's Journey, Lily's Garden, Match 3D, Merge Dragons!, Merge Magic!, Panda Pop!, Project Makeover, Royal Match, Seekers Notes: Hidden Mystery, Toon Blast, Toy Blast, Traffic Puzzle, Trivia Crack, Trivia Star, Two Dots, Wheel of Fortune: Show Puzzles, Who Wants to Be a Millionaire?, Word Collect, Word Crush, Wordscapes, Words With Friends 2*, and *World of Peppa Pig*

Tracked simulation apps: *Animal Crossing: Pocket Camp, Cooking Diary, Cooking Fever, Cooking Madness-Kitchen Frenzy, Diner DASH Adventures, Disney Magic Kingdoms, Dragon City Mobile, Family Island, Grand Hotel Mania, Harry Potter: Hogwarts Mystery, Hay Day, Klondike Adventures, Monster Legends, My Singing Monsters, Roblox, The Grand Mafia, The Sims FreePlay*, and *Township*

Tracked lifestyle apps: *Chapters: Interactive Stories, Choices: Stories You Play, Covet Fashion, Design Home, Episode - Choose Your Story, Kim Kardashian: Hollywood, Obey Me!, Redecor*, and *Time Princess*

Tracked tabletop apps: *Board Kings, Mahjong Jigsaw Puzzle Game, Phase 10: World Tour, Solitaire Cruise Tripeaks, Solitaire Grand Harvest, Solitaire TriPeaks, Spades Plus - Card Game, UNO!, Yahtzee with Buddies Dice*, and *Yalla Ludo*

CASUAL EVENT REVENUE IMPACTS

Purchase events have a very high average revenue impact of 4.6% WoW but a relatively low median of 0.6% WoW. This discrepancy is reflected in their high standard deviation of ±20.8%.

Event Mechanic	Average Revenue WoW	Median Revenue WoW	Standard Deviation	Release Count
Purchases	4.6%	0.6%	±20.8%	283
Mini-Games	3.9%	3.5%	±16.8%	107
Rewards	2.7%	1.3%	±18.6%	84
Challenges	2.7%	1.4%	±16.5%	309
Custom Design	2.2%	-0.1%	±13.1%	102
Competitions	2.2%	1.0%	±14.2%	252
Collections	1.5%	0.2%	±17.4%	270
Missions	1.3%	0.0%	±16.6%	194
Levels	0.9%	1.8%	±12.6%	75
Quests	0.2%	-0.5%	±11.7%	204

Data includes event types with 50 or more releases by tracked casual apps between 4/1/21–3/31/22.

Data excludes outlier releases with revenue impacts that exceed -40/80% WoW.

WoW = Week over the preceding week.

App revenue data provided by Sensor Tower.

9

PURCHASE EVENTS BY GENRE

However, purchase events perform poorly in the puzzle genre, which includes *Toon Blast.* They perform significantly better in the lifestyle and simulation genres.

Genre	Subgenre	Average Revenue WoW	Median Revenue WoW	Standard Deviation	Release Count
Lifestyle	Customization	9.6%	0.1%	±29.1%	69
Lifestyle	Interactive Story	8.0%	7.9%	±20.2%	22
Puzzle	Classic Match-3	2.8%	-1.3%	±20.6%	71
Simulation	Tycoon/Crafting	1.6%	1.9%	±15.2%	15
Puzzle	Puzzle and Decorate	-0.9%	0.2%	±8.2%	34
Puzzle	Bubble Shooter	-2.0%	-1.7%	±8.8%	39

Data includes subgenres with 15 or more purchase event releases by tracked casual apps between 4/1/21–3/31/22.

Data excludes outlier releases with revenue impacts that exceed -40%/80% WoW.

WoW = Week over the preceding week.

App revenue data provided by Sensor Tower.

QUARTERLY PURCHASE EVENT RELEASES

The number of purchase events released by top-grossing casual apps grew sharply in Q4'20 and has remained quite stable since then. During the past year, *Toon Blast* released 76% fewer purchase events than the market average.

To receive updates on new releases from specific apps, try our new Tracker Tool.

