Augmentir
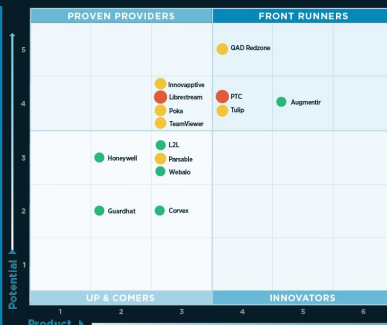
The Future of Industrial Work

How AI-powered Connected Worker solutions are helping modern manufacturers connect, engage, and empower their frontline workers.

NEW RESEARCH REPORT · CONNECTED WORKER

FREE INSIDE

LNS Research

SOLUTION SELECTION MATRIX

Connected Frontline Workforce Applications

Today's workforce challenges are forcing us to rethink how we onboard, train, and support our frontline workers

The manufacturing sector is facing an increasingly unstable, unpredictable, and diverse workforce. The sector that was already stressed with a tight labor market, rapidly retiring baby-boomer generation, and the growing skills gap is now facing employee absenteeism, turnover, and quality issues that are strongly impacting manufacturers' bottom lines.

Across all manufacturing sectors, the skilled labor gap and workforce variability have a direct impact on production. According to recent studies by Deloitte and McKinsey, up to 82% of unplanned downtime can be traced back to human error. Over the past 3 years the industry has seen an 8% increase in safety incidents and an 11% increase in quality issues. During this period, there has also been a 5% uptick in non-compliance violations. This can all be traced to the skills gap and labor shortages.

> "Not only are we having trouble attracting new workers, but we also have no visibility as to who will show up each day, and inaccurate visibility into worker skills and competencies, making it virtually impossible to meet our production goals."
>
> Plant Manager
> Fortune 500 Food Manufacturer

Manufacturers now face increased pressure for improved production efficiency, changes in consumer demands, and increased regulatory compliance, safety, and sustainability. These pressures have highlighted the need for accelerated workforce development and optimized manufacturing workflows.

Line supervisors are dealing with new team members that lack the necessary skills, and experienced ones leaving. The combination of a variable workforce, along with constantly changing skill levels and skill expirations pose safety concerns and complicates the optimal allocation of work - as skill levels and expirations are a constantly moving target.

To maintain business continuity and advance operations, manufacturers are now leveraging artificial intelligence (AI) and connected worker technology to enhance their operations.

According to LNS Research (a leading analyst firm in defining the connected worker space), the business case for connected worker solutions continues to grow, and solutions that incorporate emerging technologies like AI are leading the way. In fact, LNS states that **Industrial Transformation Leaders (IX Leaders) are two times more likely to use AI-enabled advanced analytics capabilities**. These leading manufacturers are supporting their frontline operations with AI-based technology for training and skills development, real-time worker performance support, collaboration, and daily work management.

Augmentir

The Future of Work and Smart Digitization

The future of work in manufacturing includes the use of modern, digital tools that can connect, digitize, and optimize what your employees know and how they are doing on the job.

Solutions that incorporate enhanced mobile capabilities and combine training and skills tracking with connected worker technology and on-the-job digital guidance can deliver significant additional value.

A critical requirement to make this a reality is a digitally connected workforce and access to data about the work being done. Data from actual work performance combined with AI-based analytics can inform workforce development investments, and deliver *smart* insights that reduce time to productivity, enable targeted reskilling and upskilling, and provide individualized guidance and support at the point of work so that you get the best each person has to offer.

This **Smart Digitization** path can be summarized as follows:

1   Digitize your frontline operation

2   Augment workers with AI and GenAI Assistants

3   Provide value throughout the employee lifecycle

4   Connect your frontline with your enterprise

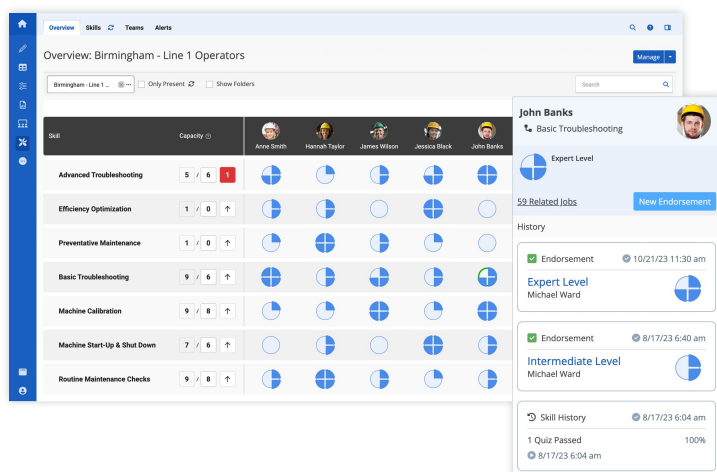The following sections outline this digitization process.

