Walking a Tightrope

Finding a Balance of Automated and Manual Testing

- [Word Version](#)
- [Plain Text Version](#)
- [PDF Version, non-accessible](#)

Stipulations

1. Automated accessibility testing is not a substitute for manual testing, but an important part of a successful accessibility program.
2. Estimations of what can be checked accurately by an automated checking tool vary wildly.
3. I work for an automated tool company.

Balance Points

- Automated vs. Manual Testing
- The Team
- Bringing It All Together

Balance Point #1: Automated vs. Manual

Automated

Plus

- Big Picture
- Saves time
- Cost effective
- Scalable
- Consistent
- Can schedule scans

Minus

- Questionable accuracy
- Literal interpretations
- Data overload
- Can be expensive
- Some success criterion not checked at all
- Assumption that auto testing is enough

Manual

Plus

- More likely to find 'real' user issues
- The human element
- More flexible
- User testing and design results
- Allows tester judgement calls

Minus

- The human element
- Tester burnout
- Some tests are difficult to perform
- Can't reuse manual tests
- Less thorough

TMI?

Experience of Tester

- Relevant?
- Accurate?
- False Positive?

False Positives?

- Everyone has a process.
- Everyone has their own perceptions.
- Flagging an item for review isn't a false positive, but an efficiency.
- Technology is advancing, and testing is now more complex.

Making Automated Testing Better

- Siri
- Alexa
- Watson
- Cognitive Computing
- Advanced Algorithms
- Image Identification

Links to automated testing resources

https://www.w3.org/community/auto-wcag/

https://ictaccessibilitytesting.org/

Cost?

- Irrelevant.
- Free tools
- Browser-based
- Single Page

Choosing an automated tool Choosing an automated tool

- Developer-based
- Content/end user-based
- Browser-based
- Hybrids

Balance Point #2: The Team

Team Members

- Content Managers
- Designers

- Developers
- Marketing Team
- Teachers
- Student/Intern/Grad Assistants
- Administrative Assistants

Designers
- Print Designer
- UX
- Marketing
- Devs with design experience

Developers
- Programmer
- Devs with or without design experience
- IT Support/Network Admin
- CMS/LMS
- Agency

Training and Skills Check
- A11y Awareness
- Basic Web skills
- CMS user only
- Code/no code, copy/paste
- Assistive Tech Awareness/Skills
- NVDA and or Chrome Vox
- User task-based testing
- PwD Testers

Accessibility Responsibility Breakdown
- By offering role-based issue sorting, you can easily assign issues based on the individual team members' responsibility.
- Manual testing is typically managed in one area, but…
- Manual testing can also be divided among the team based on their responsibilities.
- [W3C accessibility responsibility breakdown](#)
- Fact: Manual tests rely on the knowledge of the tester.

Balance Point #3: Bringing It All Together
 Automated (review)

Plus
- Big Picture
- Saves time
- Cost effective
- Scalable
- Consistent

- Can schedule scans

- Questionable accuracy
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Manual
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Find the Automated Tool That Complements

- Your Team
- Scalable
- Single Page
- Site Wide
- Configurable
- Runs on a Schedule
- Can integrate into CMS
- Cost Effective
- Robust
- Matches teams' skills
- Dev tools
- API

Divide and Conquer

- Divide the work based on the roles
- Content Issues to content people
- Dev issues to developers/webmasters

Automated Testing

- Site templates
- Representational content pages

- Dynamic content pages
- Dialog modals and alerts
- Key entry and exit pages (including account login and recovery pages)
- Help and assistance pages
- Interactive forms

Manual Testing

- Page zoom
- Form Elements and Form Validation
- Visible Focus
- Multimedia and Media Control
- Dynamic elements
- Modals and dialog boxes
- Modal Receives Focus
- No Keyboard Trap
- Close modal

Training Program

- General Accessibility Testing Knowledge
- HTML Coding/ CMS
- AT Tester Training
- Document Accessibility Training
- Manual Tester Training
- Automated Tool Training

Thank You!

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- Link to Word Version