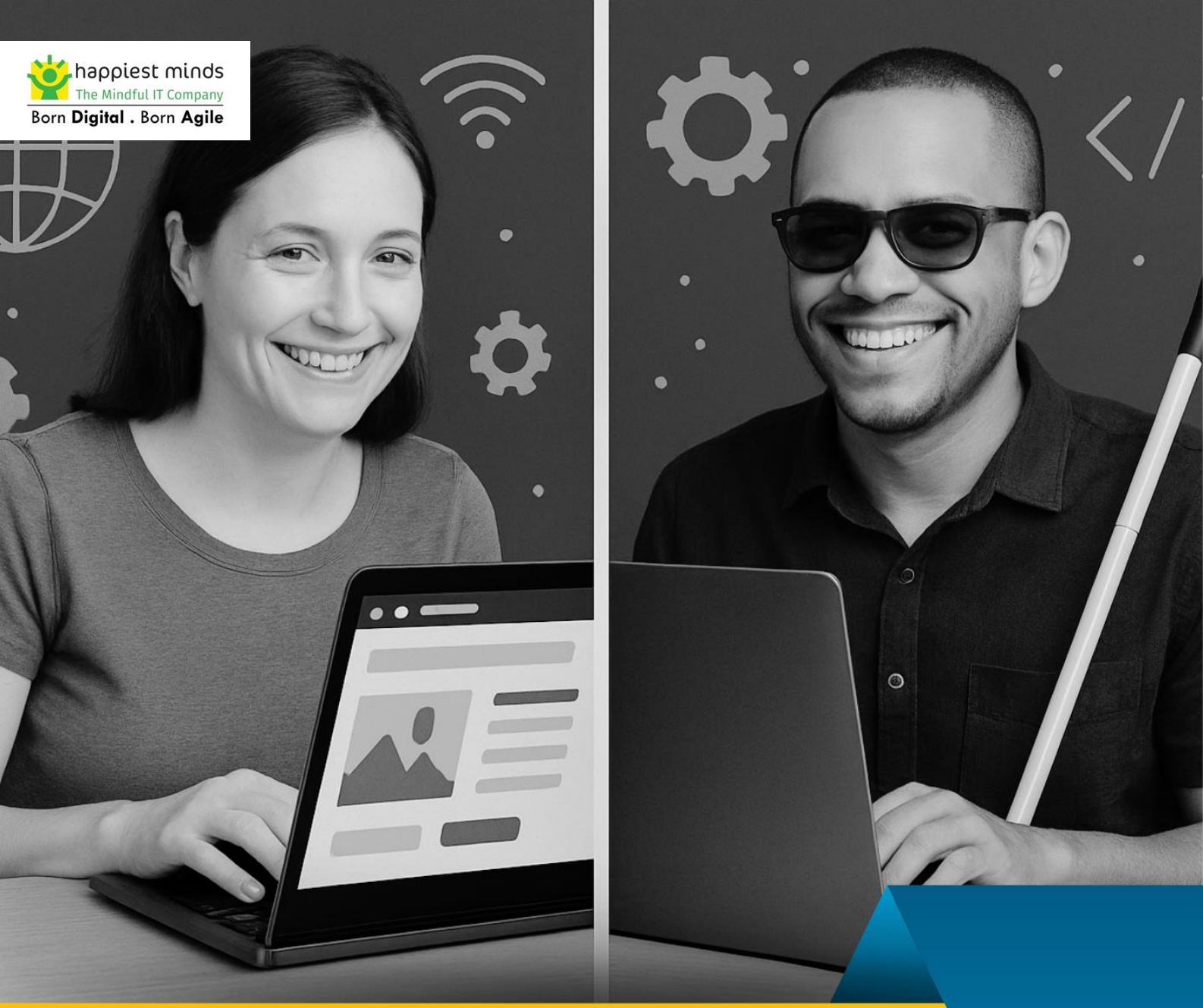
happiest minds
The Mindful IT Company
Born Digital . Born Agile



SEAMLESSLY ENABLE ACCESSIBILITY WITH OUR

AI-POWERED REMEDIATION SOLUTION

OVERVIEW

Accessibility is about ensuring digital inclusion by making products and services available to everyone, including individuals with permanent, temporary and situational disabilities. It is not just about meeting legal requirements, it's about creating equal access enabling all users to fully engage with your services, products and contents regardless of their abilities. Adopting an accessibility-first approach fosters an inclusive environment for the customers and employees, building trust and demonstrating your commitment to positive change.

WHY ACCESIBILITY?

2.2 billion people worldwide suffer from some form of visual impairment.

About **75%** of Americans with disabilities use the internet daily.

Over **96%** of the top one million web pages had accessibility issues in 2023.

Investment in digital accessibility technologies within enterprises is seeing a significant uptick.

