



**LIQUID&GRIT**

**CASUAL REPORT**

Competitive Research and Actionable Product Recommendations

# TABLE OF CONTENTS

---

## IMPACT DRIVER

3

Upgradeable Event Hubs  
Revenue Analysis  
Feature Teardown  
Product Insights

## RELEASE TRENDS

8

Casual Feature Impacts  
Level Features by Subgenre

## MARKET WATCH

11

Soft-Launch and Breakout Apps  
Feature and Event Releases  
Content Releases

## APPENDIX

17

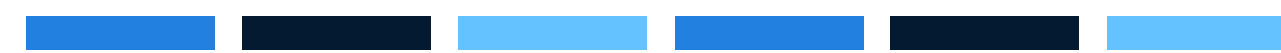
Tracked Casual Apps  
Premium Partnerships  
Casual Mechanics Taxonomy

# JULY

---

# 2022

# IMPACT DRIVER



Features and events that boost revenue, retention, or downloads



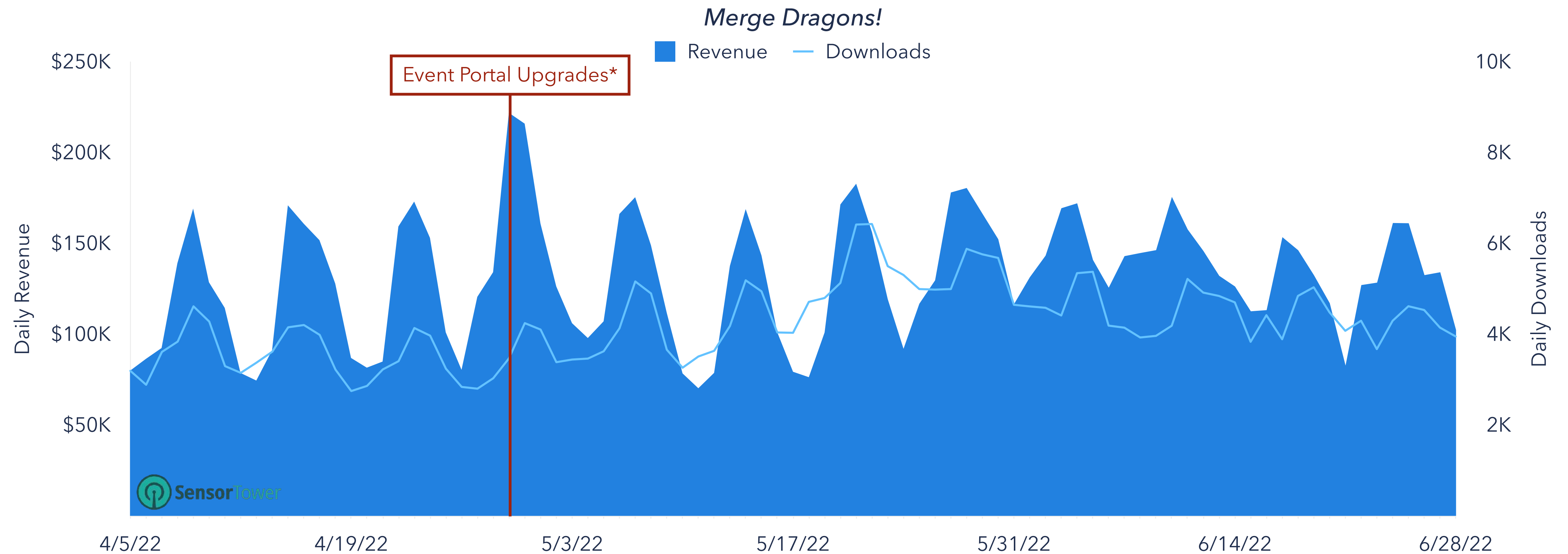
CASUAL > FEATURES > LEVELS

## Upgradeable Event Hubs

Event Portal Upgrades in *Merge Dragons!*

# REVENUE ANALYSIS

After our account was given access to the Event Portal Upgrades on 4/29/22, the revenue of *Merge Dragons!* increased 8.7% MoM and 5.9% 2Mo2M. However, the feature has been in beta since 6/1/21, so its full revenue impact is difficult to assess.



Graph data is iOS, U.S. only.

XMoXM = X months over the preceding X months.

