

Build a Modern, Connected Workforce with **AI**

Today's dynamic and changing manufacturing workforce needs personalized training, guidance and performance support to deliver effective on-the-job performance.

Augmentir



This is **not your** **grandfather's** factory floor

Today's industrial workforce is different. It's rapidly changing. It's diverse. And it's dramatically less stable than it used to be. Today's workforce challenges stem from the unprecedented levels of dynamism in the areas of skills diversity, reduced tenure, and increased churn. Unlike the stable and predictable workforce of the recent past, today companies must live in the new normal where workers are hard to find, hard to engage, and hard to keep.

Along with the ongoing skills gap crisis and retiring workforce leading to tribal knowledge leaving, today's workforce is also more dynamic and diverse than previous generations. The 30-year dedicated employees are no longer the norm. The average manufacturing worker tenure is down 17% in the last 5 years and the transient nature of the industrial worker is quickly accelerating. An outgrowth of the COVID pandemic brings forth the Great Resignation, where workers are quitting in record numbers, and worker engagement is down almost 20% in the last 2 years.

The end result is that companies are struggling to onboard, guide, and support their frontline workforce so that it can work at acceptable levels of safety, quality, and productivity.





The old way of supporting your workers **just doesn't work today**

Today's industrial companies can no longer train, guide, and support their workers using the static, "one size fits all" processes from the past.

This new workforce is changing in real-time – who shows up, what their skills are, what jobs they need to do, is a constantly moving target. The traditional "one size fits all" approach to training, guidance, and performance support is fundamentally incapable of enabling today's workers to function at their individual peak of safety, quality and productivity.

In an attempt to solve the knowledge gap issues, an entire generation of companies set out to build "Connected Worker" software applications, however, these solutions relied on the existing training, guidance, and support processes – the only true difference with this approach has been the creation of technology that takes your paper procedures and puts them on glass.