1

Digitize and connect your frontline operations

⬡ Digitizing Skills

Skills management programs that are digitally tracked using skills management software provide numerous benefits, including:

- Instantly visualize the skills gaps in your team
- Quickly assess team and individual readiness
- Identify upskilling/reskilling opportunities

Furthermore, using software solutions like Augmentir, organizations can digitize and easily manage skills tracking and training programs and connect them with frontline operations. This provides additional benefits, including the ability to assign work to employees with the required skill level, increasing safety and equipment uptime.
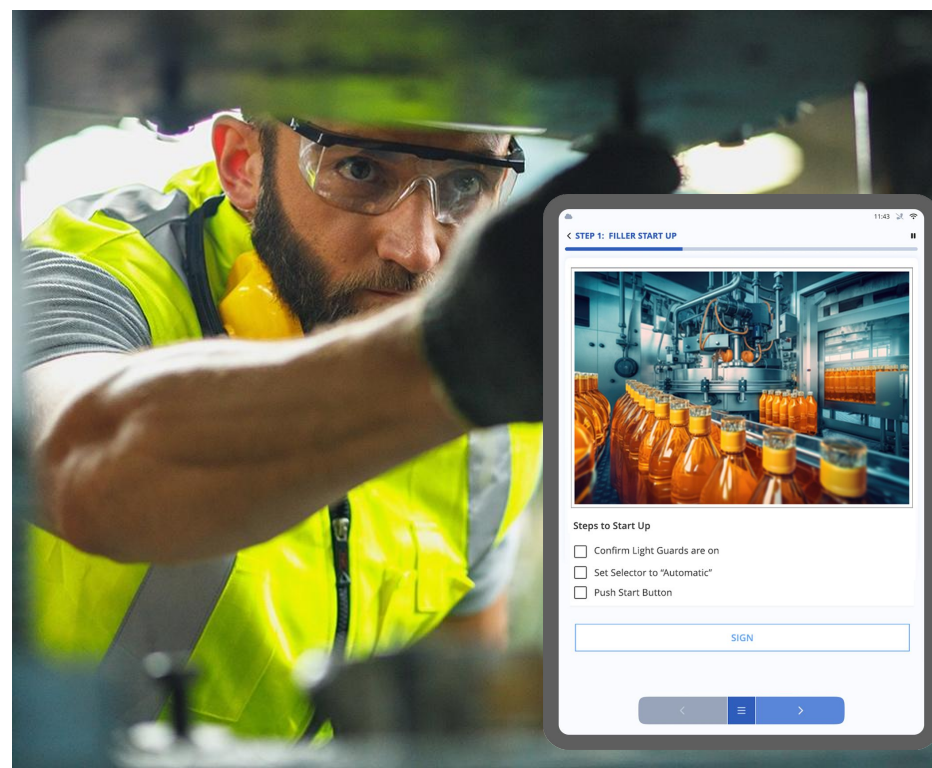
Augmentir

▤ Digitizing Work

Digital work instructions are electronic versions of work instructions or SOPs that provide necessary visual aids and real-time contextual information to help improve processes and guide operators through complex tasks. Digital work instructions improve standardization and quality for a wide range of use cases and help optimize workforce performance in all aspects of manufacturing.

