

Competitive Research and Actionable Product Recommendations

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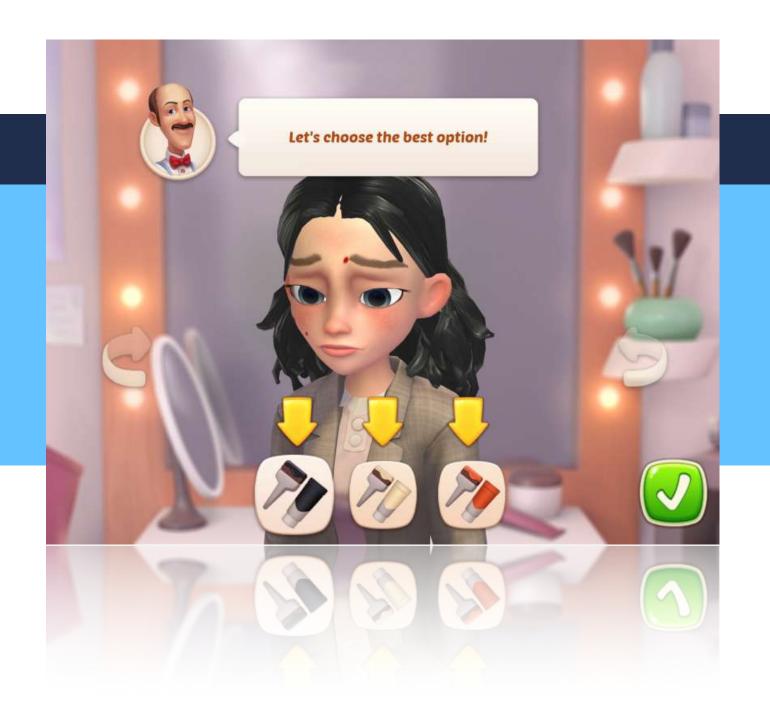
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FEBRUARY

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IMPACT DRIVER

Features and events that boost revenue, retention, or downloads



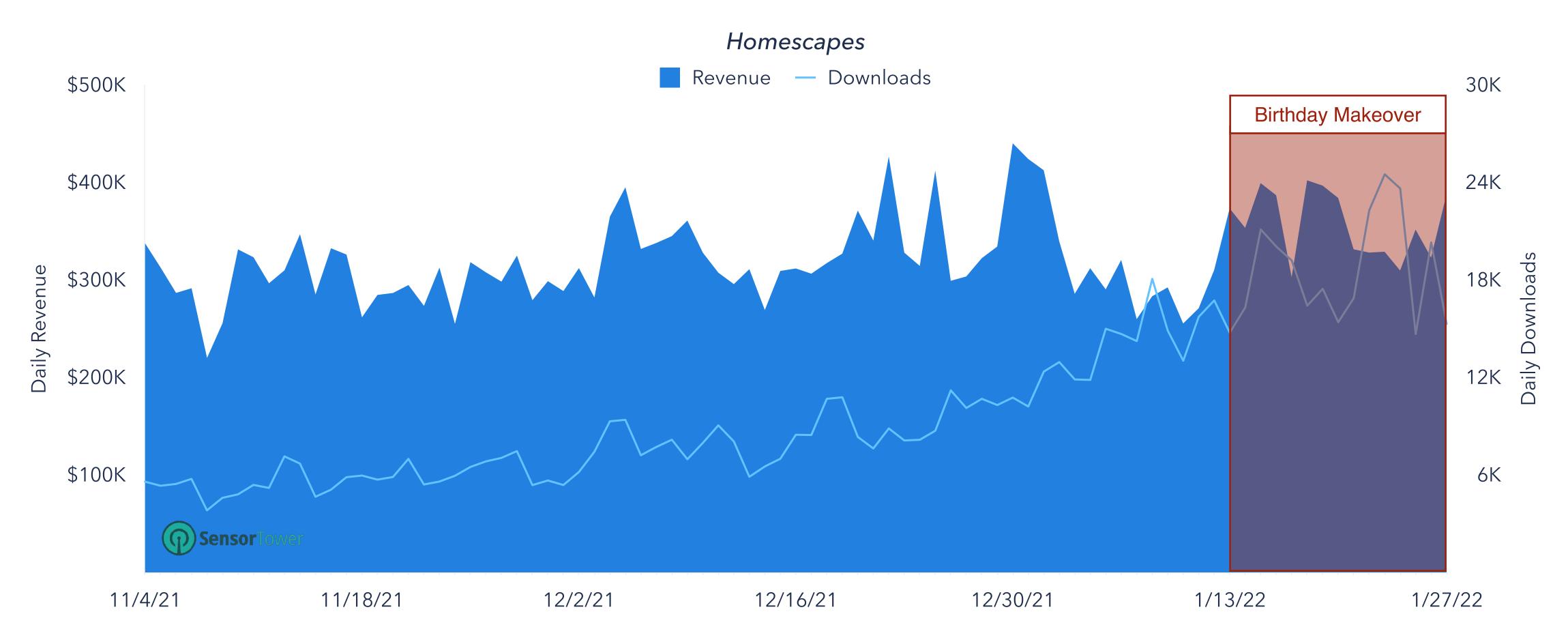
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Custom Design Makeover Event