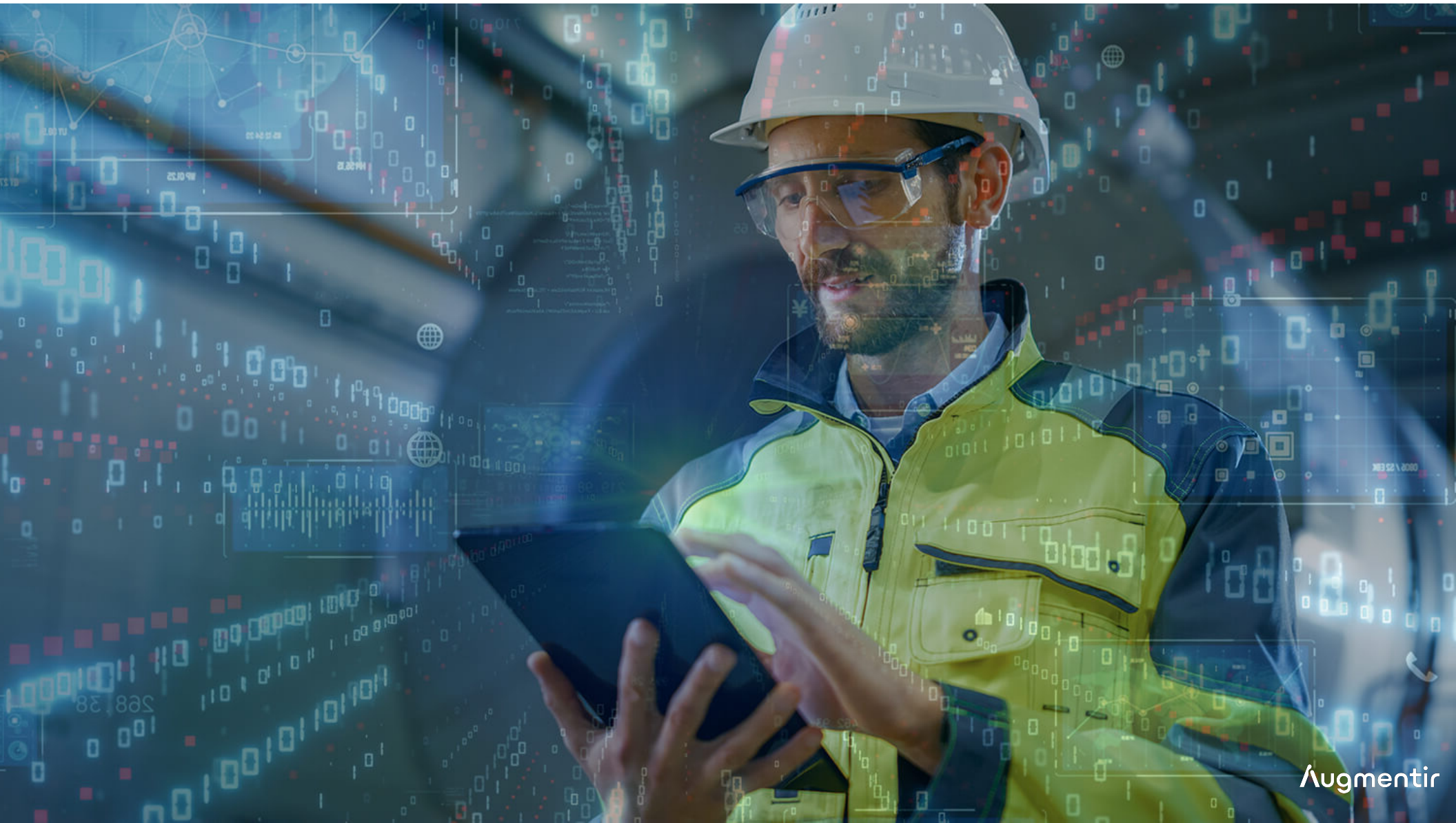
Digitizing work instructions is a great start to helping the skilled workers issue but alone, it won't help completely solve the problem. We must go a step further to overcome the lack of a skilled and qualified manufacturing workforce.



Enter **Artificial Intelligence**

This new connected worker is a source of valuable enterprise data, but only if the data can be captured and understood. The challenge: connected worker data is inherently noisy, creating confusing signals that traditional business intelligence tools can't interpret.

Making sense of this data and turning it into actionable insights is only possible with AI.



Using AI to empower workers to perform at their best

As workers become more connected, companies have access to a new rich source of activity, execution, and tribal data, and with proper AI tools can gain insights into areas where the largest improvement opportunities exist. **Artificial Intelligence lays a data-driven foundation for continuous improvement in the areas of productivity, quality, and workforce development**, setting the stage to address the needs of a constantly changing workforce.

Enter the 2nd generation of Connected Worker software, one based on a data-driven, AI-supported approach that helps train, guide, and support today's dynamic workforces by combining digital work instructions, remote collaboration, and advanced on-the-job training capabilities.

These 2nd generation connected worker solutions are designed to capture highly granular data streaming from connected frontline workers. These platforms are built from the ground up on an artificial intelligence (AI) foundation. AI algorithms are ideal for analyzing large amounts of data collected from a connected workforce. AI can detect patterns, find outliers, cleanse data and find correlations and patterns that can be used to identify opportunities for improvement and creates a data-driven environment that supports continuous learning and performance support.

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Imagine if all your frontline workers could perform at their best regardless of their training, experience, recency, and ability. We were able to achieve this using Augmentir's connected worker platform.”