Purchase Events Released per App
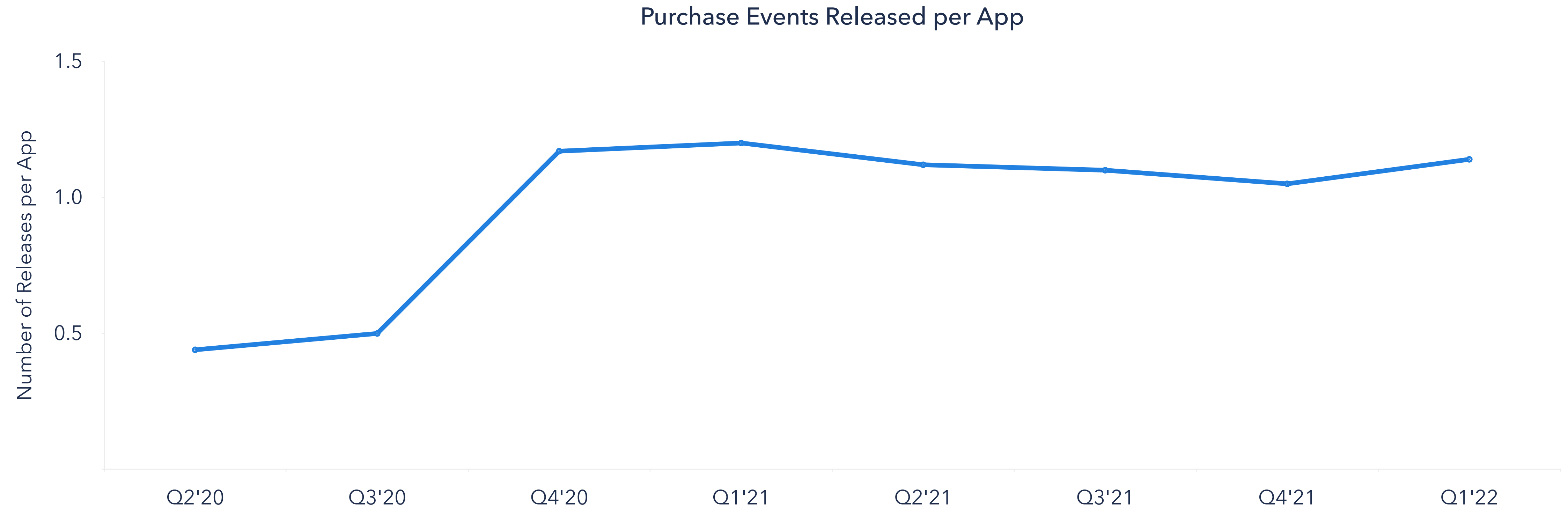
MARKET WATCH

New apps and notable releases from established competitors

SOFT-LAUNCH APP

City Life by Zynga Inc.

City Life combines merge, sim, and tycoon mechanics: Buildings generate traffic and resources, hero characters complete tasks around the city, and players visit each other's cities to play mini-games.

App Details
- Players construct buildings and roads to develop a city.
  - Buildings send vehicles to other buildings to generate currency and resources.
  - Decorations boost nearby buildings.
- Players spend currency to merge buildings, which upgrades them (1).
- At population milestones, players unlock advisors that offer challenges (2).
  - Completing all of an advisor's challenges advances players in the main progression.
- Advancing in the main progression unlocks new areas, buildings, heroes, and abilities.
  - Heroes can be assigned tasks to earn resources.
- Players can build attractions that offer mini-games (3).
 - Players can visit other players' cities and play their mini-games (4).

Launch Information
- Soft-launched on 4/2/22 in the Philippines and Indonesia
- Average daily revenue since soft-launch: $16
- Average daily downloads since soft-launch: 417
- View *City Life* on the App Store

