



WHITEPAPER

COMPLIANCE TESTING FOR ADA



1. ABSTRACT

Computers and other electronic devices are being used today for a large range of purposes, including accessing information and facilitating transactions. At the same time, people with disabilities – physical, mental and even material such as the version of a hardware or software they use – can pose a challenge in accessing the electronic data, and losing the benefit an otherwise normal customer would gain. Therefore, Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) make it mandatory for all businesses to comply with guidelines, ensuring inclusivity. This requires not only developing electronic content in an inclusive way, but also testing for the different variables that can make it non-compliant and liable to lawsuits. Compliance also expands the customer base for the organizations, making it a compelling reason to ensure inclusivity. But achieving this requires not only ADA-compliant development but also exhaustive testing.

2. INTRODUCTION

In June 2017, in a first of its kind case, Winn-Dixie's website was found to have violated Americans with Disabilities Act and denied a blind man accessibility due to incompatibility with standard screen reader software. This denied him the opportunity to benefit from the offer that other customers enjoyed from Southern chain's 495 stores.

Though this is one of the first websites where a federal court has passed a judgement in favor of the claimant, in 2016, several lawsuits were filed by the blind and visually impaired customers due to different accessibility challenges, including:

- Website images not text-labeled
- Pages that are not readable or functional when text size is increased
- Forms that are not accessible

3. DEFINING DISABILITY AND COMPLIANCE

According to ADA, "a person who has a physical or mental impairment that substantially limits one or more major life activity" is defined as disabled. Physical impairment could be visual (blindness, low vision, and color blindness), muscular issues, Parkinson's disease, hearing impairment, epileptic seizures etc... Mental impairment could be dyslexia, problem solving, cognitive disabilities etc.

Beyond that, it also includes:

- Users with poor communication

- Labels or instructions that are not provided when the website's content requires user input

Section 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) require that the web applications, web sites and documents developed/procured/maintained by organizations are accessible to all users – including those with certain disabilities.

The ADA, initially amended in 1990 to protect people with disabilities from discrimination and providing equal opportunity for all, was published again in September 2010 to encompass electronic and information technology as per the latest amendment published in September 2010. It has become necessary for organizations to align themselves to comply with standards.

- Computer illiterates such as new users and aged people
- Users with outdated/old systems

For eCommerce, Accessibility – or a11y (referring to the 11 characters between 'a' and 'y') define how businesses can align their business towards ADA compliance by designing products, devices, services, or environments such that those with disabilities can also access and benefit from the services offered.

4. BENEFITS OF CONFORMING

While on the one hand there is a need to conform because of the lawsuits and fines non-compliance can attract, the need for compliance has its own benefits:

- As part of every organization's social responsibility to build products and provide services that can be accessed conveniently by everyone regardless of their physical or mental challenges.
- Businesses benefit from a larger target customer
- by being inclusive. According to the American Community Survey, in the US, nearly 12.6 per cent of the US population were found to have disabilities.
- The US government also incentivizes businesses to be ADA compliant, providing a credit of up to 50 percent of eligible access expenditures like communications, interpreters, and other auxiliary aids that exceed \$250 but do not exceed \$10,250.

Our client, a leading educational software solution provider, experienced an expansion in its user base following ADA compliance

5. COMMON CHALLENGES TO CONFORMATION


ADA compliance needs to be built into the development process right at the beginning. Some of the common mistakes a developer or an organization may make in either not factoring in the ADA requirements, or assuming that the development process will take care of it on its own. As a result:

- ADA may not be part of project planning or requirement phase
- ADA testing will be done only during or before UAT
- Wrong assumption on Validation Estimation

As a result, some of the common errors that may arise include:

- Choosing a color template that not meet ADA requirements
- Contrast ratio standards not maintained as required by ADA
- Treating JAWS, which is only a screen reader, as a professional validation tool

The UI / UX team's inadequate knowledge of ADA standards/tools, periodic changes in the various sections of the Act to keep pace with the changing requirements of users (Change in DIV / SUB DIV sections), and adding HTML tag for analytics are some of the other factors that can further compound ADA compliance challenges despite validating it.



Following a comprehensive testing, one of our retailer customers was able to reduce their customer support cost and also experienced an increase in revenues by 20 per cent.

6. WITH THE RIGHT TESTING PARTNER

There are readymade tools available for ADA compliance testing. However, there are several factors that cannot be automated and need discretion of an experienced team to ensure total compliance.

For the compliance testing to be successful, ADA requirements should be discussed and integrated at the requirement phase and decided before creating the UI creative comp doc. ADA limitations should also be considered before having rich UI features such as drag and drop.

Developers/organizations should look for testing partners:

- Who possess the right expertise and experience

- Have certified ADA testers
- Can provide sample reports/ artefacts showcasing capabilities
- Referenceable clients
- Can draft reports that can be audited by authorizing authorities

To ensure 100 per cent compliant product covering critical aspects of relevant compliance standards. Their effective and streamlined process or approach not only is effective but can also be practiced across the organization on multiple products/projects. For ease of audit and certification, use of standardized templates, checklist and reports is another important criterion followed by professional testers.

7. WHY INDIUM?

Indium Software Testing, with experience in implementing ADA compliance across multiple domains such as healthcare, e-commerce and e-learning has a resource pool with strong ADA expertise in usage of tools and standards. One of its greatest strengths is in creating reusable kits to jump start execution.

Being right from Day 0, at the planning stage, to providing inputs on how the development can comply better and reduce iterations as well as comprehensive and diligent testing at the end for optimum results are some of the strengths that Indium offers developers and businesses.

Indium can also certify for ADA compliance.



**Having problems with
Compliance? We can help you
with our state of the art**

Compliance Testing

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