<u>Augmented Reality for Enterprise Alliance</u> <u>Announces New Research</u>

28th June 2023



BOSTON, MA - JUNE 28, 2023 - Today, the <u>Augmented Reality for Enterprise Alliance</u> (AREA) published a new research report entitled <u>Effectiveness Evaluation of Augmented Reality for Delivering Highly Dexterous Work Instruction</u> (ERADEX). The report reviews the state of the art of XR in the context of training and adoption within the industry, followed by details of the AR trials used to deliver highly dexterous work instruction, including methodologies and results.

"COVID-19 placed unprecedented pressures on human resources, forcing the industry to resolve new challenges of delivery of products on time and within accepted quality frameworks while continuing to upskill their workforce despite the global challenges," said Mark Sage, Executive Director, AREA. "XR technology within training/onboarding has proved to offer increased benefits of time and efficacy to the workforce. AR offers manufacturers improved processes, the flexibility of working methodologies, less time and cost to train, and the opportunity to upskill staff to different levels of the workforce."

Composite Manufacturing companies face real challenges in reducing waste, completing tasks within a shorter timeframe, and working with a consumer-driven right-first-time production process. Training is required to maintain high-quality standards, but continuous workforce training is costly and time-consuming.

Training the workforce includes a full spectrum of levels of workers' training needs, e.g., upskilling proficient employees, as well as initial training for newly recruited employees. Composite manufacturing companies must balance the quality and consistency of training needs with waste reduction and address a fully sustainable approach to quality and measurable productivity and output.

Some questions the reports answers include:

- How does AR for high dexterity tasks differ from other instruction delivery methods?
- How are users impacted by the delivery of AR instructions in high-dexterity tasks?
- What are the key factors (e.g., cost structure) informing decision-making and driving return on investment in delivering work instructions for particularly dexterous, manual tasks?
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Please view an executive summary of the entitled <u>Effectiveness Evaluation of Augmented Reality</u> <u>for Delivering Highly Dexterous Work Instruction</u> (ERADEX) research report from the AREA website. Please also view executive summaries of other AREA resources and enterprise guidance from the AREA <u>website</u>, including <u>3D Mapping Solutions for Enterprise AR</u>, <u>AREA 5G</u>, <u>AR - Research Introduction Summary Report</u>, and <u>AR ROI Best Practice Report And Case Study</u>.

About the AREA

The Augmented Reality for Enterprise Alliance (AREA) is the only global non-profit, member-based organization dedicated to adopting interoperable AR-enabled enterprise systems. Whether you view it as the next computing paradigm, the key to breakthroughs in manufacturing and service efficiencies, or the door to unimagined applications, AR will have an unprecedented impact on enterprises of all kinds. Visit https://thearea.org for more information.

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The Industrial Metaverse and Digital Twinning





An interview with Mark Sage of the AREA and Dan Isaacs of Digital Twin Consortium.

read more

XR And Spatial Computing Were Everywhere At MWC 2023

28th June 2023



This year's Mobile World Congress, MWC 2023, was the first true Mobile World Congress since 2019, and it was quite apparent that the show was back in full swing. I attended the event last year, but it was considerably smaller—a shell of its former self—which is something I couldn't say about this year's show. The GSMA, which organizes the event, says that 88,000 people attended this year, up from 66,000 last year (albeit still down from 2019's 109,000).

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<u>Augmented Reality for Enterprise Alliance</u> <u>Publishes Key Research</u>

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3D models or point clouds can lower the cost, time, and developer training to view an object or environment with AR information such as instructions, warnings, or routes overlaid on the physical world. Despite its relatively young presence in the enterprise sector, AR technology has rapidly evolved into a powerful tool with broad versatility and a thriving community of experts.

AR technology is already being leveraged with 3D mapping data to provide strategic tools for site planning, instructional guidance, or real-time navigation. As AR technology advances, so will its capabilities to leverage 3D mapping data.

"3D mapping technology has become pervasive throughout various industries to capture objects and environments in a digital format such as point clouds or 3D models," said Mark Sage, Executive Director of the AREA. "It allows for rapid visualization, communication, and prototyping without the additional physical overhead. Our new report offers developers, business decisions makers and companies interested in AR, information about 3D mapping technology and techniques to eliminate resistance to augmented reality (AR) adoption."