\*Liquid & Grit's account was given access to this feature on 4/29/22, but it has been in beta since 6/1/21.



# FEATURE TEARDOWN: EVENT PORTAL UPGRADES

Players unlock a portal that grants access to weekly events. Completing missions upgrades the portal, which increases the rewards players earn from the events.

## Details

- A portal on the map is initially locked.
- Advancing in the app's main progression awards points.
  - Players spend points to unlock the portal.
- Unlocking the portal grants access to events that run every weekend (1).
- The portal contains a series of missions (2).
  - Completing missions fills a meter.
  - Players can also spend premium currency to instantly complete a mission.
- Every 12 hours, players can exchange an uncompleted mission for a different one.
  - If players exchange a mission, they must wait for a timer to expire or spend premium currency to receive the new mission.
- Once the meter is complete, players can spend resources to upgrade the portal and earn rewards (3).
  - Upgrading the portal increases the rewards players earn from the portal's associated events (4).
  - The portal can be upgraded 16 times.

## Additional Information

- See the [Event Portal Upgrades](#) gallery for more images and videos.





# PRODUCT INSIGHTS

## Merge Dragons! is experimenting with level features that require extensive tuning.

[Event Portal Upgrades](#) has been in beta since June 2021, and [Season Portal Upgrades](#), a similar feature, has been in beta since November 2021. Introducing 16 levels of upgrades that increase rewards for weekly events and monthly battle passes takes a huge amount of tuning that's specific to *Merge Dragons!*, making this a difficult feature for other apps to copy (1).

## Level features are an opportunity for casual apps.

Despite being reliable revenue drivers, level features are still uncommon in the casual market (see [page 9](#)). Level features appear about four times as frequently in casino apps, where they also have strong revenue impacts. For a very successful example in casino, see *Caesars Slots'* [Prize Pet](#) (20% revenue MoM), in which players level up customizable pets to earn boosts and rewards (2).

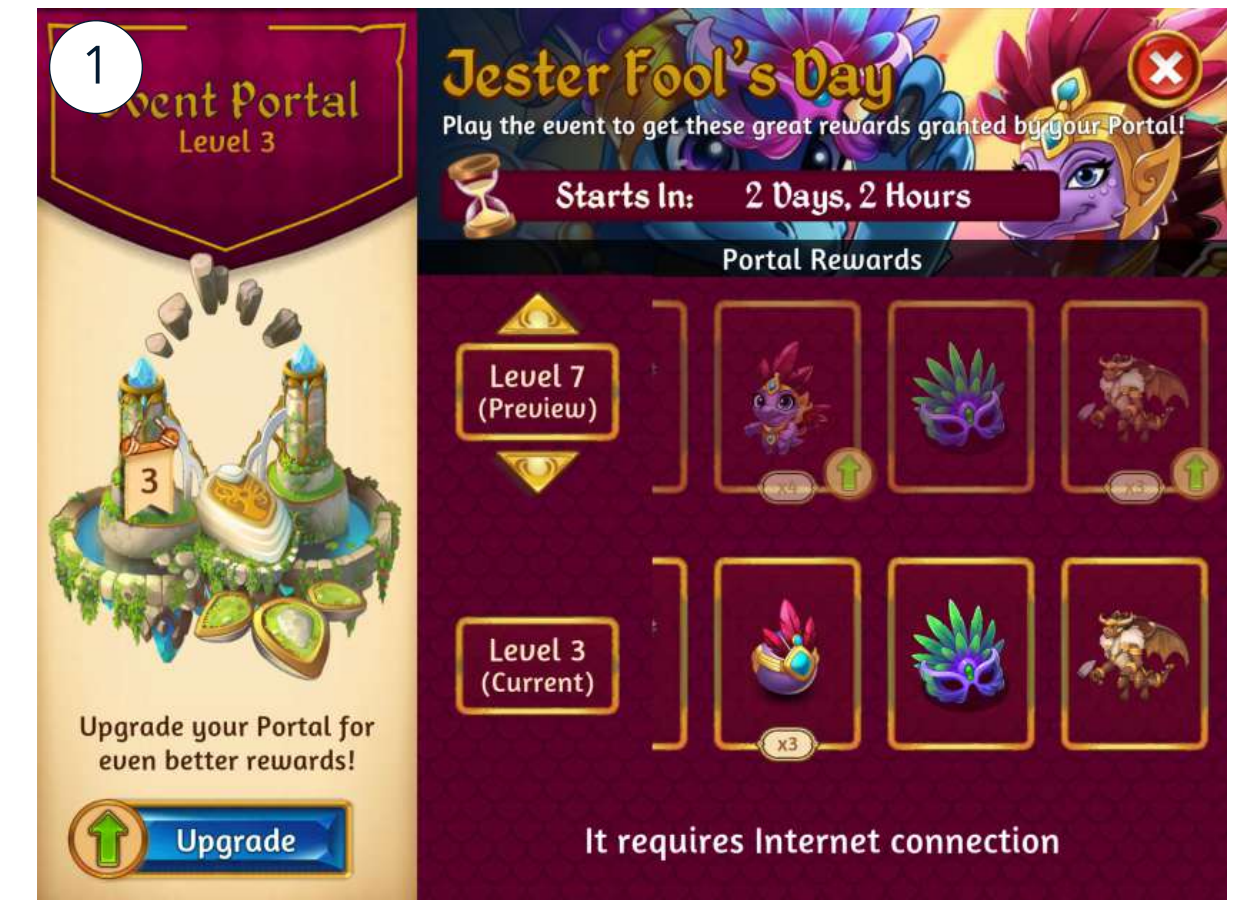
## Upgradeable hubs are an alternative to battle passes that use less overt monetization.

