STATSIG

A guide to gaming experimentation

Strategies for launching iterative and successful experiments at gaming companies

Why experimentation matters for gaming companies

Modern games are dynamic, ever-evolving products that thrive on constant tuning. Unlike static apps, games have complex systems—from virtual economies to character power levels—that must be continually balanced for fun and fairness.

Small changes can dramatically affect player engagement, so rapid experimentation is crucial. Leading studios treat their games as live services, running thousands of experiments annually to optimize user experience, engagement, and monetization.

By **embracing data-driven experimentation**, gaming companies can quickly identify what truly resonates with players and build compelling experiences that keep their audiences engaged and coming back for more.

Guide overview

This guide outlines five key growth opportunities for gaming companies, actionable experimentation strategies, and advice from gaming leaders.

01 **Content pacing:** Managing the cadence of updates, levels, and events

02 **Economy balancing:** Fine-tuning in-game currencies and rewards

03 **Power creep:** Controlling the gradual overpowering of new items or characters

04 **Live ops tuning:** Optimizing limited-time events and seasonal updates

05 **Social friction:** Removing barriers to social interaction

Content pacing

01

Observation

When players consume content too quickly, they hit a content drought and churn.

If updates arrive too often, players can feel overwhelmed or left behind.

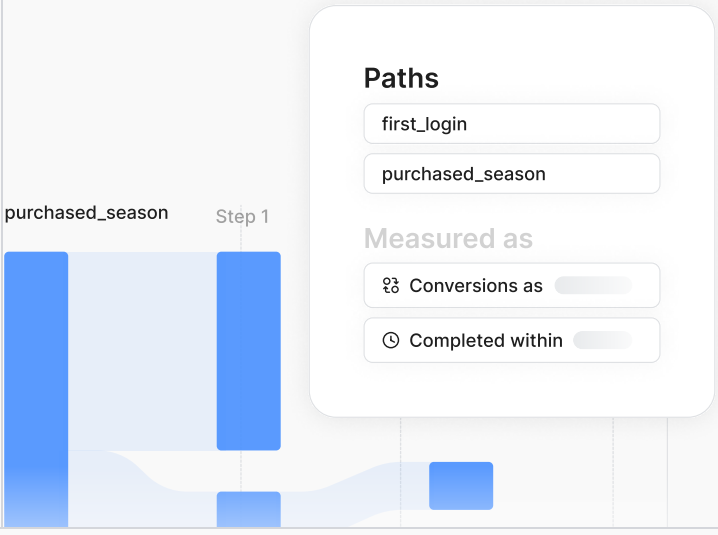
Impact

Higher retention and daily engagement: Frequent, predictable updates build player habits and reduce churn.

In Fortnite's OG season, delivering fresh content week after week helped the title reach new user milestones.

Experiments to run

- Compare weekly content drops to bi-weekly updates by segmenting players into different cohorts. Track retention, playtime, and satisfaction scores to see which group remains consistently active.
- High-frequency vs. low-frequency updates: In certain regions or servers, deliberately speed up the release schedule, dropping content twice as fast. Compare monetization patterns and burnout signs against those on a slower, more deliberate schedule.
- Player-guided poll tests: Some studios send in-game polls, offering players a voice in the pacing. This approach can be tested on a subset of users to measure whether having "content choice" impacts satisfaction or time spent.



Economy balancing

02

Observation

Game economies break easily: too generous, and rewards feel worthless; too stingy, and players churn.

Balancing currency, prices, and sinks requires constant tuning.

Impact

A well-balanced economy keeps players progressing fairly and encourages long-term play.

When Top Eleven gave players higher starting funds, it increased downstream purchases, showing that generosity doesn't always reduce revenue.

Carefully tested reward and pricing changes can surface surprising, scalable insights. And when things feel fair, players stick around—and spend longer.

Experiments to run

- Drop rate tuning: Increase gold or loot drop rates by 10–20% for one cohort and compare retention, progression, and monetization.
- Dynamic pricing models: Adjust item prices weekly based on usage (e.g. popular items increase, underused items decrease). Measure impact on purchasing diversity.
- Shop bundle testing: A/B test item bundles that mix premium currency and freebies. Measure revenue per paying user.
- Soft sinks for inflation: Introduce limited-time high-cost items or seasonal "currency drains" to test if they stabilize in-game economies.

