

a11y

A primer on trends in the digital accessibility ecosystem

v1.0 – January 2025



#a11y
accessibility
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Digital Accessibility, from the Legal Department to Developers

- The Americans with Disabilities Act (ADA) was passed in July 1990, and though initially focused on the physical realm, by the mid-2000s digital experiences began to be brought into the fold. The first draft of Web Content Accessibility Guidelines (WCAG), which has since heavily influenced disability-related legislation globally, was first published in 1999, but it was likely the 2006 class action lawsuit *National Federation for the Blind v. Target* which first gained the attention of corporate legal departments. Target settled for \$9.7 million (including plaintiffs' legal fees) and the associated court ruling first established the precedent which extended "important areas of disability law into an emerging form of electronic commerce."^[a]
- Changes in the legal and regulatory environment accelerated from there. High-profile lawsuits were filed against Walmart in 2010 (\$3m), Disney in 2011 (\$2m), BofA in 2012 (\$1m) and Domino's in 2019 (\$4m). A 2017 lawsuit (*Andrews v. Blick*) set the precedent NY state disability law applied to digital experiences and in 2019, a similar ruling in CA agreed websites were subject to the Unruh Act. The EU adopted the European Accessibility Act (EAA) in 2019, which covered a broad range of physical and digital services, notably giving EU member states until 2025 to largely comply with WCAG guidelines. Plaintiffs' attorneys got the memo – in each of the past 3 years, more than 4,000 digital accessibility lawsuits have been filed (nearly 100 a week) against US companies.
- In the nearly two decades since *NFB v. Target*, spend for software and services around digital accessibility was thus driven by legal departments, and sales efforts from vendors in the space often led with an ROI calculation of the cost of remediation versus the cost of a lawsuit. And while this powerful argument persists, in keeping with broader trends advancing ESG, application owners have sought to design more inclusive digital experiences; the companies that employ them have gained appreciation for the substantial purchasing power of the disabled community. A 2018 study by American Institutes for Research estimated the after-tax disposable income of working-age people with disabilities to be \$490 billion.
- As a result, the market for digital accessibility solutions has gone from solely compliance-driven "remediation" to a revenue-impacting business decision (and the right thing to do), and enterprise adoption is both a top-down and bottom-up (practitioner-led) sales motion. Among several developer-focused accessibility solutions, Google Lighthouse is used by well over 1M MAUs and is integrated into Chrome DevTools; the axe-core community claims more than 1 billion downloads. Developers long ago realized bugs are exponentially less expensive when caught early in the SDLC versus in production; as accessibility has evolved from after-the-fact compliance, it has also undergone the "shift left" witnessed in other application quality disciplines (e.g. functional testing, security).

"The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect."

Tim Berners-Lee (inventor of the web)

"Accessibility is often only checked at the end of development, wasting time on retrofitting fixes while excluding disabled users."

Gartner, 2023

"You need to think about automated, manual and everything in between ... at the same time there's a huge elephant in the room, which is compliance."

Director of Product Accessibility, Salesforce

a11y ... by the numbers

Accessibility is an Enterprise Priority

85% of respondents believe digital accessibility is a key competitive advantage ^[b]

42% of respondents in a recent Applause survey rated accessibility “a top priority for their organization” ^[d]

ADA Litigation Continues Unabated ^[a]

4,630 class-action lawsuits filed in 2023 related to web and digital accessibility

105% CAGR (2015-2023)

Developer Adoption is Accelerating ^[c]

1bn+ total downloads of axe-core, a free open-source developer tool for web accessibility

275k weekly active users of axe-core

Internal Resources Remain Constrained ^[d]

44% of respondents said they have limited or no in-house resources for accessibility testing

29% do not involve people with disabilities in the application design or testing process

[a] UsableNet, [2024 Mid-Year Report](#)

[b] Level Access, [State of Digital Accessibility \(2023-2024\)](#)

[c] Deque, [website](#)

[d] Applause, [State of Digital Quality Report](#)

