



# Experimentation Checklist

The only checklist your experimentation program will ever need.

## Experiment planning

Lock your hypothesis, metrics, and AI baselines before a single line of test config is written.

- Hypothesis clearly defines the business outcome, user behavior change, AI component under test, and expected direction of impact.
- Primary metric defined and configured in VWO.
- Secondary metrics defined and configured.
- AI-specific metrics defined: response latency, prediction confidence distribution, hallucination/error rate, recommendation accuracy, false positives/negatives.
- Guardrail metrics set to protect revenue/conversion, UX performance, and AI output stability.
- Baseline AI performance documented: output samples saved, accuracy benchmarks recorded, latency captured, segment performance logged.

## Test setup

Document every AI artifact and assign clear ownership before the experiment is cleared for launch.

- Model version, prompt version, and algorithm logic documented.
- Rollback criteria defined before launch.
- Bias and fairness checks included in evaluation plan.

- Privacy and compliance reviewed for AI data usage.
  - Clear ownership assigned: experiment owner, analytics owner, AI reviewer, rollback decision-maker.
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## Pre-launch QA

Eliminate implementation error as a confounding variable before a single visitor is bucketed.

- Experiment type selected: A/B, Split URL, Server-side, Multivariate, or AI model comparison.
  - Targeting and segmentation validated; overlap with concurrent experiments checked.
  - Test previewed across browsers and devices; dynamic content optimized for performance.
  - AI edge cases and stress prompts tested during QA.
  - Hypothesis peer-reviewed by at least two stakeholders.
  - Prioritization framework includes AI confidence or uncertainty factor.
  - Experiment stages configured in program management tool.
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## Running the experiment

Protect test integrity through disciplined non-interference until pre-committed stopping criteria are met.

- No premature conclusions drawn from early data; no metric changes made mid-run.
- No prompt changes, model swaps, or logic updates during run; if required, pause, flush data, and relaunch cleanly.
- AI telemetry actively monitored: latency, error rate, unsafe outputs, and behavioral anomalies.
- All variations receiving sufficient traffic; traffic split confirms statistical power.
- Guardrail metrics monitored daily.
- Test running minimum of 7 days; drift detection monitored for AI systems.

## Conclusion

Ship only when the evaluation is complete, unbiased, and strictly aligned to your pre-defined hypothesis metrics.

- Test not concluded before minimum runtime unless a guardrail breach occurred.
  - Evaluation based on probability to beat baseline, statistical significance, effect size, segment-level performance, and AI output distribution differences.
  - Evaluation strictly aligned to metrics defined in the original hypothesis.
  - Bias and fairness review completed before shipping.
  - AI stability confirmed before rollout.
  - Winning variation shipped; losing variations paused and documented.
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## Analysis & learnings

Go beyond the win/loss call, segment, quality, & feed every insight back into the next experiment cycle.

- All learnings documented: business outcomes, AI behavior patterns, unexpected outputs, segment insights, guardrail observations.
- Qualitative deep dive completed using heatmaps, session recordings, funnel analysis, and AI output sampling review.
- Insights fed back into prompt refinement, model retraining, feature engineering, and personalization logic updates.
- Next experiment planned based on this test's findings.
- Learnings shared with leadership and cross-functional teams.