Digital guidance can include images, videos, augmented reality (AR) experiences, and live support from colleagues or subject matter experts.
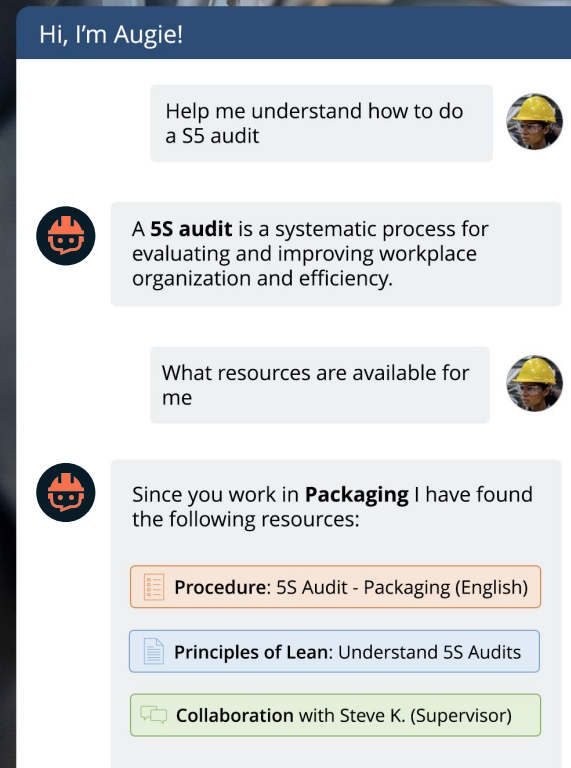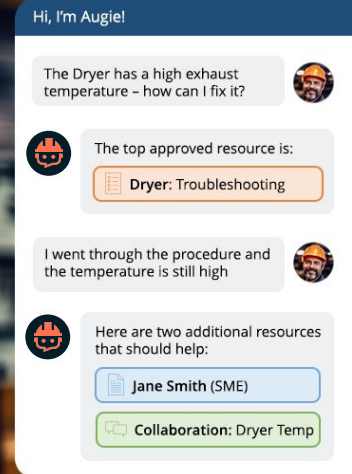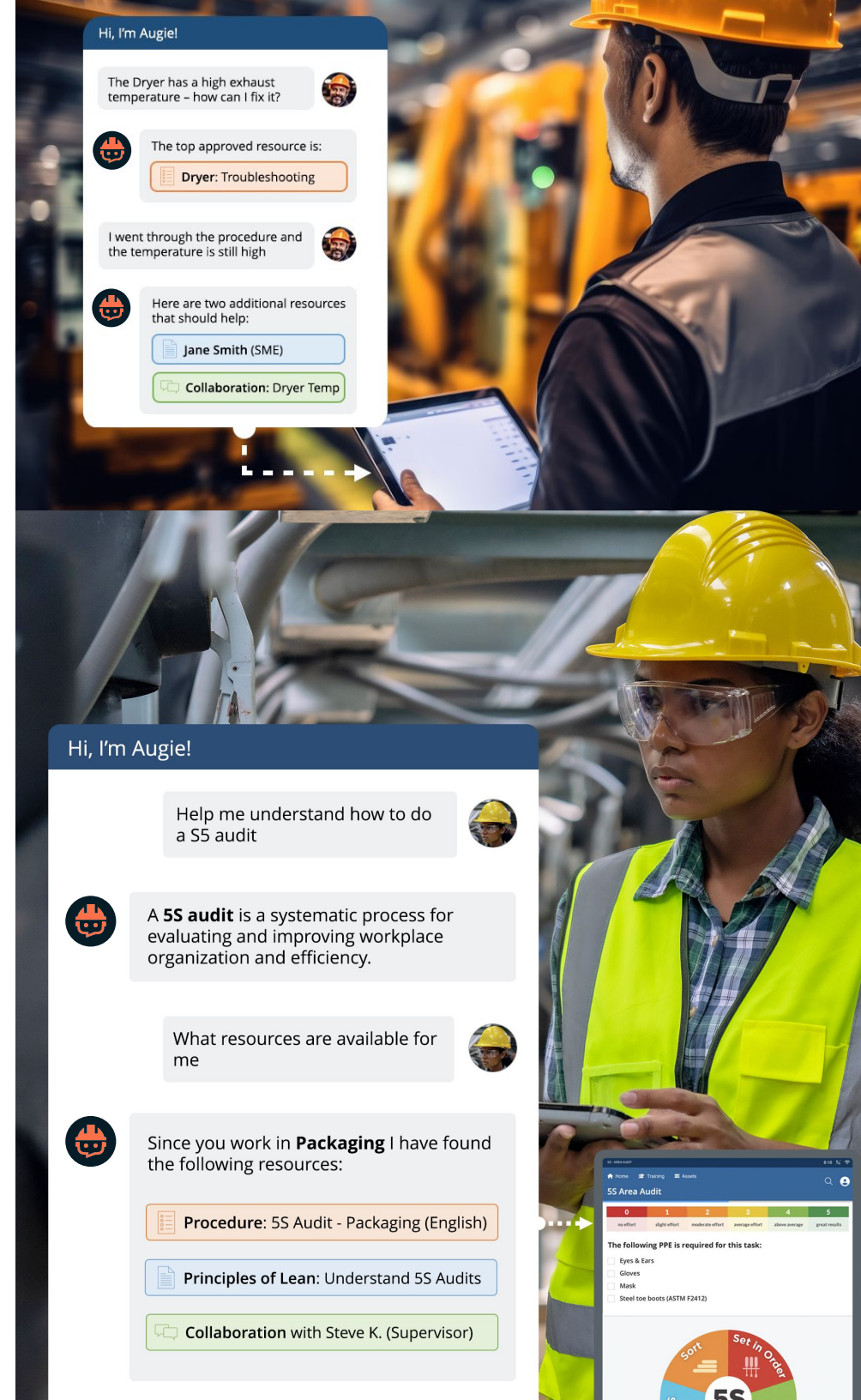
2