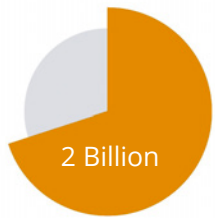
Vice President, Operations
Fortune 100 Manufacturing Company

Use **AI-powered connected worker** technology to achieve workforce excellence in today's new normal

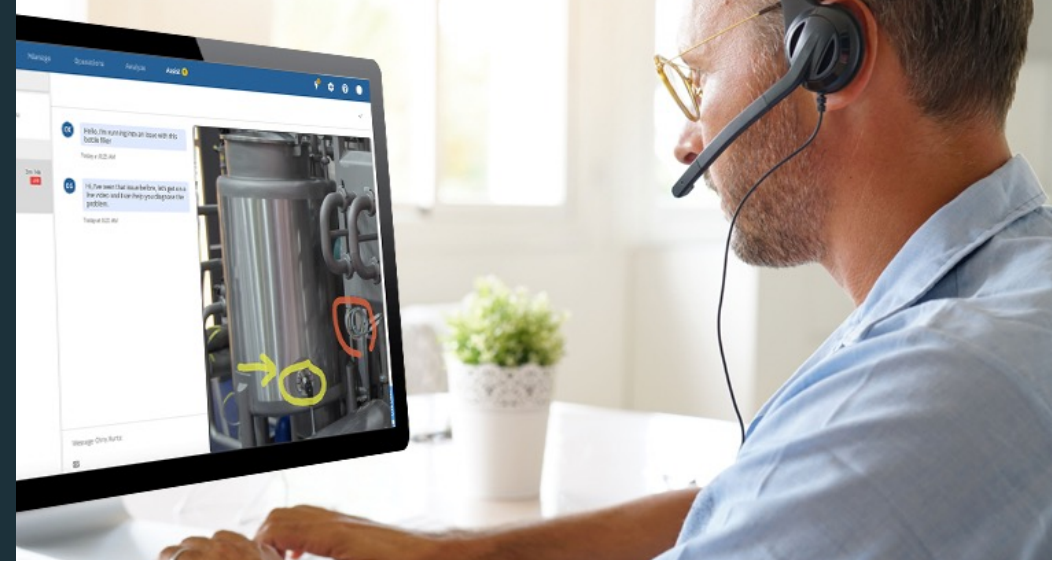


Connecting the disconnected frontline workforce

According to Cisco, there are over 3 billion workers across the globe, and nearly two-thirds of these workers are frontline or field workers, who's day-to-day duties require that they physically show up to their jobs.



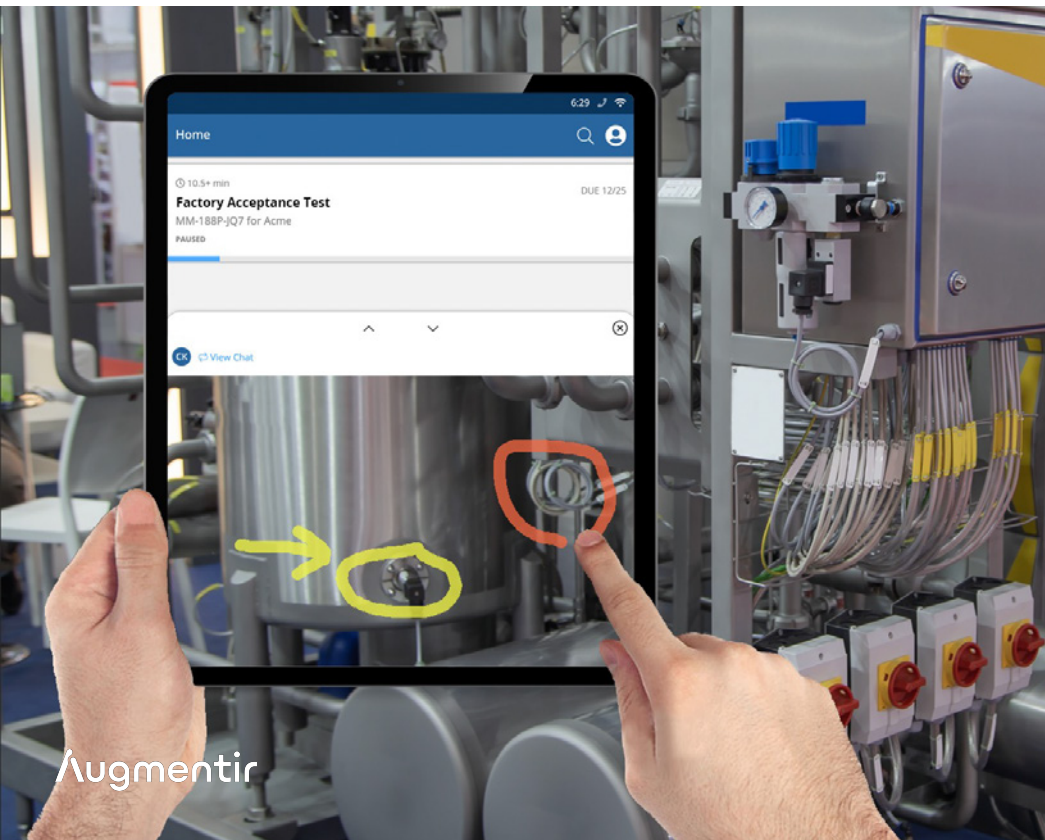
Most of these 2 billion frontline jobs cannot be done remotely, yet these workers still need access to digital information, guidance, training, and support, which was previously given in person.