Accessibility isn't just about legal compliance; it's about ensuring equal access to your services, products, and content. By prioritizing accessibility, you create an inclusive experience, build trust, and show your commitment to positive change.

LEGAL & REGULATORY

- In 2024, there were 1202 accessibility lawsuits filed, and 48% filings were against companies that have been sued before.
- The European Accessibility Act mandates that digital products comply by 2025.

BUSINESS BENEFITS

- Enable & engage with over 1.3 billion people with disabilities.
- Improve user experience, ensure higher customer retention, and mitigate legal risks.

FINANCIAL IMPACT

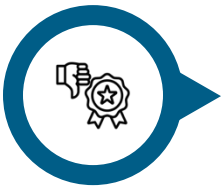
- Companies prioritizing accessibility see a 39% revenue increase (Forbes).

CONSEQUENCES OF NON-COMPLIANCE

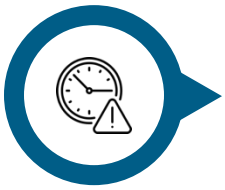
Failure to implement accessibility measures may result in:

1. Legal consequences and fines for noncompliance with accessibility laws.

2. Exclusion of customers or users with disabilities from using your products or services.



3. A negative impact on your brand reputation and customer trust.



4. Potential delays in product launches or critical updates due to accessibility barriers.

WHEN TO IMPLEMENT ACCESSIBILITY?

1

BUILD INCLUSIVE EXPERIENCES FROM DAY ONE

Integrate accessibility from the start to ensure an inclusive user experience. This minimizes redesign costs and enhances usability for all users.

2

CONTINUOUS ACCESSIBILITY IS CONTINUOUS GROWTH

Accessibility should be a continuous process integrated into your Agile development cycles. Make accessibility part of your ongoing digital transformation.

DOCUMENT MANAGEMENT CHALLENGES ACROSS INDUSTRIES

Older PDF documents often have accessibility challenges due to missing tags, improper reading order and lack of text recognition.

Many organizations have extensive public document collections that may not comply with accessibility standards.

Manual remediation using desktop software is highly time-consuming and labor-intensive.

Each document may require several hours/days of effort to make fully accessible.

HAPPIEST MINDS' SOLUTION FOR

SEAMLESS PDF ACCESSIBILITY REMEDIATION

AT HAPPIEST MINDS,
WE OFFER AN INTELLIGENT, SCALABLE SOLUTION THAT AUTOMATES THE REMEDIATION OF INACCESSIBLE PDF DOCUMENTS, REDUCING MANUAL EFFORT AND ENSURING COMPLIANCE WITH ACCESSIBILITY STANDARDS.

SMART AUTOMATION WITH AWS

AWS Lambda (serverless computing) and AWS Step Functions (workflow orchestration) is used to trigger and manage the remediation process only when needed, optimizing cost and performance. Amazon S3 handles secure storage for the original and remediated PDFs, while Amazon Bedrock generates alt text for images and charts using advance LLM capabilities.

ACCELERATED REMEDIATION WITH ADOBE APIS

Integrating Adobe's Auto-Tag API helps identify and address accessibility issues within the documents efficiently, while the Adobe PDF Accessibility Checker API is used to generate clear "before" and "after" reports for each PDF.

QUALITY CHECK WITH PDF ACCESSIBILITY CHECKER (PAC)

Validating every remediated document using the PAC tool ensures it meets PDF/UA standards. This final check confirms that the documents are truly accessible and compliant.

OUTCOMES OF THE PDF ACCESSIBILITY REMEDIATION SOLUTION

Our open-source PDF Accessibility Remediation solution is designed for flexibility and can be deployed in a variety of ways to match your organization's needs, which includes a remediation process that uses AI and machine learning to automatically identify and address accessibility gaps.

1

BULK REMEDIATION

Process entire collection of PDFs, at once for fast, large-scale accessibility updates.

2

ON-DEMAND REMEDIATION

Remediation of individual files as and when needed.

3

CUSTOM INTEGRATIONS

Seamlessly embed the solution into the existing content repositories or document workflows.

KEY BENEFITS

1

HIGH AUTOMATION EFFICIENCY

Automatically remediating 70-80% of common accessibility issues in PDFs reducing the need for manual correction.

2

STANDARD COMPLIANCE

Implements core WARG techniques to help ensure documents meet accessibility solutions.

3

REDUCED MANUAL EFFORT

Significantly lowers time and effort required from accessibility experts by automating much of the process.

4

COST & TIME SAVINGS

Speeds up remediation and lowers overall costs, making it ideal for handling large volumes of documents efficiently.

END-TO-END ACCESSIBILITY SERVICES

In addition to our PDF Remediation Solution, we offer a comprehensive suite of accessibility services designed to align with WCAG 2.2 AA standards and help organizations advance their accessibility maturity.