> We're migrating towards everyone doing experiments. The main experiments are run by the data and tech teams. They used to launch features without testing, but **now every change goes through an experimentation phase.**
>
> **Rafael Blay**
> DATA SCIENTISTS, REI DO PITACO

Power creep

03

Observation

When new content is too powerful, old content becomes irrelevant. Power creep erodes balance and trust—testing helps keep updates exciting without breaking the game.

Impact

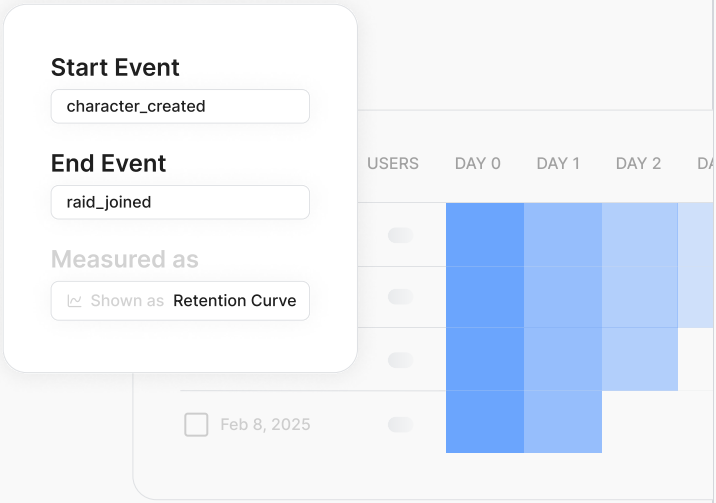
Unchecked power creep shortens game lifespan. Testing lets teams release strong, desirable content without breaking the meta.

Games like Raid: Shadow Legends reintroduced older heroes through hard-mode content to preserve balance and increase content value.

Well-calibrated updates keep gameplay fair, player trust intact, and monetization healthy—without making yesterday's purchases feel like mistakes.

Experiments to run

- Soft launch balance tests: Release new content to a small region or test server first. Measure win rates and usage to catch OP designs early.
- Live tuning A/B tests: Buff old content or nerf new content for select players. Compare performance and player sentiment.
- Seasonal rotations: Experiment with making older content temporarily unavailable. Does resetting the meta increase engagement?
- Power vs. novelty testing: Release two updates—one focused on raw power, the other on new playstyles. Measure which drives more purchases and playtime.



Live ops tuning

04

Observation

Live ops can double or triple revenue—but without tuning, they flop.

Too few and games feel stale; too many and players burn out. The best teams test everything.

Impact

Well-designed live ops can raise baseline revenue over time, not just deliver spikes.

Games like Candy Crush and Puzzle & Dragons found event formats that repeatedly drove 200–300% revenue lifts—and used experiments to refine those into repeatable playbooks.

Over time, smart live ops don't just grow numbers—they shape habit, re-engage churned users, and keep games feeling fresh long after launch.

Experiments to run

- Cadence testing: One group sees a major event every week, another every two weeks. Measure retention, DAUs, and revenue.
- Reward structure A/Bs: Compare lots of small prizes vs. a single high-value item. Which drives more completions and purchases?
- Duration testing: Run short 3-day blitzes vs. 7-day marathons. See which format boosts engagement without causing fatigue.
- Format experiments: Co-op boss fights vs. leaderboard races. Narrative vs. challenge-based events. Track which players return for.

> Statsig saves a lot of time in two processes. One is configuring experiments. It's very easy to just add feature flags to the code and implement it. The other is the analysis. Statsig makes it way faster to analyze the data, as a data scientist. **For every feature we launch, Statsig saves us about 3-5 days of extra work.**
>
> **Rafael Blay**
> DATA SCIENTISTS, REI DO PITACO

Social friction

05

Observation

Players who join a guild or clan are 3x more likely to stay—but many never get there.

Reducing social friction unlocks one of gaming's biggest retention and growth levers.