Birthday Makeover in Homescapes

REVENUE ANALYSIS

After the release of *Homescapes*' Birthday Makeover, revenue increased 31% WoW and 11% 2Wo2W. Downloads increased 37% 2Wo2W during this period, which likely contributed to revenue growth.



CUSTOM DESIGN EVENT IMPACTS BY APP

Among casual apps that released more than five custom design events in the past year, *Homescapes* had the largest average and median revenue impact by far. In the casual market overall, custom design events perform poorly, averaging 1.6% revenue WoW with a median of 0.1% WoW.

Арр	Average Revenue WoW	Median Revenue WoW	Standard Deviation	Release Count
Homescapes	6.6%	6.7%	±9.1%	15
Fishdom	1.9%	3.4%	±7.7%	16
Matchington Mansion	-0.3%	1.8%	±5.4%	9
Gardenscapes	-0.3%	-2.0%	±8.9%	14
Home Design Makeover	-1.0%	-1.3%	±5.1%	40
Panda Pop	-1.1%	-1.3%	±4.9%	8

FEATURE TEARDOWN

Players complete match-3 levels and challenges to earn currency that they spend to give a character a makeover and decorate a room.

Event Details

- Players complete match-3 levels to earn event currency (1).
 - Beating levels on the first try awards additional currency.
- During two challenge events, players collect certain pieces during levels ($\frac{2}{2}$).
 - Completing challenges awards currency (3).
- Players spend currency to customize a character's make-up, hair, and outfit (4 and video).
 - Players can change the character's look at any time.
- Completing a certain number of makeover tasks unlocks a room (5).
- Players spend currency to decorate the room.
- Completing makeover and decoration tasks fills a meter that grants rewards at milestones.

Additional Information

• See the <u>Birthday Makeover</u> gallery.











PRODUCT INSIGHTS

New custom design mechanics are driving revenue in the casual market.

Homescapes' <u>Birthday Makeover</u> uses similar custom design mechanics to those in *Project Makeover*, one of 2021's biggest breakout successes.¹ In *Project Makeover*, gameplay revolves around three types of custom design mechanics: makeovers, outfit selection, and room decoration. If you're not familiar with *Project Makeover*, you can read more about it in our <u>2021 Recap Report</u>.

Embracing this three-part custom design formula helped to make Birthday Makeover *Homescapes*' most impactful event of the past year (1). This exceptional performance suggests that casual apps (especially those in the puzzle and decorate genre) can increase engagement by adopting custom design mechanics from new competitors.

Casual app designers should also consider implementing customizable pets, which have been successful in the casino and core markets but are rare in casual. For example, *Caesars Slots*' Prize Pet feature (20% rev. MoM) allows players to customize accessories for an upgradable pet that provides boosts in the base game. Prize Pet was one of 2021's most impactful casino features.

Temporary characters and side stories help create emotionally-charged narratives.

Stories that generate intense emotions—such as fear, hope, or envy—make players more emotionally invested, which increases engagement.² At the same time, narratives with intense conflicts and elaborate character arcs can be difficult to sustain.

