

TCS Accessibility Consulting Services

Innovation labs



The global IT user base is expanding rapidly, with a significant share comprising elderly and differently-abled users. The UN Convention on the Rights of Persons with Disabilities recognizes the importance of access to information as a basic human right. The World Wide Web Consortium (W3C) has published Web Content Accessibility Guidelines (WCAG 2.0) to enable equal opportunity. Non-compliance with accessibility requirements can lead to significant legal costs have a detrimental effect on an organization's reputation and importantly hampering equal opportunities to person with disability.

Tata Consultancy Services (TCS) Accessibility Consulting Services help businesses ensure compliance with accessibility standards. With our integrated approach towards accessibility, you can support individuals with visual, auditory, mobility, cognitive, or neurological issues, or temporary challenges such as a broken arm, to partake of equal opportunities. Our services will not only help you enhance your customer base but also demonstrate social responsibility.

Overview

Organizations can run into legal and social roadblocks while expanding businesses online, implementing a new technology, or executing projects. A common challenge is monitoring and inculcating accessibility norms in the development of IT solutions. While mobile and internet penetration have drastically increased, the special needs of elderly users as well as those with disabilities are not always recognized. Accessibility also addresses issues faced by users due to cross browser incompatibility, low bandwidth connections, and search engine optimization. Web accessibility has emerged as a critical business aspect, as it promotes access, interaction, leading to more customers resulting in more revenues. Ignoring accessibility compliance implies that a significant section of the IT user base will find the solution difficult to use.

TCS Accessibility Consulting Services encompass accessibility diagnosis, assessment, and remediation, enabling businesses to integrate accessibility compliance into technology solutions and processes. We plan, design, and develop accessibility solutions that are aligned with business objectives. We also enable accessibility compliance across devices and platforms (including web, mobile, and enterprise solutions), as well as different digital content delivery formats (such as accessible PDF, EPUB3, Daisy, Braille etc.). Our user-centric designs are focused on end-customer requirements, helping our solution achieve inclusivity in the truest sense.

Our Solution

With the help of TCS Accessibility suite of customized tools, we assess risks, identify issues, and provide end-to-end implementation of accessibility compliance. Our accessibility solution includes the following tools.

End-to-end lifecycle management: The TCS Enterprise Accessibility Platform (TEAP) facilitates

end-to-end lifecycle management of the accessibility project and proactively recommends the process and tools to be used for accessibility compliance at each stage of the Software development lifecycle.

Testing and automation: TCS' accessibility testing methodology is robust, well-structured, and easy to adopt, and helps enhance testing efficiency, decrease cycle times, and reduce costs. Our Solution and capabilities includes:

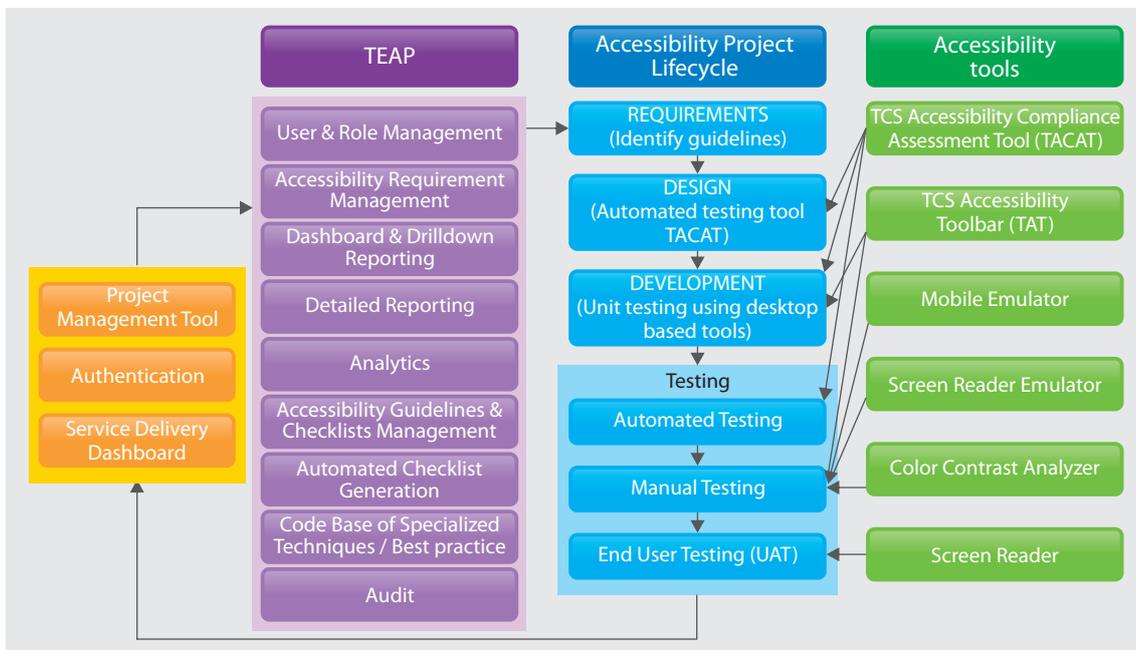
- TCS Accessibility Compliance Assessment Tool: an automated tool for web accessibility testing with the ability to crawl the entire website and also validate dynamic content (user input simulation) to diagnose pages automatically, report violations, and suggest remedies.
- TCS Accessibility Toolbar: browser plug-in tool for quick and visual evaluation of all relevant information at a single click.
- Diverse Team having expertise in assistive technology (screen readers) like JAWS, NVDA and end user testing with person with disabilities to meet diverse end user requirements
- Accessibility Certifications: Assist in obtaining multiple types of accessibility Voluntary Product Accessibility Template (VPAT) Statement, WCAG 2.0 conformance claim.