Digital Accessibility has Become a Core Enterprise Objective

Key Market Trends

Digital Accessibility is a Growing Enterprise Priority

- Millions of people access the web with some form of visual, auditory and/or mobility impairment, some estimates are as high as 20% or 30% of the population has some form of disability (sadly, we're all getting older)
- Enterprise demand historically came from the legal/compliance angle, largely in response to lawsuit avoidance and remediation or compliance with evolving regulation – however today digital accessibility has C-Level visibility and adoption driven by developers, marketers and app owners

Lawsuits are a Massive Issue

- More than 4,000 lawsuits relating to digital accessibility were filed each of the last three years, ranging from meaningful actions which advance the cause of accessibility to “troll” litigation
- A recent Level Access study found 80% of general counsels believed their organization was at risk of accessibility-related legal action in the next year

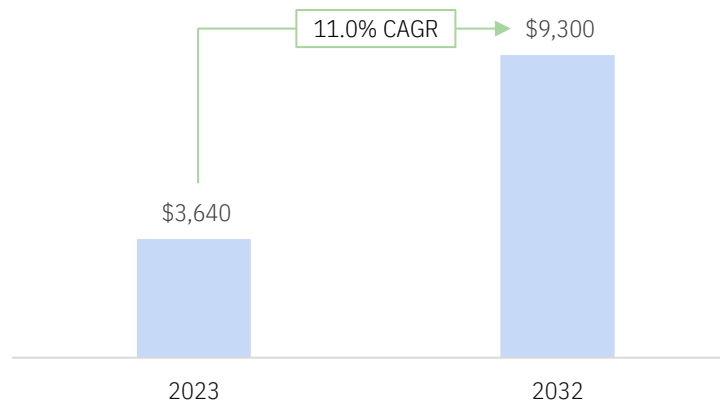
Developers and Marketers are a Growing Source of Demand

- Digital accessibility has “shifted left” from an after-the-fact remediation to proactive approaches, driven by adoption from development personas (and integration into broader testing suites) as well as modern MarTech stacks
- Vendor solutions have likewise evolved; once dominated by manual testing and consulting, leading vendors now offer comprehensive software-led platforms for developers (Level Access AMP, Deque axe, TGPI ARC) and marketers (Conductor, Google Lighthouse, Siteimprove), and gaining competition from newer software-first entrants like Evinced and Fable

Widgets are Highly Controversial

- Market reception of overlays which retrofit web content to more accessible formats has been a mixed bag – while ease of deployment is a notable selling point, these widgets frequently conflict with screen readers and other user-side accessibility tools
- These tools also do not provide protection from lawsuits; more than 450 companies with an accessibility widget on their website were sued over accessibility rights in 2023