> **Liquid & Grit's Take**
>
> *City Life*'s decision to have players merge buildings directly on the city grid is both technically impressive and a welcome innovation in the merge subgenre.
>
> If Zynga can add more depth to the app's core loops before launch, they could find a sweet spot between casual merge and mid-core sim that is currently unoccupied in the casual market.
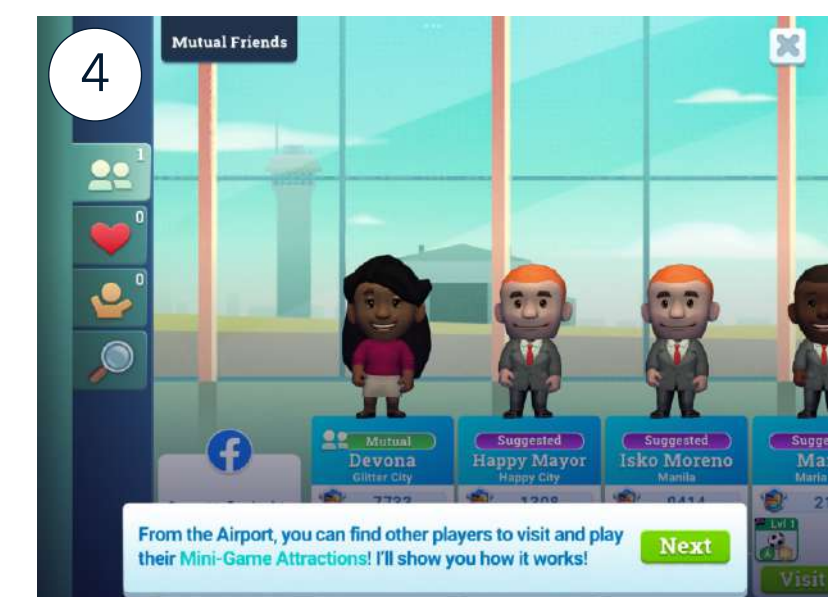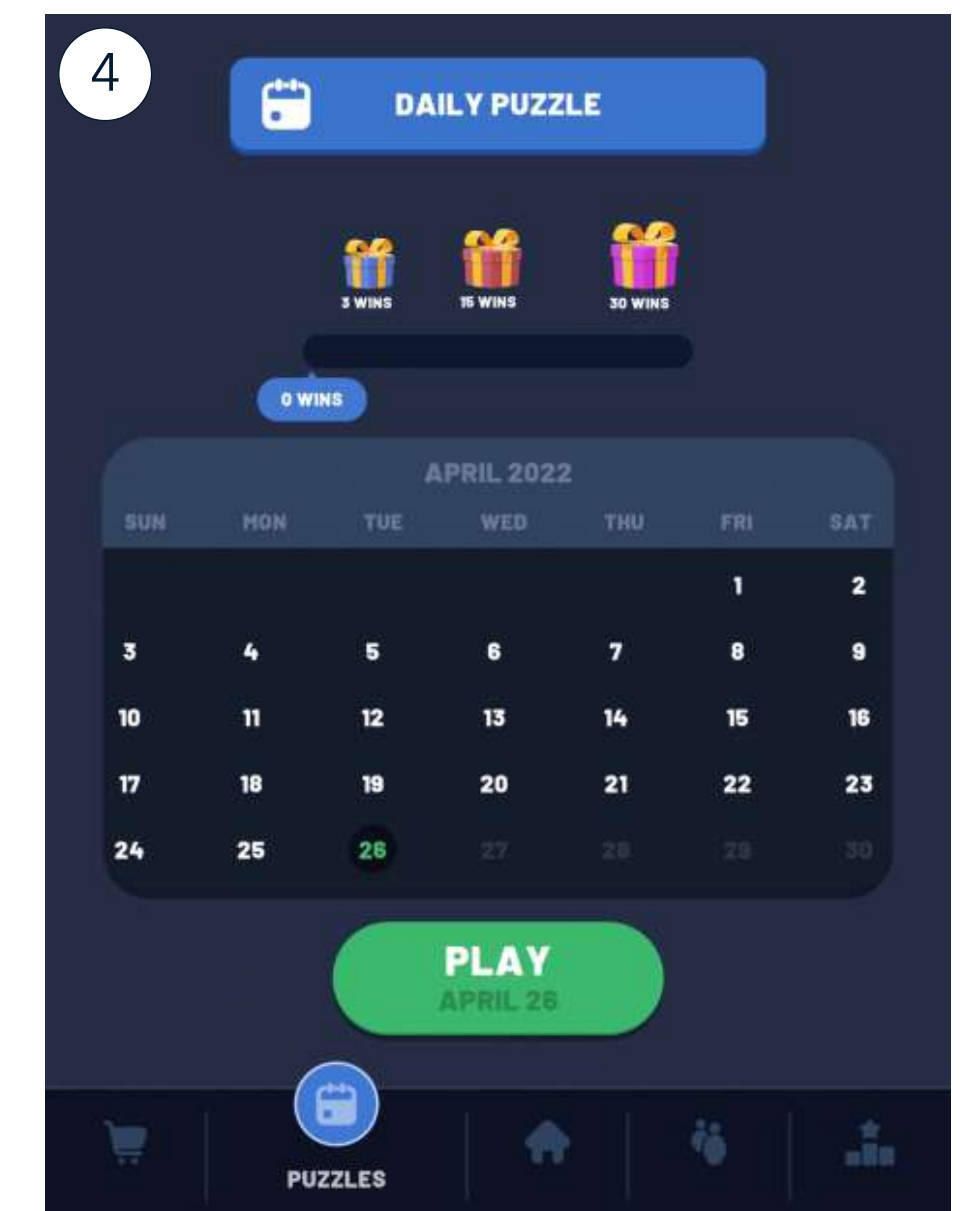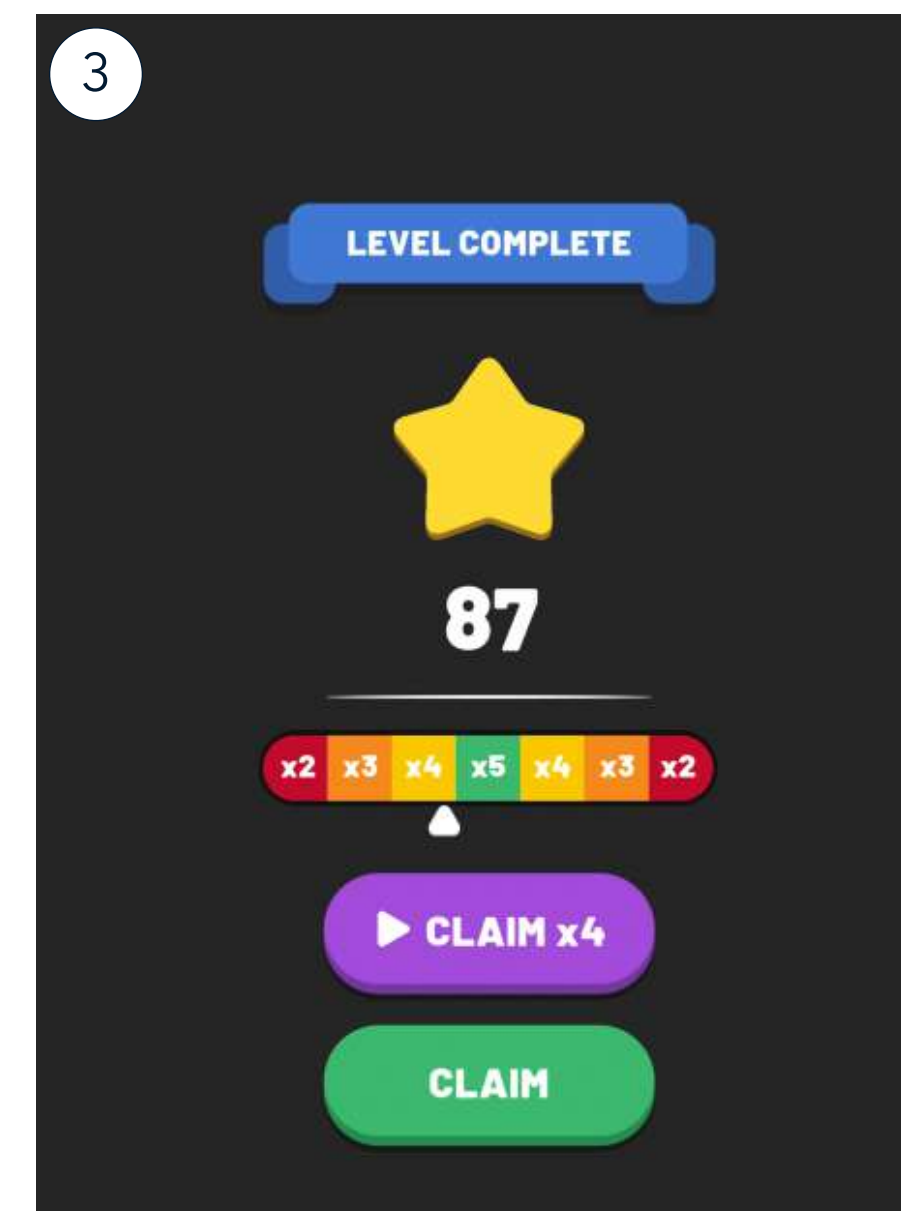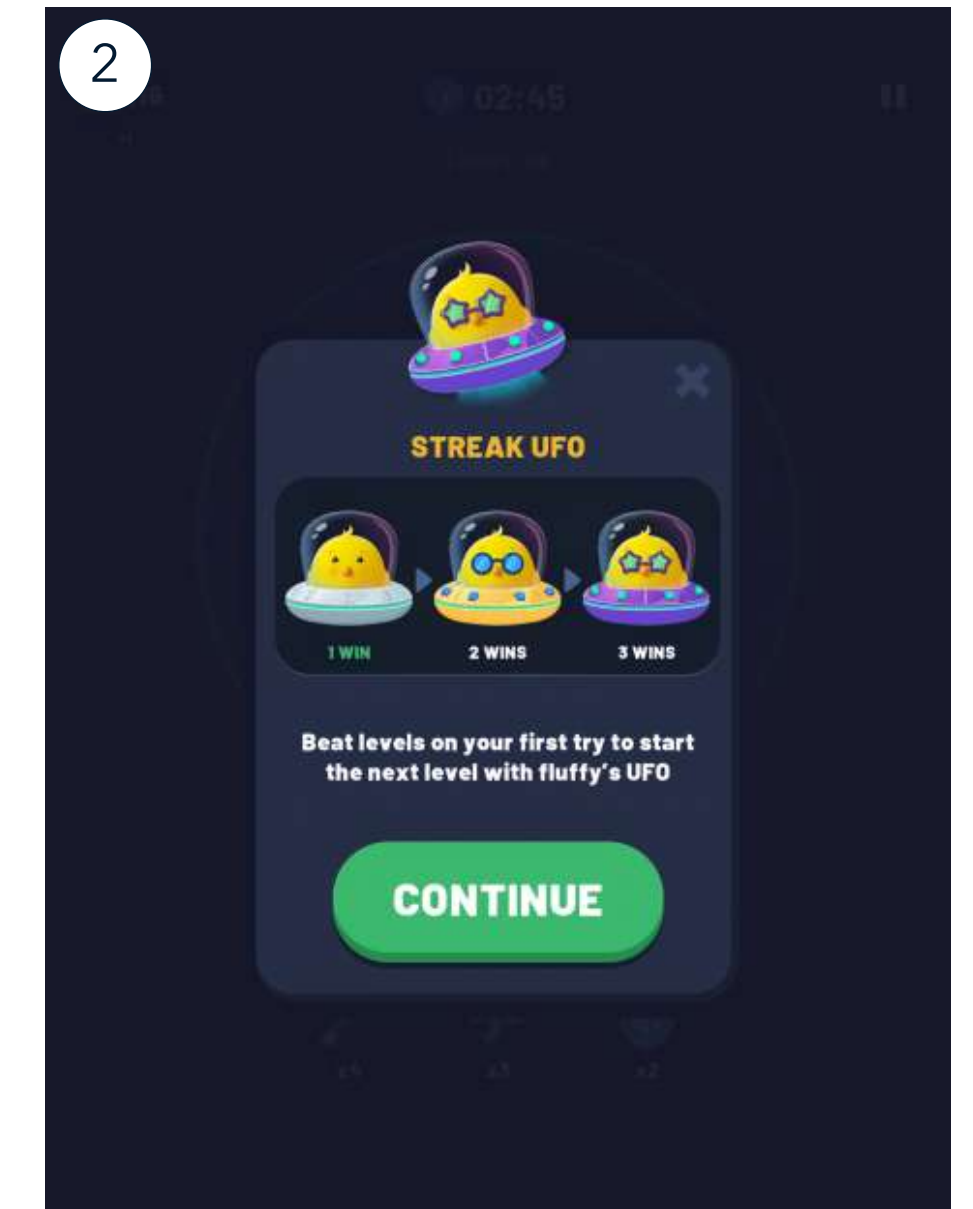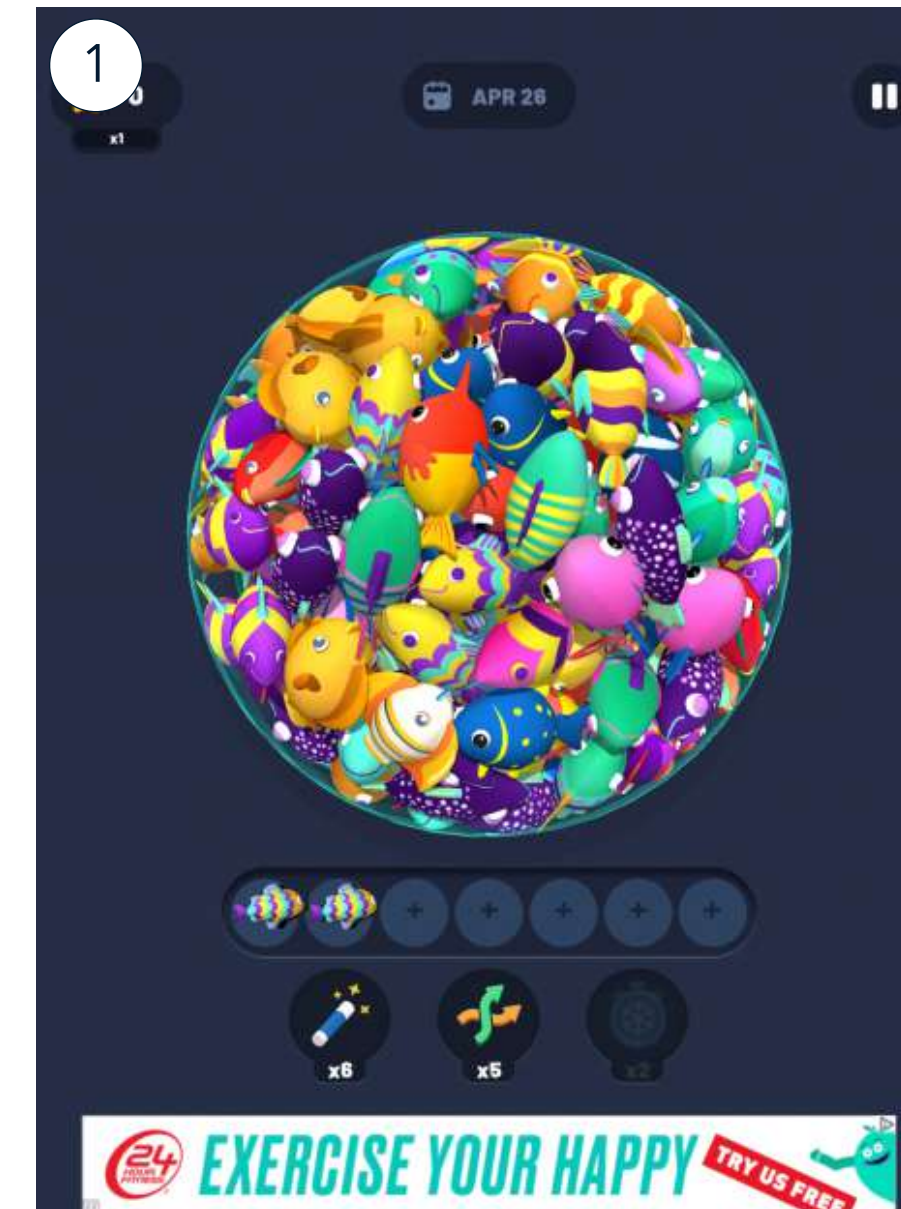
BREAKOUT APP