Project Makeover is able to consistently deliver emotionally intense narratives by setting its stories in a fictional TV show where each episode focuses on a new character. Homescapes' Birthday Makeover takes a similar approach by introducing a temporary main character as well as two antagonists (2).





RELEASE TRENDS

Investment trends for feature and event releases

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, 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

CUSTOM DESIGN EVENT RELEASES

The number of custom design events released by tracked casual apps peaked in Q4'20 and steadily declined over the past year.



MARKET WATCH

New apps and notable releases from established competitors

BREAKOUT APP

RuPaul's Drag Race Superstar by Eastside Games

App Details

- In this sim based on the RuPaul's Drag Race TV show, players manage a drag queen and studio.
- Players complete challenges to progress through themed episodes.
 - Challenges award resources and XP.
- Players use resources and XP to unlock and upgrade workstations and characters (1).
 - Characters grant boosts and passively award resources.
- During PvE and PvP runway duels, players assemble outfits based on the episode's theme ($\frac{2}{2}$ and $\frac{\text{video}}{2}$).
- Players earn points based on how well their outfit fits the theme.
- The competitor who earns the most points wins.
- Completing runway duels grants rewards and unlocks new episodes ($\frac{3}{2}$ and $\frac{4}{2}$).
- Players earn new clothes by completing episodes or buying IAPs.
- Workstations reset at the beginning of each episode.
- Other features include weekly challenges, leaderboards, daily gifts, and rewarded ads.

Launch Information

- Released worldwide on 10/25/21
- 47th highest-grossing sim app as of 1/1/22
- Average daily U.S. revenue (past 90 days): \$19,386
- Average daily U.S. downloads (past 90 days): 4,158
- View RuPaul's Drag Race Superstar on the App Store









BREAKOUT APP

Find 3D - Match 3D Items by Boombox Games LTD

App Details

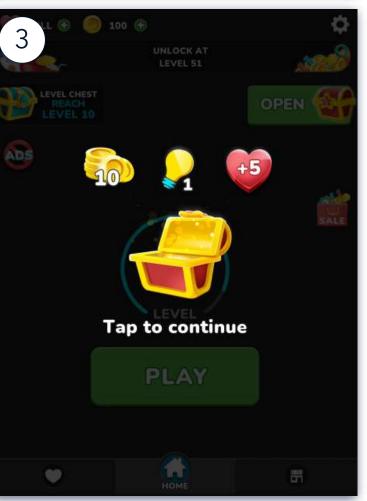
- Players drag and drop 3D objects to collect them (<u>1</u> and <u>video</u>).
- Levels require players to collect specific objects before a timer expires.
- Completing levels awards stars ($\frac{2}{2}$).
 - Stars fill a meter that grants rewards when full.
- Certain levels and some types of objects award boosts (3).
- Boosts allow players to reshuffle, highlight, enlarge, or destroy objects as well as extend or pause level timers (4).
- Other features include win streak bonuses, weekly challenges, tournament leaderboards, rewarded ads, and an ad-free mode that costs \$4.99.

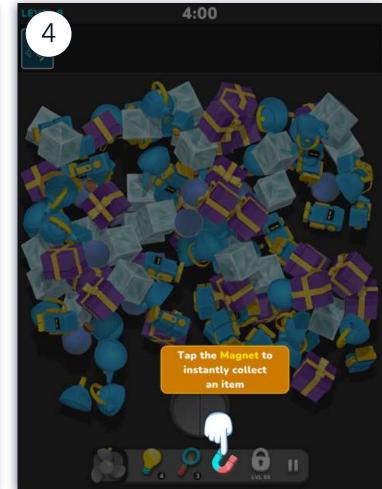
Launch Information

- Released worldwide on 5/12/21
- 57th highest-grossing puzzle app as of 1/1/22
- Average daily U.S. revenue (past 90 days): \$12,873
- Average daily U.S. downloads (past 90 days): 1,002
- View Find 3D Match 3D Items on the App Store