"This research helps to inform enterprise on how 3D mapping technologies can be utilized to capture accurate, cost-effective digital representations of real-world environments, how this data can be leveraged in augmented reality applications, and why these concepts can be useful in industrial environments," said Samuel Neblett, Senior AR/VR Software Developer and 3D Modeler, Boeing Research & Technology.

The new AREA research report provides steps companies can take to ensure accurate and successful capture of objects and environments. A supporting sample project demonstrates a real-world example that leverages 3D scan data for an AR-assisted use case.

"The AREA research project is very valuable for corporations looking to use AR technologies. It offers a good overview of available 3D mapping solutions (including our AR solutions), and outlines the advantages of each," said Markus Meixner, CEO, ViewAR.

Please view an executive summary of the <u>3D Mapping Solutions for Enterprise AR</u> research report from the AREA website. Please also view executive summaries of other AREA resources and enterprise guidance from the AREA <u>website</u>.

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<u>Iristick announces major capital increase</u> <u>enabling accelerated user adoption</u>

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Iristick's smart glasses are being used by professionals across industries in Europe and the US since the company was founded in 2015. Various large-scale proof-of-concept projects are underway, which are expected to lead to accelerated adoption of smart glasses in 2023-2024.

Currently, more than 700 companies rely on Iristick to help improve operational processes, from remote assistance to inspection for mission-critical processes. Beyond the basic use case of remote assistance, Iristick also develops tailored solutions in close partnership with major corporations in healthcare, oil & gas, crop inspection and logistics. In addition, Iristick also supports projects for telemedicine in developing countries as part of its social impact initiative, Social In Motion.

Key customers include Bayer, Siemens Energy, JBT, Houston Methodist Hospital, HG Molenaar, Aviapartner.

Through a partnership with global ATEX market leader ECOM, a Pepperl+Fuchs subsidiary, Iristick developed the breakthrough Visor-Ex® glasses for use in harsh and potentially hazardous environments, which are typical for ECOM's oil & gas customers.

Iristick will make follow-on investments in platform development, user adoption and sales & marketing in both Europe and United States. The company has appointed Karel Goderis, a software industry veteran, to lead this expansion, in close cooperation with the existing management team.

About Iristick

Iristick, based in Antwerp and New York, is a leading producer of smart glasses that enable handsfree communication and information sharing for the deskless workforce in various industries. Iristick smart glasses are being used globally for remote assistance, step-by-step workflow guidance, pick-by-vision and video conferencing. Iristick also supports NGOs with telemedicine equipment in most underserved parts of the world, enabling teleconsultation and remote expert guidance in rural areas. The award-winning Iristick smart glasses are the most balanced and lightweight on the market, and they seamlessly connect with both iOS and Android smartphones.

Published on Feb 22, 2023

Magic Leap 2 is now commercially available

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Widespread availability of the Magic Leap 2 comes after a successful Early Access Program with companies like Cisco, SentiAR, NeuroSync, Heru, Taqtile, PTC and Brainlab. During this period, Magic Leap continued to refine and improve the device for training, communication, remote assistance use cases in clinical settings, industrial environments, defense, and retail stores.

"The Magic Leap 2 is the smallest and lightest augmented reality device built for the enterprise," said Peggy Johnson, CEO of Magic Leap. "After working with customers across industries like healthcare, manufacturing and the public sector, we're proud to release a device that features innovative breakthroughs critical to driving widespread adoption, including Dynamic

Dimming[™] technology, the industry's largest field of view, and unparalleled image quality and text legibility. Magic Leap 2 will take the current use cases to the next level, and we can't wait to see what our customers create."

Magic Leap 2 integrates new innovations to address the historical barriers that have prevented the widespread adoption of AR technology and are critical to making AR a valuable tool for daily use in the healthcare, manufacturing/light industrial, retail, and defense sectors.