TCS Accessible Content Publisher: File conversion tools convert files in diverse formats (HTML, XHTML, XML, PDF, Doc, RTF, txt) into accessible formats like EPUB3, DAISY XML, DAISY audio, and Braille.

Benefits

TCS Accessibility Consulting Services enable businesses to create a seamless experience for all users. Key benefits of the service include:

- **Improved regulatory compliance:** We help you adhere to global and country-specific laws such as WCAG 2.0 Levels A and AA, US Section 508 IT, and other country specific IT accessibility standards.



An Overview of TCS Accessibility Consulting Services

- **Larger customer base:** We support you in delivering content and technology to a larger audience while enhancing the user experience for your existing user base. With an ageing global population and significant growth in technology usage by differently-abled people, accessibility compliance allows businesses to connect effectively with customers, employees, and other stakeholders.
- **Enhanced brand reputation:** By providing IT solutions that are compliant with accessibility standards, we help align your business objectives and goodwill gestures, demonstrating your commitment to quality solutions and to creating a social impact.

implementation—from identification of requirements to end-user testing—of accessibility compliance. We identify and assess risks to provide customized solutions to our clients.

- **Sophisticated technology:** TCS Enterprise Accessibility Platform is a comprehensive accessibility platform that enables administration of the accessibility project lifecycle, integration of the accessibility evaluation process with existing delivery processes, and dashboards and compliance reporting. It also enables management of different accessibility projects—web, mobile, and digital—and follows best practices. The platform also has readily available online technical resources.

The TCS Advantage

We deliver value to businesses through:

- **Domain experience:** Over the years, TCS has developed a sound understanding of the user requirements for persons with disabilities, through our extensive experience in consulting and reviewing user-centric designs.
- **Relevant technology expertise:** We have significant expertise in WAI-ARIA, an accessibility suite for screen reader users, which helps develop rich and accessible internet applications and deliver accessible dynamic content. Our accessibility solutions are integrated throughout the software development life cycle (SDLC), providing agility of operations and ease of maintenance. Our teams are experienced in automated, manual, and assistive technology tools. We also leverage our research capabilities in accessible user interface models, mobile accessibility, and automation of accessibility validation to eliminate human judgment.
- **End-to-end solutions:** We develop in-house portfolio tools part of 'TCS Accessibility Suite' and also have expertise in both open source and commercial tools to ensure total

How we help our customers

A large US retail chain decided to ensure its website adhered to accessibility norms and met the needs of all customers. The TCS team provided consultation and remediation services to the retailer. Testers (with disabilities) were trained on WCAG 2.0 and employed to test the website. As a result, the retailer reduced User Acceptance Testing (UAT) defects and warranty defects, and ensured accessible solutions for its customers.

One of the largest credit card companies in the US required accessibility testing for its customer-facing web applications. The TCS team customized a macro and used automated testing tools to perform automated code validation and followed an accessibility evaluation checklist adhering to WCAG 2.0 guidelines. Since 2010, we have successfully tested 22 interactive applications for processes such as customer travel, membership rewards, template validation for the content management system, and relationship summary of accounts. Our phased approach for accessibility compliant web pages and applications have led to all tested applications being certified Level A and level AA accessibility compliant by Shaw Trust, a UK based organization for the disabled.

About TCS Innovation Labs

The TCS Corporate Technology Office governs formal research and innovation in the company. We have several disruptive innovations to our credit and we set up our first research lab in 1981 when the IT industry in India was just taking shape. We adopted model-driven development and created toolsets for each phase of the application development lifecycle.

Today, TCS research is focused on Software, Applications, and Systems exploration. Our Research and Innovation teams, through a global network of TCS Innovation Labs, work across domains and new technologies to deliver a range of solution frameworks to help your business to optimize, analyze, digitize, de-risk, and sustain.

In the true spirit of collaboration and open innovation, we have created a co-innovation network, TCS COIN™ that connects with several entities in the innovation ecosystem such as emerging technology companies, venture funds, academic research, strategic partners, and key customers. The group co-innovates, capitalizing on the strengths of each, for the benefit of all.

Contact

To know more about our TCS Accessibility Consulting Services, contact
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About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that delivers real results to global business, ensuring a level of certainty no other firm can match. TCS offers a consulting-led, integrated portfolio of IT and IT-enabled infrastructure, engineering and assurance services. This is delivered through its unique Global Network Delivery Model™, recognized as the benchmark of excellence in software development. A part of the Tata Group, India's largest industrial conglomerate, TCS has a global footprint and is listed on the National Stock Exchange and Bombay Stock Exchange in India.

For more information, visit us at www.tcs.com

IT Services Business Solutions Consulting

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