FEATURE AND EVENT RELEASES I

Арр	Release	Description
Candy Crush Soda Saga	Fishing Cup competition event	 During a competition, matching four blocks in a square creates a fish boost. Creating a fish boost awards one point (1). Each round consists of ten players and lasts five days. The top three players earn rewards and advance to the next round. During a wild card round, eliminated players compete against each other. The winning player from the wild card round rejoins the competition's final round. Winning the final round awards premium currency.
Fishdom	Carnival of Gifts! challenge event	 Completing levels on the first try adds rewards to a prize bundle (2 and video). After each win, players choose to collect their rewards or continue playing. Collecting rewards or losing a level resets the prize bundle. Completing the prize bundle grants a chest.
Monster Legends	Monster of the Year reward event	 Players spend currency to vote for their favorite hero of 2021 (video). Eligible heroes were preselected by the app's community. Players can vote as many times as they want. Purchasing one of the heroes awards a token (3). Tokens award premium currency every day for ten days.





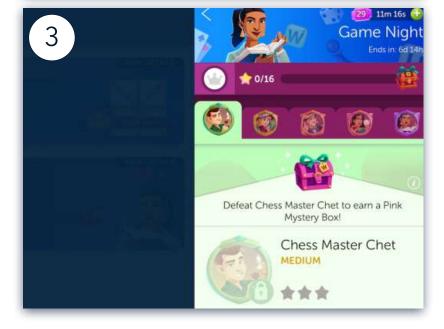


FEATURE AND EVENT RELEASES II

Арр	Release	Description
Panda Pop	Panda Guardians accelerator feature w/ battle pass	 Completing base game levels awards points for a battle pass. Battle pass rewards include heroes and boosts. A premium pass unlocks a second set of rewards, including an exclusive hero. Before each level, players choose one of their unlocked heroes to use (1 and video). Heroes have three unique boosts. Players progress in the battle pass to unlock heroes' second and third boosts. Beating levels on the first try fills a meter that awards the hero's boosts at milestones. Each hero has their own meter. Losing a level resets the meter.
Wheel of Fortune: Show Puzzles	<u>Super Star</u> <u>Challenge</u> challenge event	 Players complete challenges to advance on a map (2). Map spaces add spins and prizes to a prize wheel. At the end of the event, players spin the prize wheel.
Words With Friends 2	Game Night accelerator feature	 Players receive one token every 12 minutes. Players spend tokens to play a series of matches against NPCs (3). The competitor who earns the most points in five moves wins. Winning a match awards a chest. Scoring a certain number of points during matches awards stars. Stars fill a meter that grants additional rewards when complete.







Quickly review all features and events

Filter the <u>Database Tool</u> by month and year to see all new releases.

CONTENT RELEASES

Арр	Release	Description
Gardenscapes	<u>Tackle Boxes</u> hazard	 Making four matches or triggering four boosts next to a tackle box clears it (1). When the tackle box is cleared, lures latch onto four random pieces. Making a match or triggering a boost next to a piece with a lure clears it.
Homescapes	<u>Balloons</u> hazard	 A balloon is tied to adjacent pieces (2 and video). Making a match or triggering a boost with a tied piece releases the tie. Releasing all ties clears the balloon.
Project	<u>Hairbrush</u> accelerator	• Hairbrush boosts let players tap any space to clear its entire row and column (<u>3</u> and <u>video</u>).
Project Makeover	<u>Perfume</u> accelerator	• Perfume boosts let players tap any space to clear a 5x5 area (<u>4</u> and <u>video</u>).



APPENDIX

ENDNOTES

¹ Liquid & Grit 2021 Recap Report

Customization was a major theme among the year's successes and included pet cosmetics, functional skins and outfits, and temporary cosmetics that lasted for only one event or season. *Project Makeover* stood out by focusing on its robust custom design mechanics while making its match-3 levels secondary.

² The Effect of Affect: An Appraisal Theory Perspective on Emotional Engagement in Narrative Persuasion, Hamby & Jones (2021)

Research shows that when people experience intense emotional responses to stories and characters, they engage more deeply with those stories.

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	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

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.

Kinrate Analytics

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 Al-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.

Sensor Tower

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

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

"There's no such thing as simple. Simple is hard."

Martin Scorsese

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