Deliver **smarter**, worker-friendly remote collaboration

Industrial AR-based remote collaboration solutions that provide worker guidance and support are a simple first step in the connected worker journey.

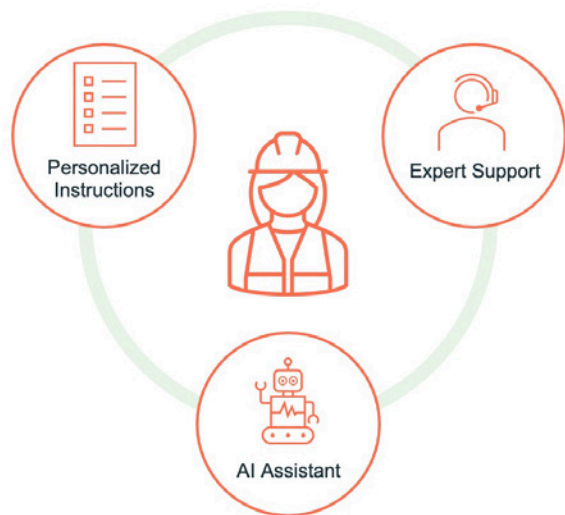
These solutions are uniquely suited for the operating environments that frontline workers participate in, and for the mobile and wearable devices they use. Designed to be used by shop floor workers or field service technicians (even without email addresses), these industrial solutions combine live video streaming with augmented reality to create a powerful collaboration tool that connects workers with subject matter experts (SMEs) to improve troubleshooting and on-the-job support. Many organizations are also extending remote assistance tools out to OEMs and 3rd party SMEs for remote equipment maintenance, virtual factory and site acceptance tests, and troubleshooting when they are unable to travel onsite.



Deliver **personalized** guidance and support with AI

On their own, remote collaboration tools are only a first step in a company's digital transformation journey.

With AI and connected worker technology, companies can drive further efficiency by converting paper-based processes to digital work instructions and use AI to dynamically personalize those instructions to the needs of your individual workers.



Furthermore, workers that require additional support can benefit from AI bots that autonomously deliver a rich set of digital work instructions to that worker so that they can be guided to resolve issues independently and complete jobs safely and correctly.



AI powers continuous learning and development initiatives

Connected worker solutions that are built on an artificial intelligence (AI) foundation are also being used support continuous improvement and lean initiatives in the workplace. AI is uniquely suited to identifying capturable opportunities from the massive, noisy data set generated by frontline workers, and therefore to serve as the foundation of an organization's continuous improvement initiatives.