CAPABILITIES	WHAT WE OFFER	KEY DELIVERABLES
Accessibility Assessments/ Audit as a Service	• Comprehensive evaluation for Web, Mobile, Documents, TVs, Kiosks, & Self-Checkout Machines. • Analysis against WCAG 2.2 A and AA standards. • Identification of accessibility and usability barriers.	• Detailed Accessibility Evaluation In-depth analysis of digital solutions. • Actionable Recommendations Clear steps for improving accessibility. • Accessibility Conformance Report (ACR) Documentation of compliance status and next steps.
Accessibility Consulting as a Service	• Accessibility enhancements for existing digital products. • Embedding accessibility during the design and development phases. • Accessibility reviews for procurement and third-party products.	• Expert Guidance Dedicated Accessibility SMEs for strategic consulting. • UI Component Evaluation Identification of accessibility barriers. • Third-Party Compliance Reviews Ensuring accessibility before procurement.
Accessibility Training Services	• Build foundations of accessibility by understanding WCAG 2.2 principles (POUR) and key regulations. • Role-specific training for designers, developers, testers, and content creators. • Practical Hands-on sessions.	• Detailed Accessibility Evaluation In-depth analysis of digital solutions. • Actionable Recommendations Clear steps for improving accessibility. • Accessibility Conformance Report (ACR) Documentation of compliance status and next steps.
Accessibility Managed Services	• Craft accessible UI/UX designs from concept to implementation. • Build accessible web and mobile applications. • Multi-level testing to ensure compliance with accessibility standards and optimal usability. • Develop accessible documents in formats like PDFs, Word, and Excel.	• WCAG 2.2 A and AA Compliance Fully accessible products designed, developed, and tested. • End-to-End Accessibility Accessible content creation systems ensuring compliance at the source. • Comprehensive Testing Reports Defect tracking with remediation guidance.

OUR ACCELERATORS FOR ACCESSIBILITY SERVICES

ACCESSIBILITY MATURITY ASSESSMENT
Quickly evaluate and enhance accessibility readiness.

RISK MITIGATION
Ensure legal compliance, regardless of the country of operation.

PROCESS AUTOMATION FRAMEWORK
Scalable, accurate, cost-effective, and future-proof automation.

SHIFT-LEFT APPROACH
Early issue detection using a combination of advanced tools.

BENEFITS

Faster Implementation

Compliance Assurance

Future Proofing and Scalability

Cost Efficiency

High Accuracy

CUSTOMER SUCCESS STORY

Accessibility Transformation for a Global Leader in Supply Chain & Logistics

A global leader in supply chain and logistics approached Happiest Minds to transform their digital assets (web, mobile, and documents) to meet WCAG 2.2 AA standards and achieve accessibility maturity.

Results Achieved

Accessibility compliance and improved user experience.	Early defect identification through design reviews saved 20% in cost and reduced timelines by 30%.
Corrected/Modified system that generates PDFs by default.	Established accessibility as an integral part of the client's design and development processes.

WHY HAPPIEST MINDS?

1. **BORN DIGITAL BORN AGILE**
Digital and Agile are the genetic codes built into the very essence of our organization.

2. **INTEGRATED DISRUPTIVE TECHNOLOGIES**
Deep expertise in Blockchain, Drones, Robotics & RPA.

3. **STRONG ACCESSIBILITY BACKGROUND**
Good understanding across all checkpoints with a team of 200+ in document accessibility.

4. **HIGH QUALITY OUTPUT**
Metrics driven performance measurement with an automated tool for verification.

Please write to us at
business@happiestminds.com
for more details.

ABOUT HAPPIEST MINDS

Happiest Minds Technologies Limited (NSE: HAPPSTMNDS), a Mindful IT Company, enables digital transformation for enterprises and technology providers by delivering seamless customer experiences, business efficiency and actionable insights. We do this by leveraging a spectrum of disruptive technologies such as: artificial intelligence, blockchain, cloud, digital process automation, internet of things, robotics/drones, security, virtual/ augmented reality, etc. Positioned as 'Born Digital . Born Agile', our capabilities span Product & Digital Engineering Services (PDES), Generative AI Business Services (GBS) and Infrastructure Management & Security Services (IMSS). We deliver these services across industry sectors such as automotive, BFSI, consumer packaged goods, e-commerce, EdTech, engineering R&D, healthcare, hi-tech, manufacturing, retail, and travel/transportation/hospitality.

The company has been recognized for its excellence in Corporate Governance practices by Golden Peacock and ICSI. A Great Place to Work Certified™ company, Happiest Minds is headquartered in Bangalore, India with operations in the U.S., UK, Canada, Australia, and Middle East.

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www.happiestminds.com