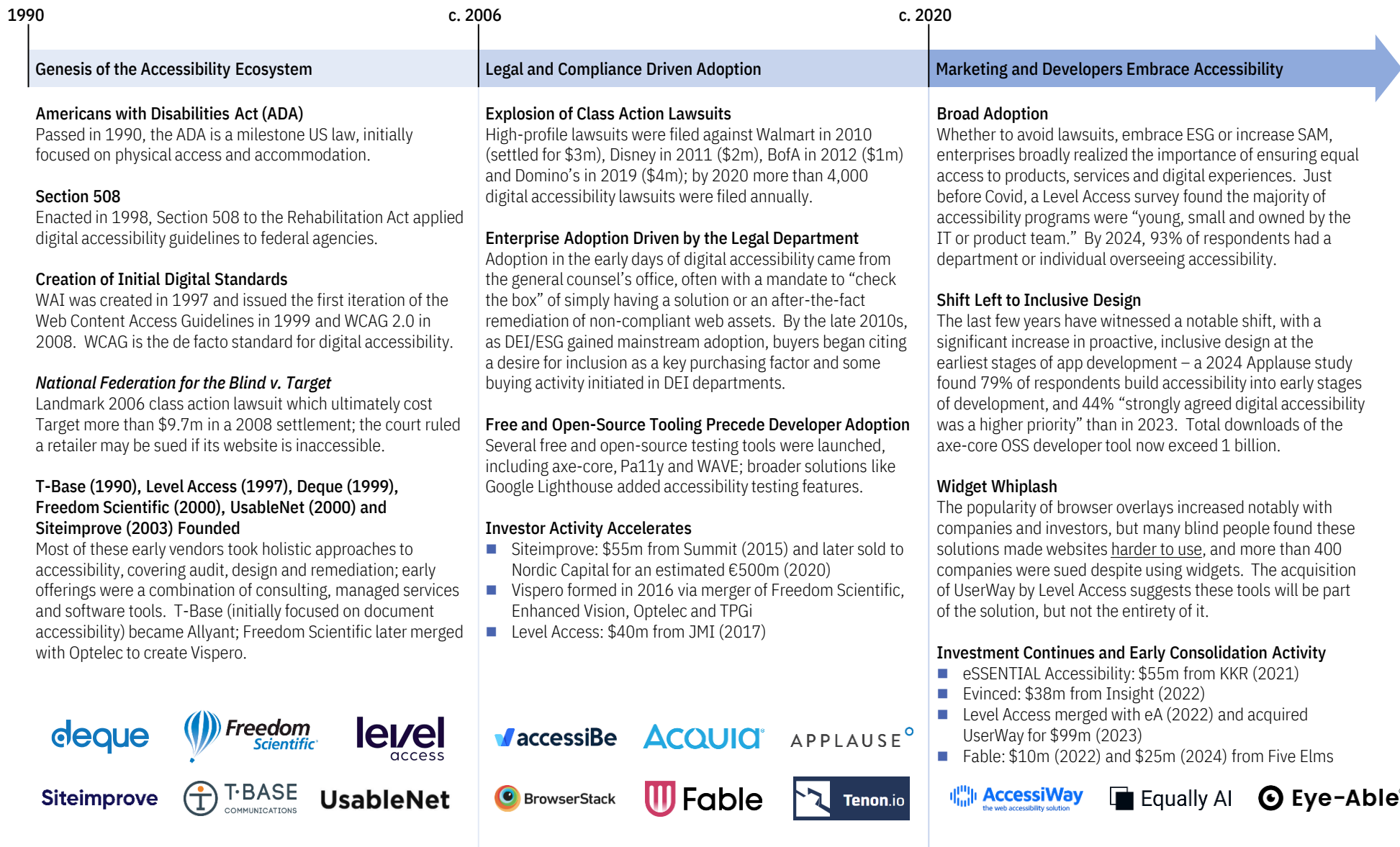
Web Accessibility Market Growth (\$ millions) [c]



Notable Market Activity

Date	Acquirer	Target	EV
03/20/24	level access	USERWAY	\$99m
10/05/22	crownpeak	ILUMINO	n/a
06/23/22	INSIGHT PARTNERS	evinced	\$38m Capital Raise
06/14/22	LEVEL ACCESS	ESSENTIAL ACCESSIBILITY	n/a
05/17/22	Five Elms Capital	Fable	\$11m Capital Raise
04/05/22	UserZoom	UserTesting	\$800m
04/05/22	GLILOT CAPITAL PARTNERS	accessiBe	\$33m Capital Raise
01/01/21	KKR	LEVEL ACCESS	\$55m Capital Raise
09/03/20	NORDIC CAPITAL	Siteimprove	\$592m

Market Evolution and Key Milestones

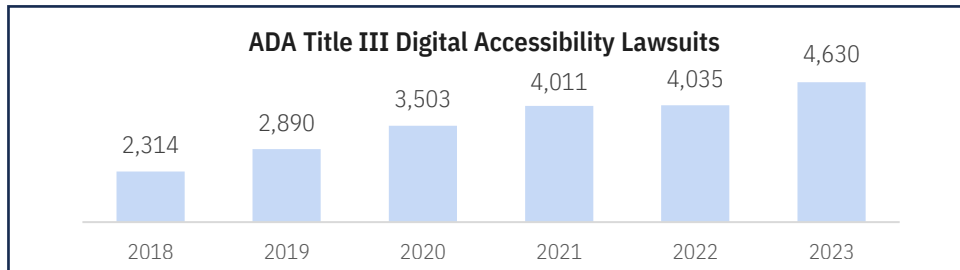



Regulation and Litigation Provide a Quantifiable ROI


Global advancement of regulation, paired with multiple high-profile lawsuits, has brought digital accessibility to the top of GRC and compliance priorities