Improve operational performance

AI algorithms are ideal for analyzing large amounts of data collected from a connected workforce. AI can detect patterns, find outliers, cleanse data and find correlations and patterns that can be used to identify opportunities for improvement in operations or content management.

Deliver training at the moment of need

Traditionally, there was a clear separation between training and work execution, requiring onboarding to encompass everything a worker could possibly do, extending training time and leading to inefficiencies. Today, with the ability to deliver training at the moment of need, onboarding can focus on everything a worker will probably do, significantly reducing onboarding time.

Identify workforce development opportunities

Use AI to identify specific individuals that would benefit from targeted training on a specific tool or procedure as well as improvements to content and instructions directed at the author.

| | | OPPORTUNITY | | |
|----------------------------------|--|-----------------------------------|---------------|--------------|
| PROCEDURE | | TRUE ↓ | TRUE (HRS/... | RAW (HRS/MO) |
| T3 General- Final Test (Step 5) | | <div style="width: 46.4%;"></div> | 46.4 | 92.7 |
| Rework Timer | | <div style="width: 30.1%;"></div> | 30.1 | 48 |
| Indirect Labor | | <div style="width: 23.8%;"></div> | 23.8 | 67.5 |
| ERV w/Motor -Decay Test (Step 5) | | <div style="width: 21.7%;"></div> | 21.7 | 26.1 |

| Direct Lab | Name | ↓2 Proficiency | Trend ↓3 | Skills ↓1 |
|------------|--|----------------------------------|----------|-----------|
| 100T2-S1 | Level 2 Technician (jdreyer90@gmail.com) | <div style="width: 100%;"></div> | → | ✓ |
| MFG-146 | Operations Leader (jeff.dreyer+opsleadgmi@augmentir.com) | <div style="width: 100%;"></div> | → | ✓ |
| 130SP/13 | Del Tomberlin (del@tomberlin) | <div style="width: 100%;"></div> | → | ✓ |
| Direct Lab | Ross Dennen (ross@dennen) | <div style="width: 100%;"></div> | → | ✓ |
| 179NC24 | Frank Berry (hmi_specialist@ngf) | <div style="width: 100%;"></div> | → | ✓ |
| | Marylin Hitz (marylin@hitz) | <div style="width: 100%;"></div> | → | ✓ |
| | Karolyn Britton (karolyn@britton) | <div style="width: 100%;"></div> | → | ✓ |
| | Carey Juhasz (carey@juhasz) | <div style="width: 100%;"></div> | → | ✓ |
| | Danyell Janowski (danyell@janowski) | <div style="width: 100%;"></div> | → | ✓ |
| | Andria Iannuzzi (andria@iannuzzi) | <div style="width: 100%;"></div> | → | ✓ |

Benefits of AI and a Connected Workforce

Industrial companies that implement AI-powered connected worker solutions as part of their digital transformation strategy often see the following benefits:



