Test Strategy

Document for app.vwo.com

# 1. Objective

To validate the end-to-end functionality, usability, security, and performance of app.vwo.com—an A/B testing SaaS platform—to ensure it meets both business and technical requirements for release. This includes benchmarking current functionality against previous releases and defined KPIs.

# 2. Scope

In Scope:

- Customer Workflows:

- User login/logout

- Dashboard navigation and access

- A/B test creation, modification, and execution

- Signup process

- Reporting and analytics viewing

- Integration with third-party analytics platforms (e.g., Google Analytics, Mixpanel)

- Account management features (change password, update profile, manage team members)

- Web UI across major modern browsers

- Mobile web support (responsive design)

Out of Scope:

- Native mobile applications (not applicable in this release)

- Deprecated or beta features not finalized for production

- Backend database scalability testing (handled by platform engineering team)

# 3. Focus Areas

1. Functional Correctness – Validate all user stories and functional requirements.

2. UI/Navigation – Ensure intuitive workflows and consistent design.

3. Performance – Load/stress testing on dashboard and test execution pages.

4. Security – Assess session handling, authentication, and vulnerabilities (OWASP).

5. Compatibility – Test across browsers (Chrome, Firefox, Safari, Edge) and screen sizes.

6. Usability – Apply accessibility standards (WCAG 2.1) and conduct heuristic evaluations.

# 4. Test Approach

Testing Types:

- Black-box Functional Testing

- White-box Testing (backend integration points)

- Automated Regression Testing

- Manual Exploratory Testing

- Load & Stress Testing (using JMeter, k6)

- Security Testing (OWASP ZAP, manual audits)

- Cross-Browser & Responsive Testing

- Usability Testing (sample of 5-10 users)

Tools & Infrastructure:

- Selenium (Java/Python) for UI automation

- Postman for API validation

- Jenkins for CI/CD pipelines

- BrowserStack/SauceLabs for browser/device compatibility

Test Data Management:

- Use sanitized production-like data for functional and integration testing

- Simulated edge cases for negative testing

# 5. Deliverables

- Daily Smoke and Functional Test Reports

- Regression Test Execution Summary

- Load/Performance Benchmark Reports

- Security Test Summary with Vulnerability Log

- UAT Completion Report with Stakeholder Sign-Off

- Test Coverage and Requirements Traceability Matrix

- Open/Closed Defect Reports from JIRA

- Automation Suite Codebase with Execution Logs

# 6. Team & Schedule

Team Composition:

- 4 Testers (2 Manual Functional, 1 Automation Engineer, 1 Performance/Security Analyst)

Tentative Schedule:

- May: Functional & Security Testing

- June: Load & Performance Benchmarking

- July: Compatibility Testing, Accessibility Validation, UAT

- August: Regression Testing, Final QA Review, Go/No-Go Decision

Note: Tool licensing for BrowserStack/SauceLabs must be verified ahead of test planning.

# 7. Entry & Exit Criteria

Entry Criteria:

- Approved user stories with clear acceptance criteria

- Stable QA environment and test data provisioned

- Build deployment to QA with basic smoke validation

Exit Criteria:

- 100% execution of high and medium-priority test cases

- No Sev-1 or critical bugs open

- All UAT issues addressed and stakeholder sign-off obtained

- Test reports and metrics reviewed by QA Lead and PM

# 8. Risk & Mitigation

- Unstable builds may delay testing → Enforce smoke test gate on new builds

- API changes post-testing start → Lock contracts post-handover

- Browser/device test gaps → Use BrowserStack or equivalent for full coverage

- Performance issues in reporting modules → Early load simulation and benchmarking

- Insufficient resourcing for parallel test phases → QA Lead to adjust task allocation based on sprint priorities

# 9. Conclusion

This test strategy aims to ensure that app.vwo.com delivers a reliable, user-friendly, and secure experience across its critical modules. With a balanced combination of automation, manual, exploratory, and performance-focused approaches, we aim to reduce defect leakage and ensure high-quality delivery that aligns with stakeholder expectations and market readiness.