Evolution of Digital Accessibility Regulation


- **Complex & Expanding Regulatory Environment:** beginning the late 90s and early 2000s, disability governance, regulation and compliance focus shifted from solely physical spaces to recognize websites and software applications as “public accommodations.”
 - Legal precedent formally captured digital experiences under the ADA in 2006 (though green shoots had appeared earlier, notably Section 508) and New York (2017) and California (2019); the EU then leapfrogged the ADA with the EAA (2019) which covered physical and digital experiences.
- **Threat of Lawsuits:** while physical accessibility has historically been a focus of legal action, digital accessibility has become a prominent challenge – nearly 100 digital accessibility lawsuits were filed each week in 2024
 - A recent Level Access survey found 53% of respondents and 80% of general counsels felt their enterprises were “at risk” of accessibility-related legal action in the coming year
- **No Simple Fix:** accessibility overlays, or “widgets” grew in popularity circa 2020. Unfortunately, the widgets often made websites less accessible. Worse, they also did not inoculate customers from lawsuits; more than 20% of the lawsuits filed this year were against websites which had deployed widgets at the time of the lawsuit.
- **Quantifiable ROI:** the all-in cost of digital accessibility lawsuits often costs well into the millions of dollars for large companies, and well into the hundreds of thousands for small business
 - *NFB v. Target* may be the high-water mark, at \$9.7m plus Target’s own legal fees
 - The Level Access survey found about a third of respondents began addressing digital accessibility primarily because of compliance obligations or the threat of a lawsuit





Americans with Disabilities Act (ADA)
 The Americans with Disabilities Act (ADA) is a US civil rights law prohibiting discrimination against people with disabilities. The ADA does not currently have specific requirements regarding digital accessibility. However, courts frequently interpret Title II and Title III as applying to web-based content and services, and more website accessibility lawsuits are being filed each year.

Section 508 of the 1973 Rehabilitation Act (1998 Workforce Amendment Act)
 Section 508 applies to all Information and Communication Technology (ICT). The law applies to all Third-Party ICT deliverables purchased by the US Federal Government. All new web and electronic content and applications published after January 2018 must comply, and non-compliance can result in fines of \$100,000+ and loss of federal funding.

European Accessibility Act (EAA)
 The EAA has four principles of accessible websites and mobile applications: Perceivable, Operable, Understandable and Robust. Some EU member states are only citing WCAG 2.1 AA, instead of the more stringent EN 301 549 which goes beyond web to include requirements for documents and hardware UIs.

California Unruh Civil Rights Act (Unruh)
 The Act requires “full and equal accommodations, advantages, facilities, privileges or services in all business establishments that sell or promote products or services within the state of California.” Unruh allows for plaintiffs to claim up to 3x in damages per incident (damages can include emotional distress), with no less than \$4000 in statutory damages.

New York State Policy P08-005 (NYS P08-005)
 NYS P08-005, is a hybrid of Section 508 and the WCAG and establishes basic accessibility requirements for web-based information and applications maintained or used by State Entities. NYS P08-005 applies to all web content and functionality developed, maintained or offered by state entities, including employees and third parties that access any IT resource.

Web Content Accessibility Guidelines (WCAG)
 The Web Content Accessibility Guidelines are the technical guidelines created by the World Wide Web Consortium (W3C) for creating accessible web-based content. WCAG serves as the basis of accessibility regulations across the globe including the US, Canada, the UK, the EU, Australia and Japan.

