2022 XR Association (XRA) State of the Industry Report

Where XR Made an Impact This Year



A message from XRA CEO Liz Hyman

Over the past year, the XR Association has grown both in influence and in size. XRA's membership has soared to over 45 industry-leading partners in the past year, and legislative successes like the introduction of the National XR Month Resolution and the passage of the CHIPS and Science Act illustrate XRA's broad policy influence as the leading trade association representing the growing ecosystem of companies powering virtual, augmented, and mixed reality.

Our main priority is ensuring that all members, big and small, can reap the incredible benefits of our stakeholder engagement and legislative efforts. As this vital industry continues its expansion into workplace training and safety, healthcare and education, we must work together to build, shape and navigate the larger technology landscape. We can't wait to work together through 2023 to see what we can accomplish.



Important Milestones and Member Activities

The XR Association reached a total of 47 members and represented a broad ecosystem of the XR industry, such as headset manufacturers, technology platforms, component and peripheral companies, enterprise solution providers and corporate end-users. Within the past year, we've seen exponential growth in the immersive technology space and our members were at the forefront of the industry.

MEMBER HIGHLIGHTS

GameDriver

GameDriver enables developers, testers and producers of video games, AR, and VR, to automate functional testing; improving time to market, test coverage and overall quality and revenue. GameDriver has seen a significant increase in XR use over the last year, signaling a rise in the need for automated testing solutions in the market.

- <u>GameDriver, the Gaming Industry's First Out-of-the-Box Automated Testing</u> <u>Solution, is Now Widely Available; Receives \$2 Million USD in Seed Round</u> <u>Funding</u>
- Launch of GameDriver 2022.07
- Introduction of Beta: Unreal 4 and Godot
- Launch of GameDriver 2022.11

Big Rock Creative

Big Rock Creative is an XR content creation company, bridging in-person and XR experiences.

- Breonna's Garden (Won Best Societal Impact at the 2022 Auggie Awards at AWE)
- Pride Has No Borders (Finalist for Best Societal Impact at the 2022 VR Awards)
- SES CricketVRse
- BRCvr The Official Virtual Burning Man Experience
- FanConXR The First VR Only Comic Book Convention

In 2023, Big Rock Creative is planning a unique immersive documentary experience meshing the 3D digital art of the 2020 and 2021 virtual Burning Man events with 360 and 180 3D video footage captured at the 2022 in-person Burning Man event. This is a new format for storytelling. One that is nonlinear and participatory.



Transfr

Transfr builds job-training simulations in VR that helps trainees build confidence in their knowledge, skills and abilities.

- What Alabama Can Teach us About the Future of VR Training
- From Virtual Reality to Careers: How Indiana's Boys & Girls Clubs use VR for
 Workforce Development
- <u>Arkansas Taps Virtual Reality Simulations to Help Residents Explore Technical</u> <u>Career Paths and Training Options</u>
- Boys & Girls Clubs Across Montana Receive Virtual Reality Headsets for Career
 <u>Exploration</u>
- TRIO Electric Upgrades their Electrician Training Program with Transfr
- West Alabama Works Provides Immersive Career Exploration with Transfr

Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security.

- Accenture's Nth Floor Metaverse Video
- Nth Floor Case Study
- Accenture Invests in BehaVR to Help Expand Access to Mental and Behavioral Healthcare Using Virtual Reality
- <u>Accenture Invests in Strivr to Help Advance Immersive Learning in the Metaverse</u>
 <u>Continuum Era</u>
- <u>Accenture Invests in Extended Reality-Based Immersive Learning Startup Talespin</u>

Strivr

Strivr's job-skills training platform powers the creation, delivery, management, and measurement of VR-based learning to optimize workforce performance.

- Strivr Announces Strategic Investments by Accenture and Workday Ventures to Accelerate Adoption of Enterprise VR
- Strivr Launches Partner Program to Accelerate the Expansion of VR in the Enterprise
- The XR Association Welcomes Eight New Member Companies
- <u>Calling all VR Developers: Create Content for Millions of Fortune 1000 Employees on</u> <u>Strivr's Enterprise VR Platform</u>



Meta

Meta builds technologies that help people connect, find communities, and grow businesses.

- Progress in Augmented and Virtual Reality
- <u>Research Prototypes for Meta's Infinite Display System for VR Optics, Displaying Next-Generation Technologies</u>
- Launched the Meta Quest Pro With Full-Color Mixed Reality
- More Options, More Platforms and Super Bowl LVI Shirts for Avatars
- Building and Innovating With Privacy in Mind
- Meta Connect 2022: Meta Quest Pro, More Social VR and a Look Into the Future

Google

Google is a multinational technology company focusing on search engine technology, online advertising, cloud computing, computer software, quantum computing, e-commerce, artificial intelligence, and consumer electronics.