Players will likely need to buy items to complete Event Portal Upgrades' more difficult missions (and can also pay to complete missions outright). These missions are a subtler way to drive spend than simply selling players a premium battle pass.

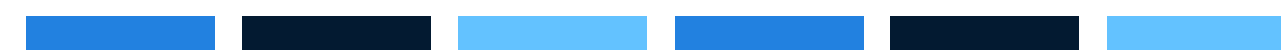
Apps can also offer upgradeable hubs and battle passes at the same time. *Merge Dragons!* includes both types of systems in its Season Portal Upgrades by having players complete missions to increase rewards for a battle pass.

## This feature drives engagement by getting players to invest in events ahead of time.

Players who invest in leveling up their portals will want to participate in the weekly events in order to collect the bigger rewards they've earned. This is especially true at higher portal levels, which require players to invest more time and resources for each upgrade.



# RELEASE TRENDS



Revenue impacts and trends for features and events



# CASUAL FEATURE IMPACTS

Level features are one of the most effective and least frequently released feature types in the casual market. Although the sample size for level features is small, they have the second highest average and median revenue impacts.

Feature Type	Average Revenue MoM	Median Revenue MoM	Standard Deviation	Release Count
Accelerators	7.7%	5.1%	12.6%	17
Levels	5.2%	3.1%	11.3%	14
Collections	4.8%	1.9%	15.8%	88
Competitions	4.7%	-0.3%	17.5%	19
Missions	3.8%	2.2%	14.9%	235
Notices	3.7%	-2.3%	21.4%	34
Challenges	3.4%	1.5%	14.6%	80
Mini-Games	3.1%	2.4%	13.3%	20
Bonuses	3.0%	-4.2%	25.0%	35
Exchanges	2.9%	0.3%	15.3%	30
Clubs	2.3%	0.4%	11.3%	15
Interactions	0.4%	-0.2%	14.3%	18
Rewards	0.2%	0.8%	12.6%	24
Flows	-1.8%	-1.3%	12.3%	100
Expansions	-2.4%	-1.5%	15.4%	25

Data includes feature types with 14 or more releases by tracked casual apps between 5/15/20-5/15/22.

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

MoM = Month over the preceding month.

App revenue data provided by Sensor Tower.

# LEVEL FEATURES BY SUBGENRE

The merge subgenre has released a relatively high number of level features in the past two years.

Genre	Subgenre	Number of Level Feature Releases
Tabletop	Board	5
Puzzle	Merge	3
Puzzle	Puzzle and Decorate	3
Puzzle	Action Puzzle	1
Puzzle	Bubble Shooter	1
Puzzle	Other Match-3	1

Data includes level features released by tracked casual apps between 5/15/20-5/15/22.