While Remediation Often Drives Initial Interest, Accessibility is “Shifting Left”

Successful digital accessibility requires a combination of tools, training and services at virtually all stages of maturity

Remediate

Initial Interest is Often Driven by Legal/Compliance

- More than 50% of initial interest in digital accessibility is driven by the legal, compliance or DEI departments
- Many of the top digital accessibility companies “lead” with legal

Expertise is Required

- Against a backdrop of constantly evolving regulation, standards and legal threat environment, 44% of respondents said they have limited or no in-house resources for accessibility testing and 29% do not involve people with disabilities in design or testing

Services Heavy Engagements & Training

- Particularly when in response to a legal threat or compliance mandate, third party audit / manual testing and remediation services are common
- Creation and update of formal disability program and internal standards (e.g. Voluntary Product Accessibility Templates or “VPATs”)
- Adoption of training programs, typically provided by an expert / vendor in the field

Accessible Design

Incorporation of Accessibility into Design

- A broad array of tools and plug-ins support creation of accessible design such as Able (Figma) and Adobe XD
- Vision Simulator (Figma plugin) simulates visual impairments to evaluate design usability

Developer Testing Tools

- Axe-core, perhaps the most popular open source tool, had been downloaded more than 2 million times, and is usable as both a standalone browser extension and can be embedded in automation solutions for scaled testing
- Code linters provide feedback within the IDE

QA / Testing Tools

- Through a combination of automated tests and manual / guided testing, browser tools such as Google Lighthouse, Wave and axe-core can detect common accessibility issues

Automate

Test Automation

- Embed accessibility testing into a broader test automation process or continuous quality program – akin to the “shift left” of code quality, supply chain and standards compliance (among others)
- Several test framework vendors (Cypress, Perfecto, Storybook) announced partnerships with Deque to leverage axe-core for automated accessibility testing
- Though credible sources vary, industry consensus seems to be that 50%-60% (and rising) of accessibility issues can be caught by automated solutions

Integration with Broader Developer Toolchain

- API based integration with common developer tooling and test automation solutions

Real-Time Monitoring

- Tools that continuously monitor live sites for accessibility issues such as Siteimprove Accessibility and Monsido

Market Taxonomy and Leading Solution Providers

Compliance & Remediation

- End-to-end solutions covering digital and print
- Audit, consulting, remediation, training services
- Target legal and compliance departments, but covered personas are expanding



Crowd Testing

- Manual QA / testing and research, providing access to on-demand community of users with disabilities for real-world testing
- Typically handle recruitment of communities and integrate with broader dev workflows



Developer-Driven Accessibility

- Automated accessibility tools purpose built for developers and DevTest
- APIs for integration into CI/CD pipeline
- Target “shift left” enterprise dev teams



Document Remediation

- Tools for creating, managing, auditing and maintaining accessible digital document
- Audit, consulting, remediation, training services
- Target legal and compliance departments, with integrated solutions for digital content teams



Broad Test Automation Frameworks

- Broad cross-browser and mobile application testing platforms, incorporating accessibility into broader functional test automation
- a11y testing is a source of differentiation
- Several use axe-core open source developer tool



Overlays

- Widgets deployed on top of websites to improve accessibility without the need to change code
- Very easy to adopt/deploy, and provide fully automated remediation for broad array of accessibility issues



Broad Digital Accessibility Platforms

- End-to-end accessibility platforms aimed at enterprise customers, covering compliance, legal, developer, marketing and C-Level personas
- Software coupled with technology-enabled services; typically testing, remediation, issue tracking and reporting, with increasing levels of automation
- Ongoing consulting, support and training are an important part of the solution for all but the most sophisticated enterprises



Broad DX Platforms

- End-to-end platform designed to help enterprises optimize digital experiences (“DX”), across accessibility, content governance, web analytics, search engine marketing and cross-channel advertising from a single pane of glass
- Targeted at a range of technical and non-technical personas, with a particular strength in marketing departments, offering a wide arrange of tools for specialists within each functional area (e.g. accessibility, SEO, etc.)