- Immersive View Coming Soon to Maps Plus More Updates
- Google to Make Search and Maps More 'Immersive'
- Gorillaz Turn the World Into a Stage With Augmented Reality

Talespin Reality Labs, Inc.

Talespin is building the spatial computing platform to power talent development and skills mobility for the future of work.

- <u>Talespin Announces Investment from WestRiver Group, Acquires 'Pioneer</u>
 <u>Adaptive Learning' Platform from Singularity Group</u>
- <u>Accenture Invests in Immersive Learning Startup Talespin</u>
- <u>Kyle Jackson, Co-Founder and CEO of Talespin, to receive UCLA Executive</u> <u>Leadership Award for Real Applications of the Metaverse</u>
- <u>Talespin Announces \$20M Series C Funding Round, Validates 2015 Company</u> <u>Vision for Learning in the Metaverse</u>
- <u>Talespin Selected as one of the 2022 Best Tech Startups in Culver City</u>
- <u>Talespin Announces Three New Executive Hires to Fuel Immersive Learning</u>
 <u>Platform Growth</u>
- Talespin Participates in the SAP.iO Foundry New York Fall 2022 program
- <u>The Metaverse Can Provide a Whole New Opportunity for Education. Here's</u> <u>What to Consider</u>
- <u>Talespin: Using Immersive Technology for Skills Development</u>
- <u>The Skill Immersion Lab: Year Two Results of Virtual Reality in the Classroom</u>
- How Talespin is Using the Metaverse to Train Employees
- Learning in the Metaverse: Key Takeaways from the Experts
- <u>Tower Hill Insurance Drives Workplace Innovation with the Talespin Platform</u>



Praxis Labs

Praxis Labs leads virtual reality-based learning experiences to teach workplace inclusion and belonging.

- <u>Celebrating a Year of Learning and Growth</u>
- Immersive Learning: Harnessing Technology to Create a New Empathetic
 Reality in the Workplace
- Edtech Insiders Podcast

ArborXR

ArborXR is an enterprise-grade XR device management, content management, and content distribution solution for enterprise companies and XR solutions providers looking to scale.

- <u>Ultimate Guide to Using VR Devices for Work</u>
- What Enterprise VR Headset Should I Buy?
- <u>ArborXR Announces Strategic Collaboration with Qualcomm Technologies,</u> <u>Helping Companies Scale VR and AR Deployments</u>

HTC

HTC is a leading innovator in connected technologies and XR solutions for consumers and businesses across multiple industries.

- HTC's G Reigns partners with iconec for private 5G network showcase
- HTC's virtual production solution VIVE Mars CamTrack hits the market
- <u>VIVE introduces new Location Based Software Suite</u>
- HTC Chairwoman Cher Wang unveils VIVERSE
- <u>e& Universe launches with VIVERSE technology</u>
- Introducing the powerful and versatile VIVE XR Elite
- VIVE Mars CamTrack integrates Aximmetry software for seamless virtual production

Sony

Sony Group Corporation is a leading provider of audio/video electronics and information technology products for the consumer and professional markets.

- Sony Unveils New Virtual Reality Headset for PlayStation
- PlayStation VR2 and PlayStation VR2 Sense controller: the next generation of VR gaming on PS5
- First look: the headset design for PlayStation VR2
- Look inside PlayStation VR2 with new teardown videos: First look at internal components with engineers



XRA By The Numbers (2022)

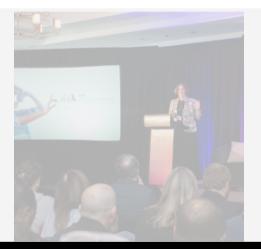
100+ Speaking Events and Major Conferences, Including:

- AR/VR Policy Conference
- Limitless Future Conference
- AWE U.S. and AWE Europe
- State of the Net Conference
- CSUN
- FOSI 2022
- 27 Engagements with Members of

Congress and Government Agencies Pushing Policy Forward

- 3 Legislative Wins
 - Introduction of National XR Month Resolution
 - Passage of CHIPS and Science Act

 Designates immersive technology for federal R&D funding
 - Introduction of XR Workforce bill
- **51** Member Milestones, Including:
 - 7 Member Committees & Working Groups
 - 13 Leaders celebrated as part of the Limitless Voices Initiative
 - 31 New Members to join the association







XRA By The Numbers (2022)