Impact

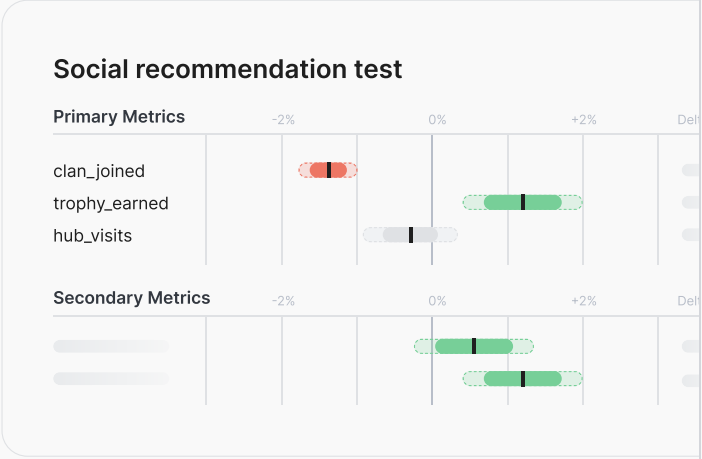
Socially connected players stay longer, spend more, and help grow the game organically.

In one MMO, players who joined a guild had a 200% increase in continued play. Social loops boost lifetime value and community health.

Experimenting to remove friction isn't just a UX fix—it's a retention strategy, a monetization driver, and a moat.

Experiments to run

- Auto-guild assignment: Prompt new players to auto-join a guild in their first session. Compare retention to players who must search manually.
- Social reward incentives: Give bonuses for adding friends or completing co-op missions. Track impact on connections, playtime, and spend.
- Onboarding social prompts: A/B test tutorial flows that highlight social systems—global chat, friend invites, guilds—versus flows that skip them.
- Positive interaction systems: Introduce "kudos" or endorsements after matches for one group. Measure ongoing multiplayer participation.

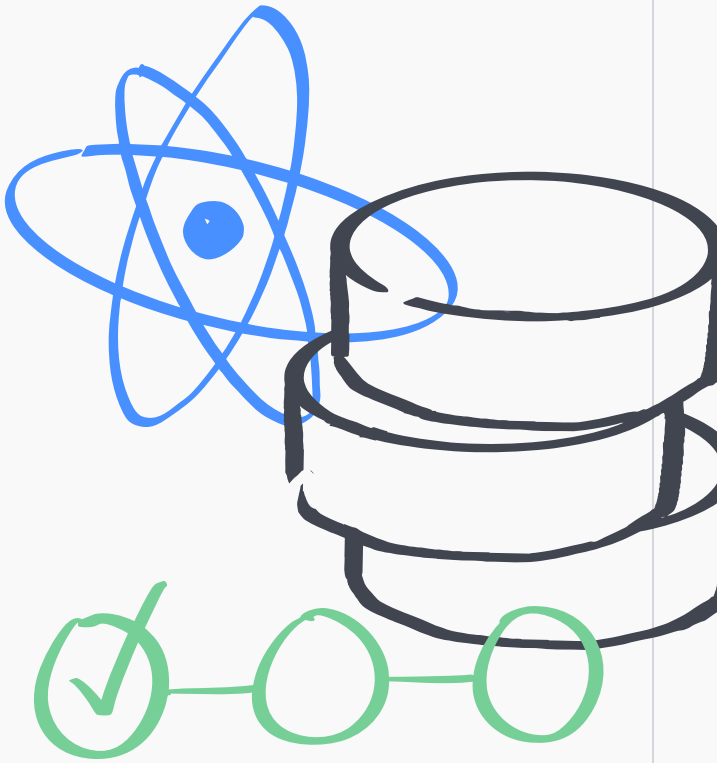


The experimentation advantage

Experimentation is the advantage in live service gaming. By testing content pacing, economies, and events, top studios uncover what drives engagement and long-term success.

It also reduces risk. Teams trial bold ideas on small segments, gather real feedback, and only scale what works—avoiding costly missteps and keeping players happy.

The best games don't rely on luck. They evolve through constant iteration, balancing new content and community needs to stay fresh, fair, and endlessly replayable.



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Want to see how Statsig can power your experimentation journey as a gaming company?

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