# MARKET WATCH



New apps and notable releases from established competitors



# SOFT-LAUNCH APP

*Worldscapes* innovates on the tile blast subgenre by having players place tiles directly on the board rather than using traditional swapping or matching mechanics. It combines this mechanic with a lite custom design system inspired by *Royal Match*. This focus on core gameplay is well suited to PeopleFun's talent for compelling puzzle design (seen in *Wordscapes* and *Bricks n Balls*) and the current state of the market.

## **Worldscapes** by PeopleFun, Inc.

### App Details

- During levels, players place blocks and boosts on a board (1 and [video](#)).
- Creating a full row or column of blocks clears those blocks.
  - Rows or columns can be created with any color or type of block.
  - Clearing blocks that contain boosts triggers those boosts.
  - Clearing two or more rows or columns in a single move awards a boost (2).
- Level goals include clearing certain numbers of blocks, types of block, or obstacles.
- Completing levels awards points.
- Players spend points to upgrade travel locations (3).
  - Players can't customize the upgrades.
  - Fully upgrading a location awards prizes and unlocks the next location.
- Other features include daily retention rewards, IAPs, and leaderboards.

### Launch Information

- Soft-launched on 3/30/22 in Australia and the Philippines
- Average daily revenue since soft-launch: \$25
- Average daily downloads since soft-launch: 34
- View *Worldscapes* on the [App Store](#)





# BREAKOUT APP

*Cube Master 3D* is the latest escalation in the trend of 3D matching apps with novel level layouts, similar to *Match Ball 3D* (which we covered in our [May Casual Report](#)). This subgenre is seeing a small boom, so we expect to see more—and more elaborate—formats for some time.

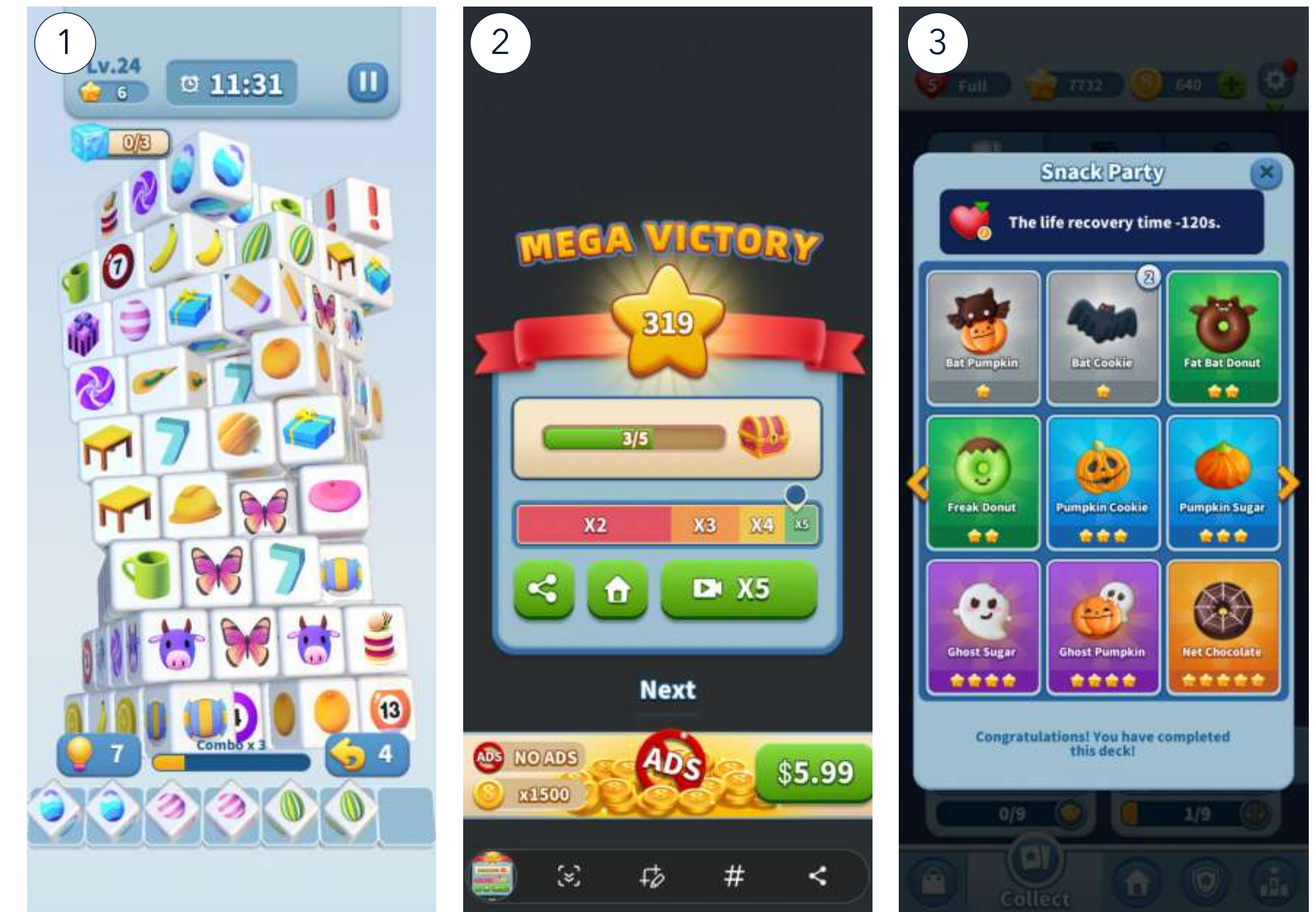
## ***Cube Master 3D*** by HIGGS TECHNOLOGY CO., LIMITED