Augment your workers with AI and Connected Worker Technology

Once on the job, AI-based connected worker solutions can help both digitize work instructions and deliver that guidance in a way that is personalized to the individual worker and their performance.

AI Bots that leverage Generative AI and vertically trained Large Language Models (LLMs) can assist workers with language translation, feedback, on-demand answers, access to knowledge through natural language, and provide a comprehensive digital performance support tool.

As workers become more connected, companies have access to a rich source of job activity, execution, and tribal data, and with proper AI tools can gain insights into areas where the largest improvement opportunities exist.

When this real-time worker data is combined with information on what a worker has been trained on, the result is a connected worker that is being given personalized support. This leads to improved performance, higher worker engagement, increased worker satisfaction and reduced churn.

Augmentir

3

Provide continuous value throughout the employee lifecycle

Organizations can continuously support their workforce from "hire to retire" by connecting and empowering them through a digital skills management framework. This enables truly personalized workforce development investments by understanding the proficiency and performance of every worker at every task. Target upskilling and reskilling based on True Performance™ insights from the point of work, reducing training costs and non-productive time.

1
Onboarding & Training

2
On the Job Guidance

3
Support & Troubleshooting

4
Upskilling & Reskilling

4

Connect your frontline to your enterprise

Connected worker solutions like Augmentir not only enable industrial companies to digitize work instructions, checklists, and SOPs, but also allows them to create digital workflows and integrations that fully incorporate frontline workers into the digital thread of their business.

Connect, engage, and empower frontline workers to drive productivity, safety, quality, and maintenance improvements, resolve quality issues faster and earlier, and share timely insights with teams across the value chain to support continuous improvement.

ENTERPRISE SYSTEMS
ERP • QMS • EHS • EAM • LMS • HR

Λugmentir

Extend the value of your Enterprise to your Frontline Operations

Frontline workers often witness production issues on the factory floor. They are effectively a "human sensor" in the manufacturing process and can readily identify quality defects, maintenance events, and safety concerns. Today, recording and resolving those defects is most often a manual and paper-based process, with minimal data collection, latency in resolving the issue, and little-to-no feedback to the frontline worker on resolution.

With a connected worker solution like Augmentir, proactively address those quality, safety, and maintenance events through direct, bi-directional connections to enterprise systems, driving operational excellence, business performance, and profitability.

Λugmentir

New LNS Research Report Highlights Augmentir as Leading Connected Worker Solution

Efforts to digitally enable the frontline industrial workforce have become increasingly common over the past several years. A new report from LNS Research shows that over half of industrial organizations globally have undertaken Connected Frontline Workforce (CFW) initiatives. CFW has become a strategic part of Industrial Transformation (IX) initiatives as manufacturers seek to solve critical labor shortages, skills gaps, and retention issues in frontline operations.