Match Ball 3D by Lion Studios

Match Ball 3D offers gameplay similar to Lion Studios' other 3D matching apps (Match 3D and Match Tile 3D), but every level takes place inside a 3D sphere.

App Details
- Each level contains a 3D sphere filled with objects (1).
  - Players can rotate the sphere.
- Tapping objects moves them to positions at the bottom of the screen.
  - Collecting three of the same object clears those objects from their positions.
  - Filling all positions fails the level.
- Clearing all objects on the sphere completes the level.
- Maintaining a win streak grants a boost that removes some objects at the start of levels (2).
- Players can watch W2E ads to multiply rewards, avoid failing a level, earn boosts, earn objects that grant extra XP, and access daily challenges from past days (3).
- Traditional ads appear on banners, during gameplay breaks, and on the home screen.
  - Players can pay to remove traditional ads.
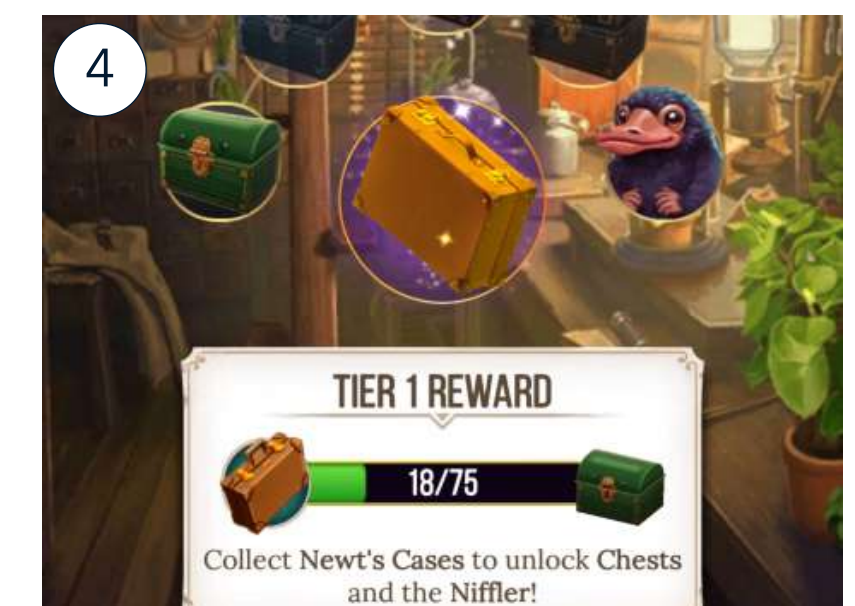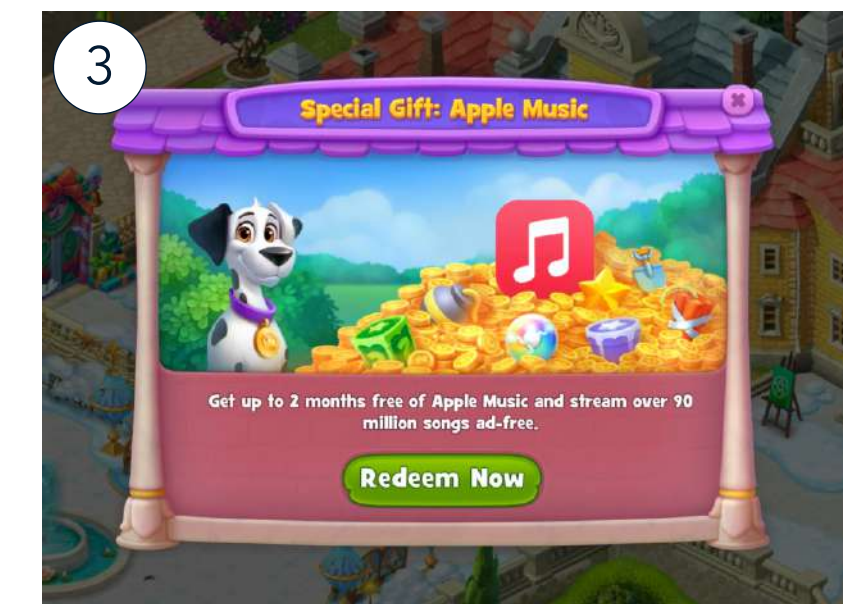- Other features include themed daily challenges, a bank, clubs, avatars, and leaderboards (4).