80%

Reduction in new-hire training time



32%

Improvement in productivity



37%

Reduction in assembly time



25%

Decrease in rework



80%

Decrease in reportable injuries



50%

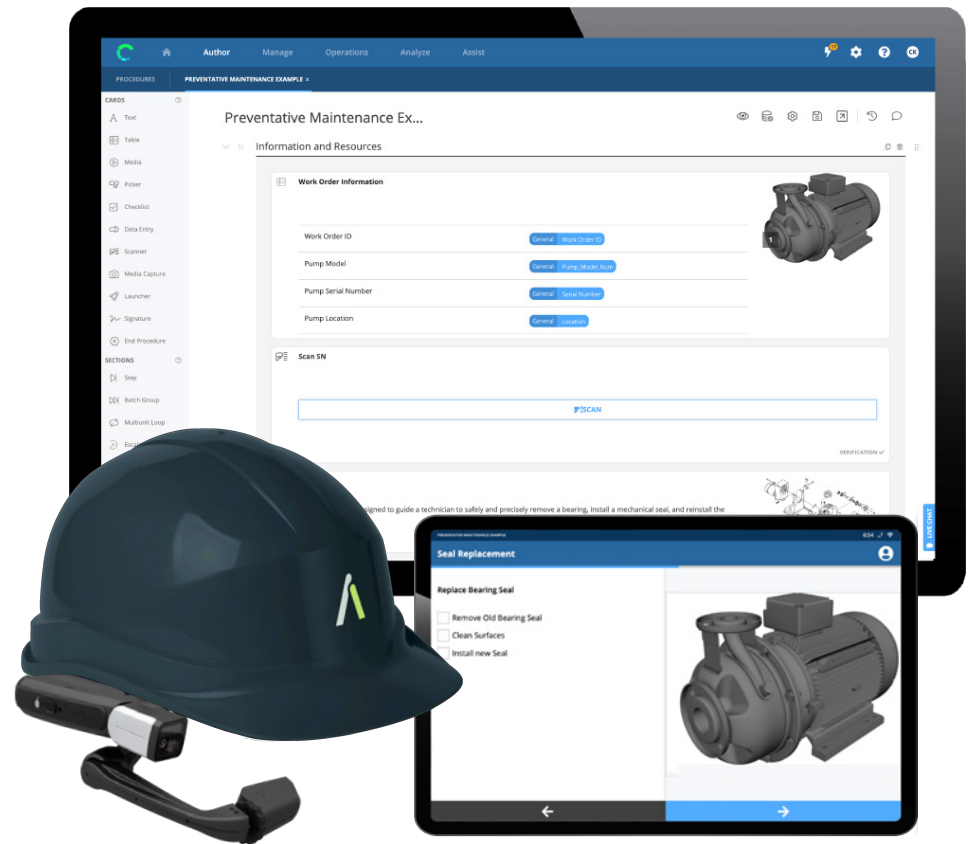
Decrease in start-up, shutdown, and changeover times



Image Credit: RealWear, Inc.

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About Augmentir



ABOUT AUGMENTIR

A Rich History of Founding Successful and Market-Leading Software Companies

The founding team at Augmentir has a deep history in starting and growing innovative software companies that have introduced transformational software to the manufacturing and service industry. Our team has been at the forefront of three of the most important software technology revolutions that have transformed the industrial sector, having co-founded 3 leading software companies over the past three decades:

- **Wonderware (IPO)**, a pioneer in human-machine interface software for industrial automation
- **Lighthammer (sold to SAP)**, which transformed manufacturing intelligence and integration
- **ThingWorx (sold to PTC)**, a pioneer in the Industrial Internet of Things

Our vision at Augmentir is to empower the industrial frontline workforce to perform at their best.

We believe that Artificial Intelligence-based Connected Worker technology holds the key to addressing the top challenges that are preventing frontline workforce excellence.

1987



- Pioneered the first human-machine interface for manufacturing
- Went public in 1994
- Today the world's #1 Factory Automation Software

1997



- Leader in manufacturing intelligence software
- Acquired by SAP in 2005
- Today the #1 Manufacturing Integration and Intelligence Platform in the world

2009



- The first IoT application platform
- Acquired by PTC in 2014
- Today, Gartner's pick as the leading Industrial IoT Platform

2017



- Use AI to continually improve the quality, safety, and productivity of the industrial frontline workforce.

AI-Powered Connected Worker Platform

The Augmentir platform is a suite of AI-powered connected worker tools that helps industrial companies optimize their most important asset – their frontline workforce.

Digitize your workflows and guide workers with augmented work instructions. Resolve issues faster and support team collaboration with industrial remote expert guidance. Drive continuous improvement with operational insights driven from Augmentir's AI.

- Personalized guidance and support so your workers can perform better than even they expected
- Create work instructions once, run them anywhere, anytime
- Support your workers anywhere with smarter remote collaboration
- Provide targeted training and continuous learning
- Use AI-based insights to deliver performance support for the Organization and the Individual

Achieve workforce excellence and improve productivity with data-driven, AI-based connected worker tools from Augmentir.