CFW-enabling technologies hold the promise of helping companies meet their frontline workforce challenges while optimizing operational performance across safety, quality, and productivity dimensions.

From their extensive analysis, LNS Research has created the CFW Applications Solution Selection Matrix™ (SSM) – a comprehensive guide intended to help manufacturers better understand, evaluate, and even select from a shortlist of CFW technology vendors.
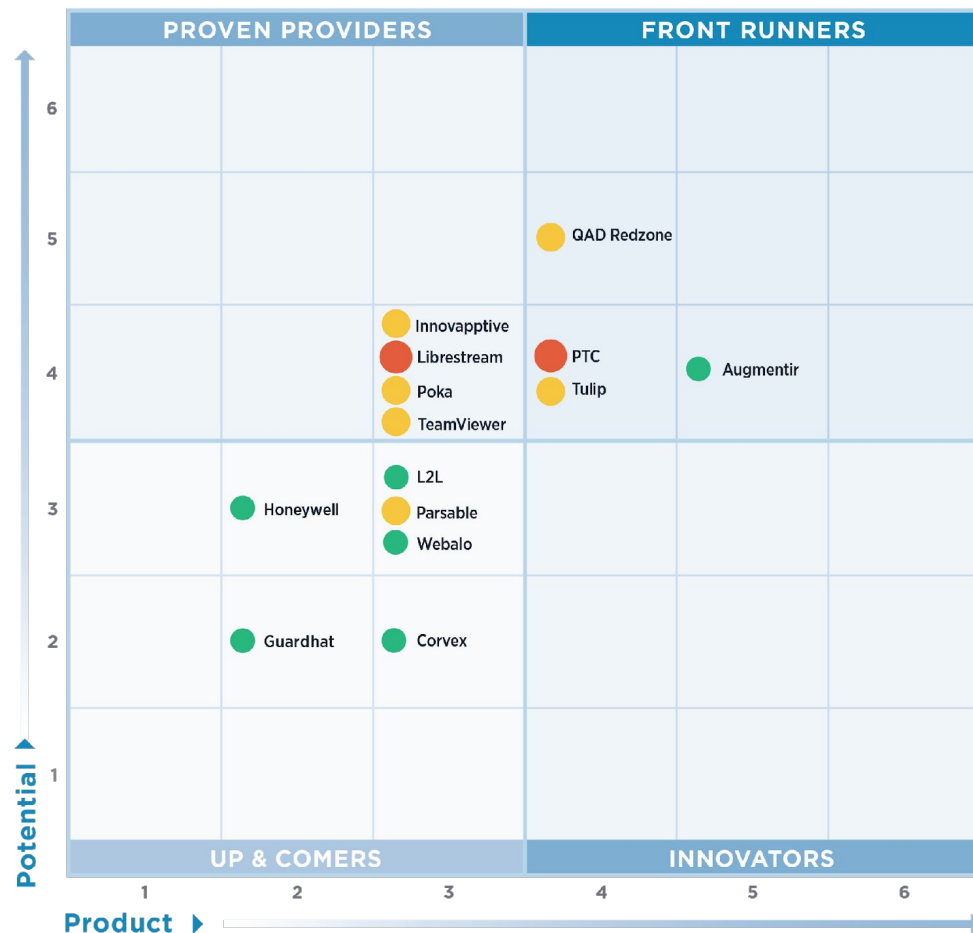
LNS reviewed dozens of vendors within the CFW ecosystem and categorized them based on various key criteria, including product capabilities, market potential, and company presence. **Augmentir was named by LNS as a leading CFW solution innovator.**

DOWNLOAD THE FULL REPORT

Connected Frontline Workforce Applications
SOLUTION SELECTION
MATRIX

PROVEN PROVIDERS | FRONT RUNNERS

QAD Redzone

Innovapptive
Librestream   PTC   Augmentir
Poka   Tulip
TeamViewer

L2L
Honeywell   Parsable
Webalo

Guardhat   Corvex

UP & COMERS | INNOVATORS
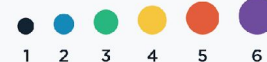
Potential ▶
Product ▶

COMPANY SCORE *(Product, Potential, Presence)*

Augmentir (5,4,3)
Corvex (3,2,3)
Guardhat (2,2,3)
Honeywell (2,3,3)
Innovapptive (3,4,4)
L2L (3,3,3)

Librestream (3,4,5)
Parsable (3,3,4)
Poka (3,4,4)
PTC (4,4,5)
QAD Redzone (4,5,4)
TeamViewer (3,4,4)

Tulip (4,4,4)
Webalo (3,3,3)

COMPANY PRESENCE

1   2   3   4   5   6

Note: Companies in the same Matrix box are listed alphabetically and have the same Product and Potential scores.