### App Details

- Players rotate a 3D object composed of cubes (1).
- Tapping three cubes of the same type clears them.
- Players earn stars for clearing cubes.
  - Quickly clearing cubes fills a combo meter that multiplies stars.
  - Stars fill a meter that awards a chest when complete.
- Clearing all the cubes within a limited amount of time and moves completes the level.
  - Completing levels awards currency and fills a meter that awards a chest when complete.
  - After completing a level, players can watch an ad to multiply their rewards (2).
- Players spend currency and open chests to earn cards.
  - Completing a set of cards awards a permanent boost (3).

### Launch Information

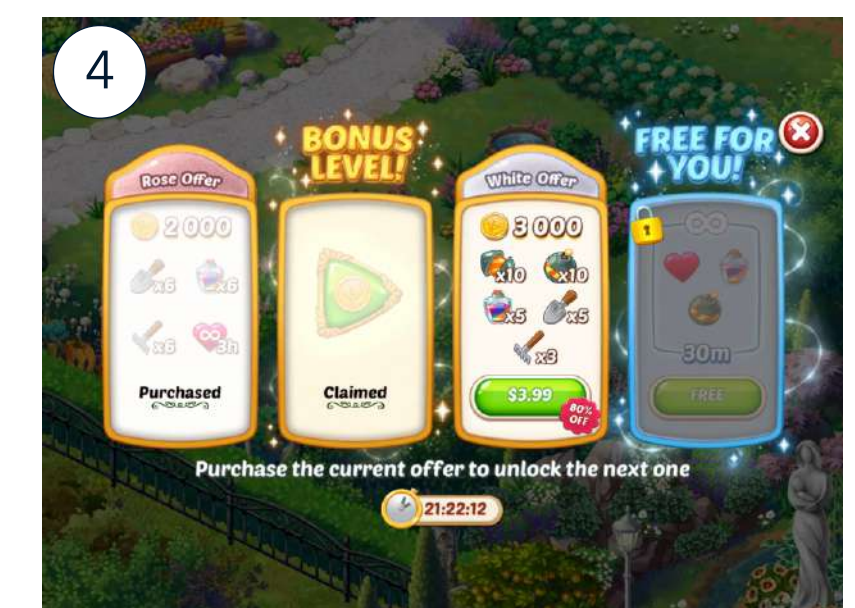
- Released worldwide on 8/1/21
- 35<sup>th</sup> top-grossing casual app as of 6/1/22
- Average daily U.S. revenue (past 90 days): \$17,159
- Average daily U.S. downloads (past 90 days): 6,462
- View *Cube Master 3D* on the [App Store](#)