Launch Information
- Released worldwide on 9/29/21
- 94th highest-grossing puzzle app as of 4/1/22
- Average daily U.S. revenue (past 90 days): $3,854
- Average daily U.S. downloads (past 90 days): 1,655
- View *Match Ball 3D* on the App Store

FEATURE AND EVENT RELEASES I

App	Release	Description
Candy Crush Soda Saga	Soda Supreme mission event	• Players spend premium currency to fill a meter. • Completing the meter before a timer expires grants a reward and advances players to the next tier for the next event (1). • Players can only fill the meter once per event. • Failing to fill the meter during two events in a row demotes players to the previous tier (video).
Farm Heroes Saga	Chain Deal! reward event	• A series of three IAP bundles must be purchased in order (2 and video). • The first bundle is free. • Claiming all three bundles grants a premium currency prize.
Gardenscapes	Special Gift: Apple Music reward feature	• A notification offers players a free two-month subscription to Apple Music (3 and video).
Harry Potter Puzzles & Spells	Fantastic Beasts Celebration mission event	• Players complete base game levels and watch ads to earn tokens (video). • Completing levels on the first or second attempt multiplies token rewards. • Tokens fill a series of meters that award chests when complete (4). • Completing the final meter awards an exclusive creature.

Feature and Event Releases II

App	Release	Description
Matchington Mansion	Tinker's Workshop purchase event	• Reaching level 30 unlocks an IAP offer for a set of futuristic decorations (1 and video).

My Singing Monsters	Eggs-Travaganza custom design feature	• Players spend premium currency to buy spring-themed monsters, skins, and decorations (2).
		   • Players can also create the monsters by combining specific monsters.
		 • IAP offers include discounts on currency and monster treats.
		 • In a competition, players make *TikTok* videos related to the app for a chance to win an iPad.
		   • Four winners are selected by *My Singing Monsters*.

Monster Legends	Easter Challenge challenge feature	• Daily challenges, ads, events, and IAPs award Easter eggs. • Players spend Easter eggs to attempt a pick'em on one of three boards (3). • Before each pick, the board's prizes are shown, then flipped face-down and shuffled. • Picking a prize awards it and removes it from the board (video). • Each board contains one exclusive monster. • Players can spend premium currency to instantly win the exclusive monster.

Words With Friends 2	Peculiar Plants mission event	• Players attempt five series of Earth Day-themed PvE matches (4).
		   • In each series, matches increase in difficulty as players progress.
		 • Completing a series awards a chest and advances players to the next series.
		 • Matches award stars based on players' points (video).
		   • Stars fill a meter that awards additional chests at milestones.
		 • Completing all series awards a profile badge.

Quickly review all features and events
Filter the Database Tool by month and year to see all new releases.