Key features and innovations of Magic Leap 2 include:

- An open platform that empowers enterprises and developers with flexibility, cloud autonomy, and data privacy
- 20% lighter and 50% smaller in volume than Magic Leap 1
- Proprietary optics breakthroughs that enable best-in-class image quality, color fidelity, and text legibility
- Largest field of view (up to 70° diagonal), compared to similar, currently available AR devices
- Dynamic Dimming™ technology, a first-to-market innovation that enables Magic Leap 2 to be used more effectively in brightly lit settings with greater image solidity

Each of these advancements is designed to increase utility, comfort, and sustained use, in order to deliver what the enterprise market has been asking for — a device that can provide an immediate return on investment and can be worn for extended periods of time.

Three Commercially Available Editions

Magic Leap 2 is available in three editions:

Magic Leap 2 Base edition is best for stand alone use by professionals and developers that wish to access the most immersive augmented reality device available.

Magic Leap 2 Developer Pro provides access to developer tools, sample projects, enterprise-grade features, and monthly early releases for development and test purposes. Only for internal use in the development and testing of applications. Use in commercial deployments and production environments is not permitted.

Magic Leap 2 Enterprise is designed for environments that require flexible, large-scale IT deployments and robust enterprise features. This tier includes quarterly software releases fully manageable via enterprise UEM/MDM solutions. Use in commercial deployments and production environments is permitted. Magic Leap 2 Enterprise comes with 2 years of access to enterprise features and updates.

Augmented Reality for Enterprise Alliance

and Partners Host Immerse Technology Conference

28th June 2023



PRESS RELEASE

AUGMENTED REALITY FOR ENTERPRISE ALLIANCE AND PARTNERS HOST IMMERSE TECHNOLOGY CONFERENCE

Two-day conference delves into the application of AR technologies in the industry

September 22, 2022, BOSTON, MA – On September 28-29, 2022, the <u>Augmented Reality for Enterprise Alliance</u> (AREA) will host the <u>Immerse Technology Conference</u>: <u>Understanding & Application in Industry</u>, along with partners:

- Innovate UK KTN
- Made Smarter Innovation Network
- Immerse UK, and
- High-Value Manufacturing Catapult (HVMC).

The conference will be held in <u>Factory 2050</u>, located in the <u>Advanced Manufacturing Resource</u> <u>Centre</u> (AMRC), University of Sheffield, Sheffield, UK. It will feature workshops on the benefits of deploying AR technologies.

Participants will learn:

- How to overcome barriers to the adoption of AR within an organization
- Use cases and requirements for enterprise AR
- Commonly encountered safety risks and how to manage them
- Security risks associated with AR-enabling technologies
- Techniques for managing change, stakeholders, and staff challenges when introducing AR
- UX design and development for VR and AR apps

Please <u>register</u> for the <u>Immerse Technology Conference</u>: <u>Understanding & Application in Industry</u>. The cost of the two-day conference is £50/person and includes lunch.

Gold sponsors include Magic Leap, Rockwell Automation, TeamViewer, and Augmental. Bronze sponsors include RealWear, Assured Cyber Protection, and ESI Group.

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<u>Theorem Solutions - Placing models using</u> <u>QR codes in Augmented & Mixed Reality</u>

28th June 2023



How to Use QR Codes in HoloLens 2 Mixed Reality

Video: Using the QR Code Offset tool in Microsoft HoloLens 2The QR code offset feature using QR Code Detection in Microsoft HoloLens 2, allows a QR code to be utilized as an origin point when visualizing 3D models in MR. In Theorem Solutions' Visualization Pipeline, users can set where the digital model will appear in relation to a QR code. Then any time you use a QR code to load the model it will appear in the same place.

This helps put models in context and allows users to see if something will fit in a certain location. For example, when seeing if parts would fit within an automotive setup, a QR code can be used to set the origin in the center of a car and digital models of parts can be positioned using the offset feature. This allows users to be more exact with the placement of their models when working with physical objects and digital models together.

Additionally, provided the QR code isn't moved, this feature allows users to load a model in the same place every time. This gives users greater flexibility to their work process, allowing users to look at multiple models in succession, and then revisit a previous model with the assurance that the model will remain exactly where it needs to be.

Using QR Codes in Augmented Reality