# FEATURE AND EVENT RELEASES I

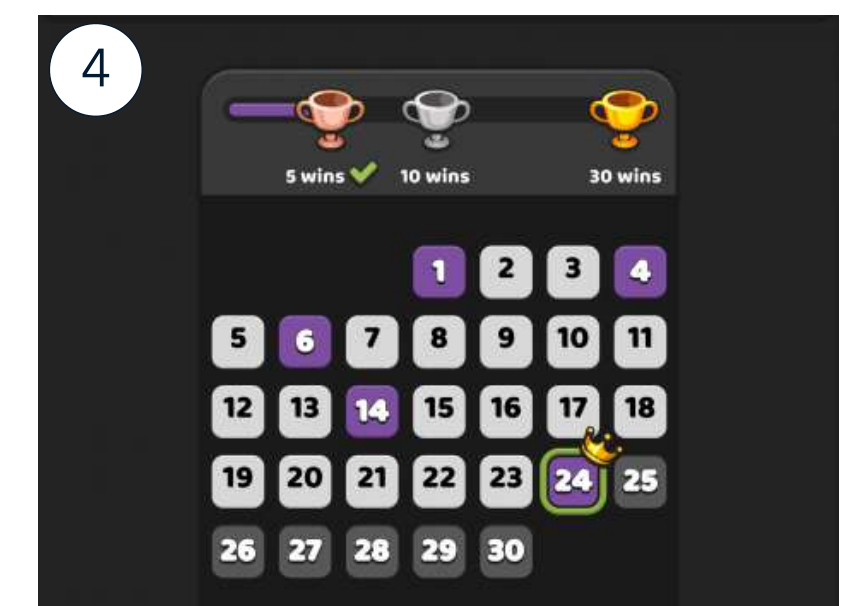
App	Release	Description
Candy Crush Saga	<a href="#">Vault Challenge</a> competition event	<ul style="list-style-type: none"> <li>• Players complete levels to reach a series of three vaults on the world map (<a href="#">1</a> and <a href="#">video</a>).</li> <li>• Reaching a vault enters players in a competition.               <ul style="list-style-type: none"> <li>• Subsequent vaults unlock higher leagues.</li> </ul> </li> <li>• In the competition, players try to collect the most blue pieces during levels.</li> </ul>
EverMerge	<a href="#">Submarine Challenge</a> mission event	<ul style="list-style-type: none"> <li>• Players harvest resources, open chests, and buy IAPs to earn submarine fuel (<a href="#">2</a> and <a href="#">video</a>).</li> <li>• Fuel can be merged to create different types of fuel.</li> <li>• Players use fuel to send submarines on timed missions (<a href="#">3</a>).</li> <li>• Each submarine has its own fuel requirement, timer length, and rewards.</li> <li>• Players can spend currency to upgrade one submarine, which eliminates its timer.</li> <li>• When submarines' timers expire, players earn treasures.</li> <li>• Players can merge treasures to upgrade them.               <ul style="list-style-type: none"> <li>• Completely upgrading treasures creates an item that grants rewards every day for one week.</li> </ul> </li> <li>• Harvesting resources, opening chests, and merging items also awards points.               <ul style="list-style-type: none"> <li>• Points fill a battle pass that grants rewards at milestones.</li> <li>• A premium pass adds a second tier of milestone rewards.</li> </ul> </li> </ul>
Lily's Garden	<a href="#">Bonus Level Offer</a> purchase event	<ul style="list-style-type: none"> <li>• Players claim a series of paid offers and free rewards (<a href="#">4</a> and <a href="#">video</a>).</li> <li>• Claiming a reward unlocks the next one in the series.</li> <li>• The first and third rewards are paid offers.</li> <li>• The second reward is a free puzzle level in which players collect as much currency as they can.</li> <li>• The fourth reward is a free bundle that grants unlimited boosts for 30 minutes.</li> </ul>





# FEATURE AND EVENT RELEASES II

App	Release	Description
Lily's Garden	<a href="#">Home Design</a> custom design event	<ul style="list-style-type: none"> <li>• Players complete events to earn tickets (<a href="#">video</a>).</li> <li>• Players spend tickets to buy custom decorations for a room (1).</li> <li>• Buying decorations fills a meter that grants rewards when full (2).</li> </ul>
	<a href="#">Zen Decorations</a> purchase event	<ul style="list-style-type: none"> <li>• An IAP offers a bundle of boosts and Asian-themed decorations (3).</li> </ul>
Match 3D	<a href="#">Daily Challenge</a> challenge feature	<ul style="list-style-type: none"> <li>• Players spend currency to attempt daily challenges (<a href="#">video</a>).</li> <li>• Players can select challenges from the current day or any previous day.</li> <li>• Each challenge revolves around a specific category or color of items.</li> <li>• Completing challenges fills a meter that awards trophies at milestones (4).</li> <li>• The meter resets each month.</li> </ul>



