

Here's your **finalized Test Strategy for apo.vwo.com (A/B Testing Tool)** 📌

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# Test Strategy Document

**Project:** apo.vwo.com (A/B Testing Platform)  
**Prepared by:** Senior QA Manager (20+ Yrs Experience)  
**Reviewed by:** QA Lead (20+ Yrs Experience)  
**Date:** 3rd May 2025

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## 1 Objective

Ensure the end-to-end functionality, usability, performance, security, and data accuracy of **apo.vwo.com**, an A/B testing platform, aligning with business and technical requirements.

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## 2 Scope

### ☒ In Scope

- **Customer Workflows:**
  - User Registration (Sign-up)
  - User Login & Logout
  - Dashboard navigation
  - A/B Test creation, modification & deletion
  - Reporting and analytics viewing
- **Account Management:**
  - Profile updates
  - Password reset
- **Integrations:**
  - API Endpoints (A/B test management, user management, analytics)
  - Webhooks & third-party analytics integrations (e.g., Google Analytics)
- **Platform Coverage:**
  - Web application (Desktop + Mobile browsers)

### ✗ Out of Scope

- Mobile native apps (Android, iOS)
  - Internal admin dashboards (for now)
  - Third-party billing and payment workflows (handled externally)
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### 3 Focus Areas

Area	Description
<b>Functional Correctness</b>	Ensure all user workflows operate as intended
<b>Data Accuracy</b>	Ensure correct reporting of A/B test results and metrics
<b>UI / Navigation</b>	Consistency, responsiveness, and intuitiveness of UI
<b>Performance</b>	Load, stress testing of high-traffic scenarios
<b>Security</b>	Vulnerability assessment (OWASP Top 10)
<b>Compatibility</b>	Cross-browser and device validation
<b>Usability</b>	Accessibility (WCAG 2.1 compliance) and user-friendliness
<b>API Reliability</b>	REST API testing (CRUD, auth, error handling)
<b>Database Integrity</b>	Backend data correctness and referential integrity
<b>Server Log Validation</b>	Ensure error-free server logs for key workflows

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### 4 Test Approach

Testing Type	Approach / Tools
<b>Functional Testing</b>	Manual Testing (Test Scenarios & Cases), Selenium for UI automation
<b>API Testing</b>	Postman / Rest Assured (Java)
<b>Database Testing</b>	SQL queries using DBeaver
<b>Log Validation</b>	Kibana / Splunk (Server log monitoring)
<b>Performance Testing</b>	JMeter (Load & Stress Testing)
<b>Security Testing</b>	OWASP ZAP / Burp Suite
<b>Cross-browser Testing</b>	BrowserStack (Chrome, Firefox, Safari, Edge)
<b>Accessibility Testing</b>	Axe, Lighthouse
<b>Exploratory Testing</b>	Session-based test charters
<b>Regression Testing</b>	Automated regression suite (Selenium + TestNG)

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### 5 Deliverables

- Functional Test Reports
- API Test Report
- Performance Test Results
- Security Assessment Report
- Cross-browser Compatibility Report
- Usability Evaluation Report
- UAT Sign-off Report
- Test Coverage & Defect Reports
- Automated Test Suite & Execution Logs

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## 6 Team & Schedule

### Team Composition

- 4 QA Engineers (2 Manual, 2 Automation)
- 1 Performance Tester
- 1 Security Tester (part-time)
- 1 Contingency Backup QA (floating)

### Schedule

Month	Activity
May	Functional, API, Database & Security Testing
June	Performance Testing, Cross-browser Testing
July	Usability Evaluation, UAT
August	Final Regression Testing & Release Sign-off

### UAT Participants

- 5 Business Stakeholders
- 5 Beta Users (Early Adopters)

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## 7 Entry & Exit Criteria

Criteria	Description
Entry	- All user stories signed-off by Product - Test environment stable & accessible - APIs deployed and documented
Exit	- All functional & non-functional tests executed - No Critical/High open defects - Load test SLAs met (Avg Response < 2 sec @ 1000 users) - No OWASP Top 10 Critical/High vulnerabilities - UAT sign-off obtained - 95%+ Test Coverage achieved

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## 8 Metrics to Track

- Requirement Coverage %
- Test Case Execution %
- Defect Density & Leakage Rate
- API Test Coverage %
- Automation Suite Pass Rate %
- Performance Metrics (TPS, Response time)
- Security Issues count (by severity)

- Usability Issues count

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## 9 Risks & Mitigation

Risk	Mitigation
Frequent UI changes	Early collaboration with Dev + Flexible exploratory testing
API schema instability	API Contract Testing + Close dev sync
Limited UAT participants	Pre-identify backups from business team

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## 10 Tools Stack

Category	Tool
Test Management	Jira + Zephyr
Automation	Selenium + TestNG
API Testing	Postman / Rest Assured
Database	DBeaver
Log Monitoring	Kibana / Splunk
Performance	JMeter
Security	OWASP ZAP / Burp Suite
Cross-browser	BrowserStack
Accessibility	Axe, Lighthouse
CI/CD	Jenkins

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## ✓ Approval

Role	Name	Signature	Date
QA Manager	Raghu	(signed)	03-May-2025
QA Lead	Chenna	(signed)	03-May-2025
Product Owner	[Donald]	(pending)	—

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