APPENDIX

ENDNOTES

[1] Zero as a Special Price: The True Value of Free Products, Shampanier et al. (2007)

Research shows that people perceive the benefits of free products to be higher and the costs associated with obtaining them to be lower. This is known as the zero price effect.

[2] Interrupting intentions: Zeigarnik-like effects in prospective memory, Mäntylä & Sgaramella (1997)

The Zeigarnik effect describes the tendency of people to remember incomplete tasks better than completed ones. This effect has been reproduced in a number of studies.

LIQUID & GRIT PUZZLE PERSONAS

Survey data from 1,513 puzzle players produced five personas with distinct motivations: Gamer Gary, Escapist Emily, Trainer Tracy, Challenger Chris, and Casual Carol.

	Gamer Gary	Escapist Emily	Trainer Tracy	Challenger Chris	Casual Carol
Demographics					
Size (N)	24%	15%	22%	18%	21%
Female (%)	53%	68%	73%	59%	66%
Age (mean)	35	36	42	40	34
Monetization					
Propensity to spend across all platforms	15.0	7.0	4.8	7.0	4.3
Propensity to spend on F2P games	1.8	1.1	0.7	0.6	0.7
Engagement					
Weekly play hours	6.6	7.4	7.6	7.8	6.7
Puzzle motivation	3.1	2.9	2.6	2.7	2.4
Motivational Buckets					
Engrossment	0.7	-0.3	-0.2	-0.2	-0.2
Escape	0.0	0.6	-0.3	-0.1	-0.1
Utility	-0.2	-0.3	0.7	0.0	-0.3
Challenge	-0.2	-0.1	0.1	0.7	-0.3
Boredom	-0.3	0.0	-0.2	-0.3	0.9

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

Market Research
Quadrant Strategies

Quadrant Strategies is a market research consultancy that uses research to help the world's most prominent technology, gaming, and entertainment companies develop strategies for building their user base, increasing user engagement and spend, and strengthening their marketing and brand plans.

We do that using a range of quantitative and qualitative methodologies, including gamer segmentation and persona development, feature testing, message creation, and loyalty and engagement modeling. The work of our senior leadership goes back many years, and includes long-term engagements for console and gaming-PC hardware-makers, individual games in a range of genres, and across consoles, PCs, and mobile, and for some of the top game franchises.

Player Personas
Kinrate Analytics

Kinrate Analytics offers game developers, consultants, publishers, and cloud gaming operators the best cross-platform game recommendation engine for targeted marketing, as well as a novel profiling-as-a-service solution for intelligent market segmentation and social networking.

Other services include advanced market prediction analyses for identifying emergent gaming trends and access to unique AI-enhanced data of 140 thousand game titles and 48 million game players.

The products of Kinrate Analytics have been developed in university-led research projects in collaboration with economists, psychologists, game scholars, and data scientists.

Mobile App Store Intelligence
Sensor Tower

Sensor Tower is relied upon by financial analysts, VCs, and publishers who need to leverage data to identify the fastest-growing apps, emerging markets, and more.

Clients harness Sensor Tower's suite of app intelligence tools to:

- Evaluate app economies and app vitality.
- Drive organic growth with the leading App Store Optimization platform.
- Get the best global download and revenue estimates for the App Store and Google Play.
- Discover top creatives and better shape user acquisition strategy.

CASUAL MECHANICS TAXONOMY

Mechanic	Definition
Accelerators	Increases in the power, impact, or efficiency of play
Banks	Features that save a percentage of spend to 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	Sets of items that players collect (often for a completion prize)
Competitions	Features where players compete against other players
Cosmetics	Improvements or updates to the app or features
Currencies	Changes to currencies, economies, stores, and items
Custom Design	Options for cosmetic customization
Expansions	Additional rooms, worlds, play modes, VIP lounges, etc.
Flows	Specific flows, like the NUX, ratings, and surveys

Mechanic	Definition
Hazards	Level elements/blockers that increase difficulty
Interactions	Social features with direct or indirect interaction
Leaderboards	Stand-alone leaderboards
Levels	Anything to do with leveling
Mini-Games	Smaller, shorter games within games (e.g., scratch cards)
Missions	Linear sets of tasks that players must accomplish
Notices	Feature or product announcements
Other	Miscellaneous features and outliers
Profiles	Features related to a player's settings, profile, and controls
Purchases	Anything to do with purchases
Quests	Tasks that advance players along a map-like feature
Rewards	Rewards players receive for engagement or spend

"You don't want to work on a job where you're looking at your watch."

– Stephen Hillenburg

LiquidandGrit.com

Brett.Nowak@LiquidandGrit.com