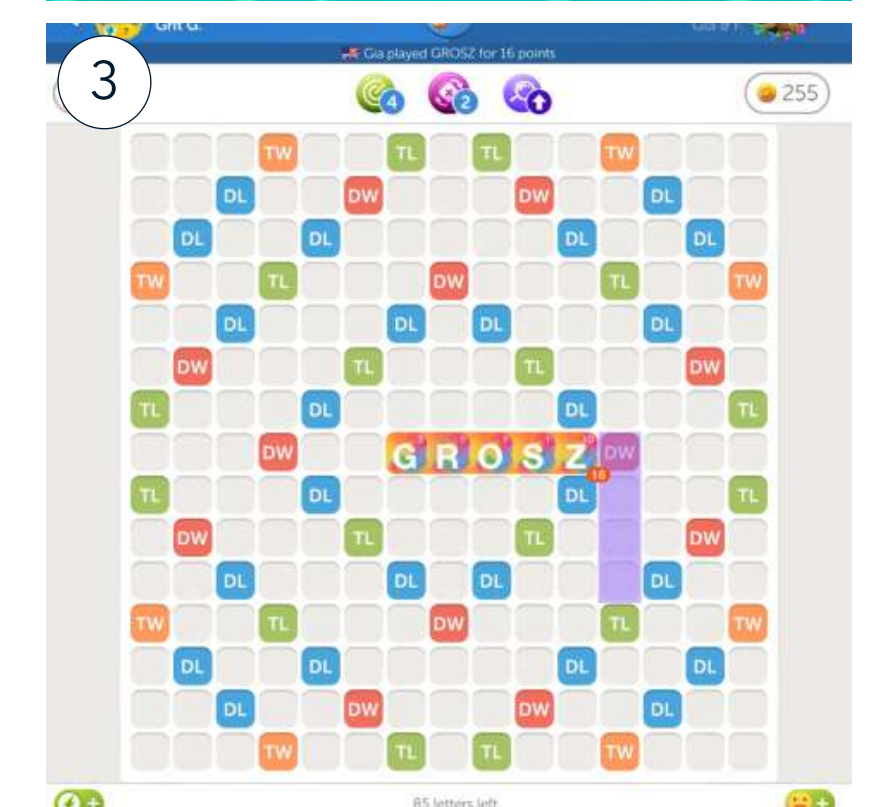
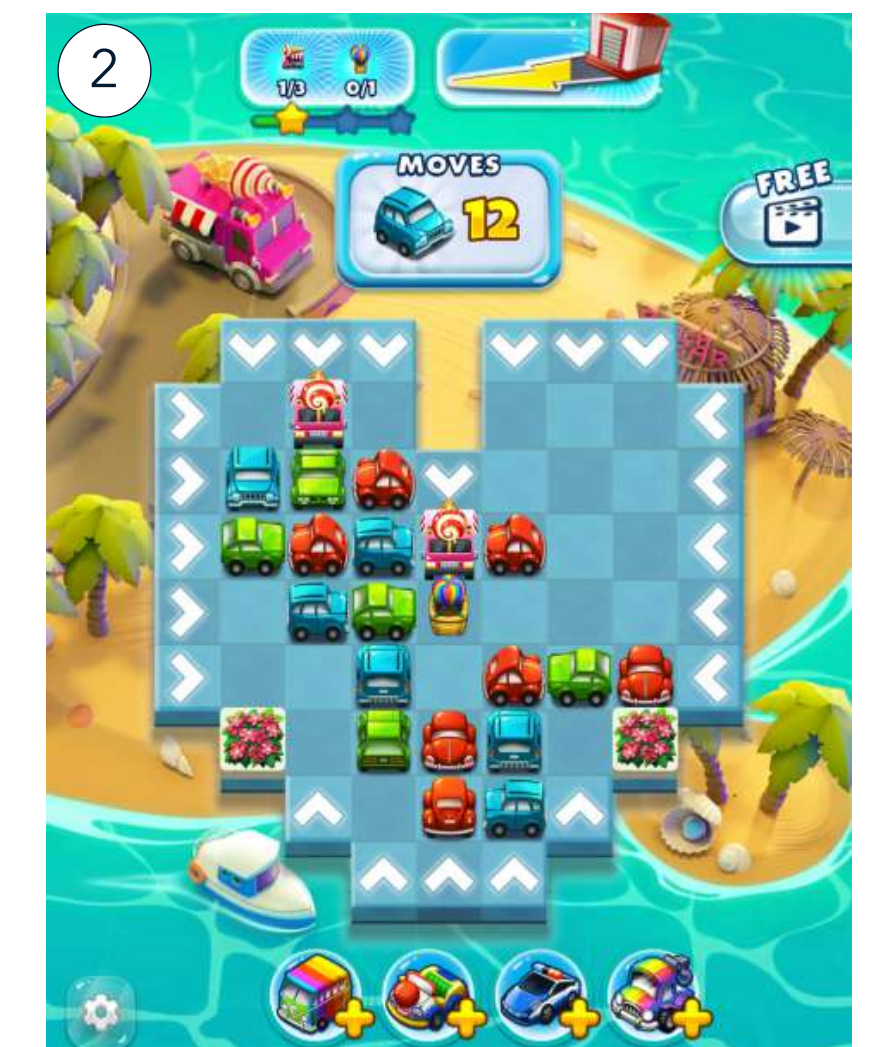
Quickly review all features and events