100+ Press Hits

- Educators See XR Tools Improving, Gaining Importance December 8, 2022 Government Technology
 - Impressions: 15K
- Success of Meta's metaverse plan could mean a whole new set of privacy concerns November 1, 2022 — The Washington Post
 - Impressions: 69.6M
- November Is... XR Month? October 15, 2022 ARPost
 - Impressions: 25k
- Virtually Putting Your Own Oxygen Mask On First Can Help October 11, 2022 Forbes
 - Impressions: 63M
- Interoperability a key priority for metaverse, says extended reality group's CEO September 20, 2022 — S&P Global
 - Impressions: 20.3M
- 'The most dangerous tool of persuasion' September 14, 2022 POLITICO
 - Impressions: 20.3M
- Metaverse Technology Opens Up a Wider World of Privacy Concerns August 30, 2022 Bloomberg Law
 - Impressions: N/A
- The future of war includes balloons July 5, 2022 POLITICO
 - Impressions: 22.3M
- The tech-Washington relationship has a chance at a reboot June 16, 2022 POLITICO
 - Impressions: 22.3M
- Ten companies just joined the XR Association as the collaborative group continues to grow — May 16, 2022 — Inside XR
 - Impressions: 82k



XR For All Foundation and Work



In November, the XR Association announced the formation of the XR for All Foundation. This charitable wing of XRA will support the development of a diverse and equitable workforce for the immersive technology industry, while promoting the next generation of employment opportunities through broad-based research and impactful partnerships.

A central focus of the foundation's work includes engaging diverse communities around the benefits of virtual, augmented, and mixed realities, as well as career opportunities within the industry.

The founding Board Members that will lead this effort are:

- President: Elizabeth Hyman, XRA
- Treasurer: Christina Sawyers, <u>XRA</u>
- Chair: Jessica Lindl, <u>Unity</u>
- Secretary: Denise Zheng, Accenture
- Esther Jeong, Meta
- Naria Santalucia, Microsoft

Over the next year, the foundation's work will include engaging diverse communities around the benefits of XR. Through these efforts, the XR for All Foundation will serve as the authority on XR as the messenger, the leader, and the key convener for the industry.



Looking Ahead...



Joan O'Hara Senior Vice President of Public Policy, XRA

"2022 was truly a banner year for XRA Policy. Our mission is to educate lawmakers, thought leaders, and the public about the positive impact XR technology will have on society, and to influence the development of the laws and regulations that will shape its future.

We advanced that mission with the introduction of original XR legislation; inclusion of "immersive technology" in the CHIPS and Science Act; panel participation at domestic and international conferences; the hosting of the 2nd annual AR/VR Policy Conference in Washington; the launching of a quarterly thought leaders salon dinner series; the introduction of our public service campaign, "Into the Digital World;" the publishing of XRA Industry Privacy Basics; and so much more! In 2022, we moved the needle in important ways.

We also laid the foundation for even greater success in 2023. Looking ahead, we will be building an initiative around global competitiveness, opening lawmakers' eyes to the tremendous investments other countries around the world have been making in XR research, development, and adoption – and encouraging Congress and the administration to provide robust support to the XR industry here at home to ensure that America leads the way into the digital future."



Looking Ahead

"Looking at 2022, I am amazed to see all that XRA and the industry have accomplished, including the rollout of enterprise metaverse solutions to drive meaningful global staff engagements, previews of photorealistic avatars for consumers, the development of effective beta programming for accessibility features in VR and AR and our <u>Developers Guide on XR in</u> <u>Secondary Education</u>. Students in the classroom are using XR to learn everything from Greek mythology to microbiology. All of these and more are driving real efficiencies and bottom-line savings for consumers and corporations.

At XRA one of our main focuses is to host those hard conversations that will drive the technology to be the best it can be. In 2022 we engaged with multiple efforts to develop technical industry standards for safety, interoperability and ethics in XR. We dove deep into the ideas of alternative text, accessibility object models and audio cues to ensure that people with disabilities are included in the design and development of XR technology from the start. We hosted industry discussions about XR in education and for youth, interviewed teachers and surveyed teens to understand the impact, value, hurdles and hazards of XR in the classroom.

We're eager to dive into the healthcare vertical this year and engage with the medical industry on its experiences with XR technology. We will roll out the next chapter of our Developer's Guide, focused on experiences in healthcare and assisting application developers in best practices when designing for better healthcare solutions. We will continue to explore the use of XR in education and career development, new tools for accessibility and continue building a community of cutting-edge industry experts.

XR technology will continue to prove its value and efficacy in 2023. I'm looking forward to seeing how consumers and enterprises alike will be using these tools in the years to come."



Stephanie Montgomery Senior Vice President of Research and Best Practices, XRA



Looking Ahead

As we begin 2023, continuing to shape public policy for immersive technology will be a collaborative effort among policymakers, developers, industry leaders, civil society groups and academics. We expect XR technology to continue its expansion and integration into critical spaces such as healthcare, job training and education. XRA and its members will lead the way, promoting the responsible development and use of this pioneering technology.



State of the Industry Report | Where XR Made an Impact

We'd like to offer a special thank you to our members who drive the immersive technology industry forward. Their contributions and commitment to XR technology is leading the way for the responsible development and adoption of virtual, augmented and mixedreality technologies.

We're excited to work closely with our members this year to continue to drive policy impact in this critical space.