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Key Takeaways

1

Significant Market Opportunity

- While estimates of the size of the market opportunity unlocked by digital accessibility vary wildly – organizations focused on inclusion and accessibility have estimated 20%-30% of retail spending may be impacted (\$13T); more conservative estimates claim \$500B annually
- More than 1 billion people worldwide have some vision deficit, and we're all aging
- More than 4,500 digital accessibility lawsuits filed annually

2

Perfection is Impossible

- Across our research in the accessibility space, two quotes regularly appeared: “progress over perfection” and “accessibility is a journey” – which is to say, no digital asset will always be 100% compliant
- Applications, infrastructure and regulation constantly evolve and improve, the need for increased accessibility and more conformant accessibility solutions will constantly grow and shift
- This also means – unfortunately – accessibility is not a one-and-done project, but rather must be a persistent competency for any digital experience provider

3

New Buyer Personas Unlocked by the Shift Left

- Accessibility is still a relatively new industry, and one which has evolved significantly over the past two decades, but adoption is now increasingly driven by product departments (vs. solely a legal issue) – moving away from a ‘minimally compliant’ threshold to an increased level of priority
- Two key changes have arisen: i) the shift left of accessibility into the earliest phases of application development (along with the migration of functional and security testing), and ii) market need to pair automated resources with the traditional manual approaches

4

Domain Expertise Matters

- While some enterprises have an accessibility COE, a surprising number of leading enterprises do not involve people with disabilities in their app development or testing process, nor employ subject matter experts
- The challenges are manifest; users have different disabilities or multiple disabilities, regulation is continually evolving across multiple jurisdictions, legal action (from trolls or otherwise) is a constant threat – coupled with the ever-present challenge of resource and bandwidth constraints

5

Expertise + Automation

- The winners in this market will take an approach similar to MD&R (managed detection and response) in security – marrying extensive use of automation with manual testing, manual remediation, consulting and extensive training
- Automation rates today at best achieve 50%-60% coverage, perhaps as high as 80% with some of the most modern vendors, but reaching full coverage continues to require human intervention

Select Notable Companies

allyant

Theme: Automated Accessibility Testing, Remediation, Document Accessibility

Developer of accessibility software intended for enterprise, government and educational clients. The company offers a comprehensive suite of products that create, test and remediate documents manually and automatically at low and high volumes making tasks streamlined, thereby enabling its clients to automate, monitor and manage their accessibility initiatives efficiently.

Employees: 244

Key Executives: Ariel Kunar (CEO), Mike Kilbane (COO), Anthony Carty (CFO)

Investors: Thompson Street Capital Partners

conductor

Theme: Broad DX Platforms

Developer of SaaS-based search and content intelligence platform intended for the retail, technology, healthcare, hospitality and finance industry. The company's platform generates customer intent insights for enterprise brands that empower marketers to compelling, value-driven content which leads to increased organic traffic and higher marketing return on investment, thereby enabling clients to create and optimize content to improve visibility online.

Employees: 795

Key Executives: Seth Besmertnik (Co-Founder & CEO), Brian Wing (CFO)

Investors: Bregal Sagemount, Verdane

deque

Theme: Broad Digital Accessibility Platform

Developer of AI-powered tools, training and services to reduce compliance risk and ensure digital accessibility. The company offers a suite of tools and services covering audit & compliance testing, VPATs, end-to-end accessibility testing, program strategy and training. Additionally, Deque owns axe-core library, an OSS tool that underpins many other web accessibility development tools.

Employees: 234

Key Executives: Preeti Kumar (Founder & CEO), Dylan Barrell (CTO), Mike Farrell (EVP)

Investors: Bootstrapped

evinced

Theme: Automated Accessibility Testing, Remediation

Provider of accessibility automation helping enterprises make web and mobile offerings accessible to everyone. Their AI-enabled products integrate directly into the software development pipeline, save developer time and reduce risk via proprietary discovery and analysis algorithms that automatically find, cluster and track.