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



# CONTENT RELEASES

App	Release	Description
Traffic Puzzle	<a href="#">Fountain hazard</a>	<ul style="list-style-type: none"> <li>Fountains block players' cars.</li> <li>Making matches next to a fountain fills it with water (<a href="#">1</a> and <a href="#">video</a>).</li> <li>Completely filling the fountain clears it.</li> </ul>
	<a href="#">Hot Air Balloon hazard</a>	<ul style="list-style-type: none"> <li>Hot air balloons block players' cars.</li> <li>Making matches next to a hot air balloon inflates it (<a href="#">2</a> and <a href="#">video</a>).</li> <li>Completely inflating the balloon clears it.</li> </ul>
Words With Friends 2	<a href="#">Free Word Clue accelerator</a>	<ul style="list-style-type: none"> <li>At the start of matches, players can watch an ad to earn a clue (<a href="#">3</a>).</li> <li>Clues suggest places that players can make words with their letters.</li> </ul>



# APPENDIX





# TRACKED CASUAL APPS

---

## Tracked Puzzle Apps

*Angry Birds 2, Angry Birds Dream Blast, Angry Birds Friends, Best Fiends, Bubble Pop Origin!, Bubble Shooter - Pop Bubbles, Bubble Witch 3 Saga, Bubbles Empire Champions, Candy Crush Saga, Candy Crush Soda Saga, Clockmaker, 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*

# PREMIUM PARTNERSHIPS

---

Liquid & Grit partners with Sensor Tower to infuse our reports with industry-leading data and statistics.

**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.

For more information, visit [Sensor Tower's website](#).





# CASUAL MECHANICS TAXONOMY

Mechanic	Definition
<a href="#">Accelerators</a>	Increases in the power, impact, or efficiency of play
<a href="#">Banks</a>	Features that save a percentage of spend to be unlocked later
<a href="#">Bonuses</a>	Free bonuses given to players (e.g., retention or W2E)
<a href="#">Challenges</a>	Goal-oriented tasks for players to complete
<a href="#">Clubs</a>	Groups that accomplish goals or compete with other groups
<a href="#">Collections</a>	Sets of items that players collect (often for a completion prize)
<a href="#">Competitions</a>	Features where players compete against other players
<a href="#">Cosmetics</a>	Improvements or updates to the app or features
<a href="#">Currencies</a>	Changes to currencies, economies, stores, and items
<a href="#">Custom Design</a>	Options for cosmetic customization
<a href="#">Expansions</a>	Additional rooms, worlds, play modes, VIP lounges, etc.
<a href="#">Flows</a>	Specific flows, like the NUX, ratings, and surveys

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

*"If I'm interested in what I'm doing, other people will be interested in it."*

– John Cale

[LiquidandGrit.com](https://LiquidandGrit.com)



[Brett.Nowak@LiquidandGrit.com](mailto:Brett.Nowak@LiquidandGrit.com)