Augmentir



DIGITAL WORKFLOW

Transform to a paperless operation and deliver digital, augmented work instructions to your frontline teams – close the skills gap, reduce errors, and improve productivity.



INDUSTRIAL COLLABORATION

Virtually support your workforce and your customers. AI bots help to automate virtual assistance and capture valuable tribal knowledge from expert interactions.



AI-BASED OPERATIONAL INSIGHTS

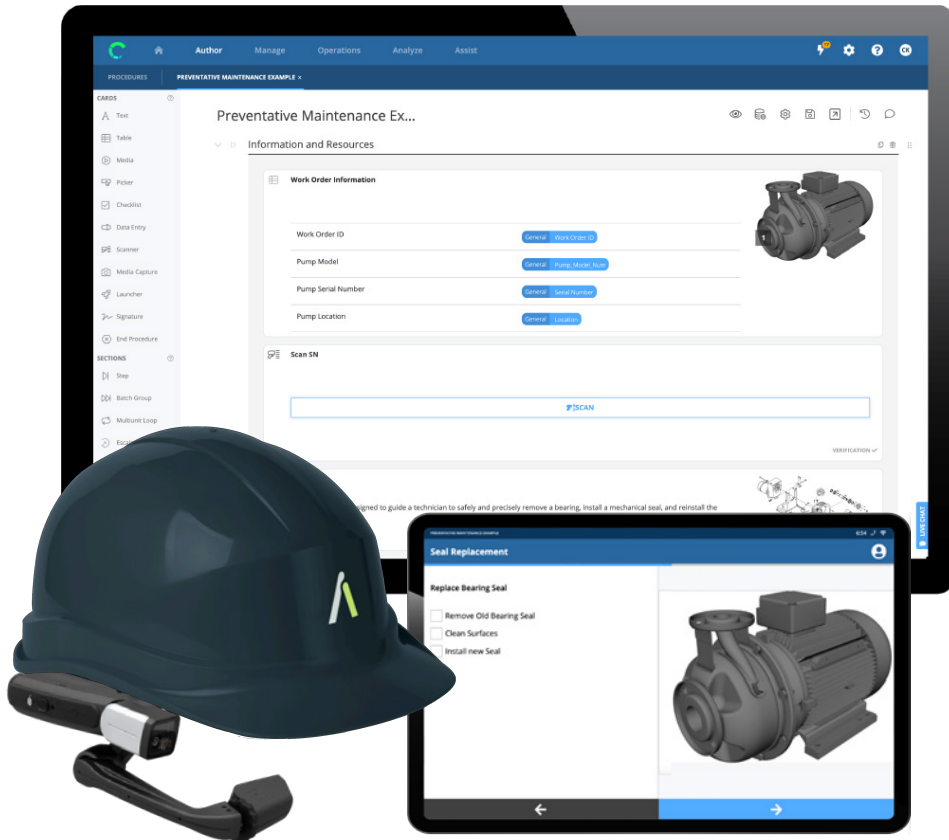
Augmentir's AI-based True Opportunity™ system uncovers operational improvements and helps to drive continuous improvement throughout the organization.



MODERN, ENTERPRISE SAAS SOFTWARE

Augmentir's modern enterprise SaaS design and scalable pricing enables companies of all sizes to get started in minutes and quickly realize ROI.

Augmentir



Get Started with Augmentir

Connect with us to schedule a live product demonstration and experience first-hand how Augmentir can help you take your first step towards a digitally connected frontline workforce.

- Virtually communicate and collaborate with remote teams using chat, live video, audio, file sharing, and AR-based annotations.
- Create and run digital, augmented work instructions on any iOS or Android mobile device or AR-enabled smart glasses.
- Identify opportunities for improving worker skills and driving continuous improvement throughout the organization.

[GET STARTED](#)