Employees: 89

Key Executives: Navin Thadani (Co-Founder & CEO), Gal Moav (Co-Founder & GM Israel)

Investors: Insight Partners, Benhamou Ventures, Capital One Ventures, M12, R-Squared Ventures, Engineering Capital

Select Notable Companies

Fable

Theme: Crowd Testing

Provider of a product testing platform designed to engage a diverse community of people living with disabilities in user research and user testing. The company's platform provides full-service training, embedded research programs and expert-led workshops that help companies operationalize accessibility and move beyond compliance, enabling accessibility managers, user researchers, designers and developers to connect remotely and on-demand to daily assistive technology users with disabilities.

Employees: 179

Key Executives: Alwar Pillai (Co-Founder, CEO), Abid Virani (Co-Founder & COO)

Investors: Disruption Ventures, Five Elms Capital

level access

Theme: Broad Digital Accessibility Platform

Developer of a cloud-based accessibility management software committed to enabling people to live their lives through access to technology. The platform ensures conformity with laws, standards and guidelines and offers consulting, training and mobile and electronic document systems to address the full scope of accessible technology regulations, thereby enabling corporations, government agencies and leading educational institutions to manage their accessibility initiatives across the entire development life cycle efficiently.

Employees: 404

Key Executives: Mark Zablan (CEO), Barry Stern (CFO)

Investors: JMI, KKR

Usablenet

Theme: Broad Digital Accessibility Platform

Operator of technology service company and developer of web accessibility and digital transformation designed to solve digital accessibility. The company's platform provides transformation and optimization of web content, testing, fixing, and monitoring the accessibility of the websites and apps, and more, thereby making websites, apps, and other digital platforms more accessible, inclusive, and user-friendly for everyone.

Employees: 111

Key Executives: Nick Taylor (CEO)

Investors: Bootstrapped

Vispero

Theme: Assistive Technology

Provider of assistive technology products intended for those with vision impairments. The company offers screen magnifiers, screen readers and refreshable braille displays, enabling blind and low-vision individuals to reach their full potential, gain education, obtain employment, succeed in professional careers and live independently throughout their lives.

Employees: 150

Key Executives: Bob Ciminera (CEO)

Investors: Vector Capital

About Shea & Company

1

Firm focused exclusively on enterprise software

2

Offices in Boston and San Francisco

45+

Professionals focused on the software industry

\$50B

Advised aggregated transaction value

40%














































Cross-Border Transactions

155+

Completed transactions

Mergers & Acquisitions, Private Placements & Capital Raising

Shea & Company has advised on important transactions representing billions of dollars in value across the strategic acquirer and financial investor landscape with clients in the U.S. as well as Canada, Europe and Israel.

 <p>has received an investment from</p>  <p>Shea & Company served as the exclusive financial advisor to Avantra</p>	 <p>has received an investment from</p>  <p>Shea & Company served as the exclusive financial advisor to Octopus Deploy</p>	 <p>has received an investment from</p>  <p>Shea & Company served as financial advisor to SmartBear and Francisco Partners</p>	 <p>has received an investment from</p>  <p>Shea & Company served as the exclusive financial advisor to Lansweeper</p>	 <p>has been acquired by</p>  <p>Shea & Company served as the exclusive financial advisor to Perfecto</p>	 <p>has received a strategic investment from</p>   <p>Shea & Company served as the exclusive placement agent</p>	 <p>has received an investment from</p>  <p>Shea & Company served as the exclusive placement agent</p>
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Shea & Company is a Leader in Infrastructure Software & DevOps Advisory

Application Development & DevTools are core competencies for our firm; we have been among the most active advisors (if not the most active), completing multiple market-defining transactions with leading companies spanning the software development lifecycle

Thought Leader in the Application Development Market

- We have completed transactions across the market, working on both buy-side and sell-side engagements, and interacting regularly with all the relevant players in these sectors to deliver superior outcomes and support market developments
- Established recurring dialogue with the leading private equity investors, strategic acquirers and market leading companies in the DevOps ecosystem
- Multiple active mandates spanning the DevOps lifecycle provide holistic industry knowledge and connections to achieve a desired outcome
- Comprehensive DevOps industry insight developed using the latest data gathered from industry practitioners

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Recent Relevant Experience

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Shea & Company served as exclusive financial advisor to Octopus Deploy

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