Digital workflows increase safety, quality, and productivity

Improve digital capabilities on the shop floor by moving away from paper-based, static work instructions and SOPs. Interactive digital work instructions help reduce errors and operational downtime and deliver improved quality and productivity across manufacturing operations, while also providing new data to support continuous improvement initiatives.

Lockout / Tagout
Digitize your lockout/tagout procedures to ensure compliance and safeguard workers from hazardous situations. Remote approvals ensure safety and compliance.

Line Cleaning, Setup, Changeover
Reduce equipment setup time and process variability and increases your flexibility to meet customer demands.

Inspection / QA
Improve the standardization and efficiency of your quality control and quality assurance processes.

Audits
Digitize 5S and safety audits to reduce friction and increase data analysis capability.

Operator Care
Ensure equipment uptime and yield.

Preventative and Autonomous Maintenance
Improve the quality, transparency, and efficiency of maintenance procedures performed by operators and technicians.
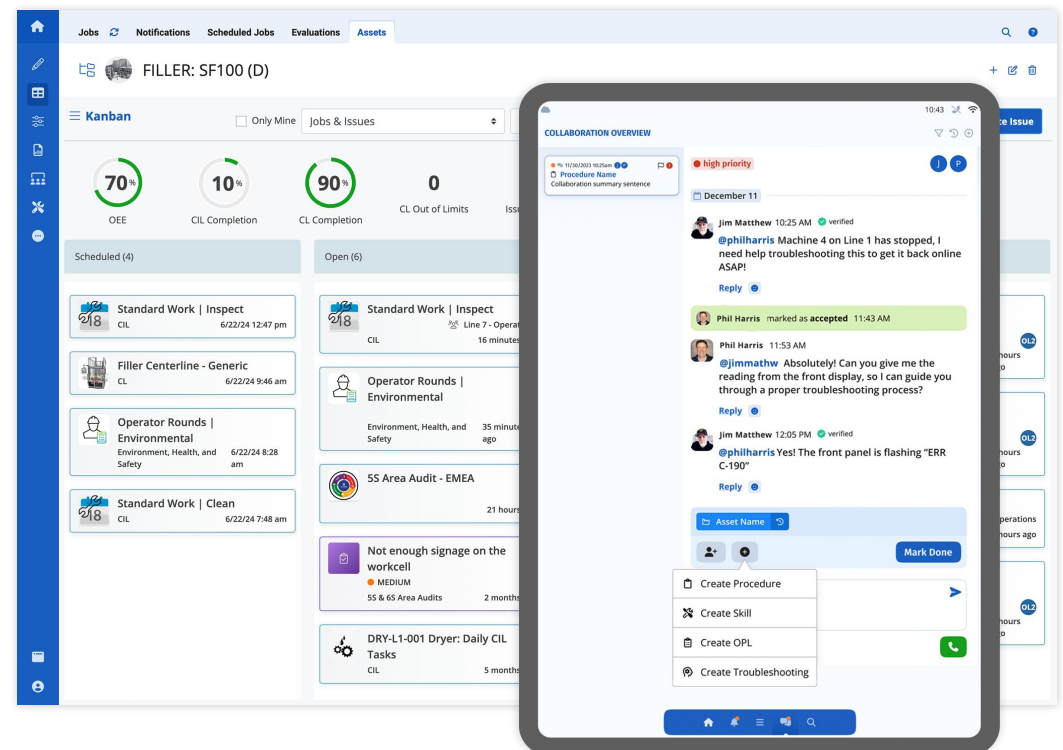
Smart, effective collaboration for your frontline teams

Effectively collaborate and share information across your frontline teams. Augmentir provides tools to support context-based collaboration, connecting team members across shifts, plants, and languages.
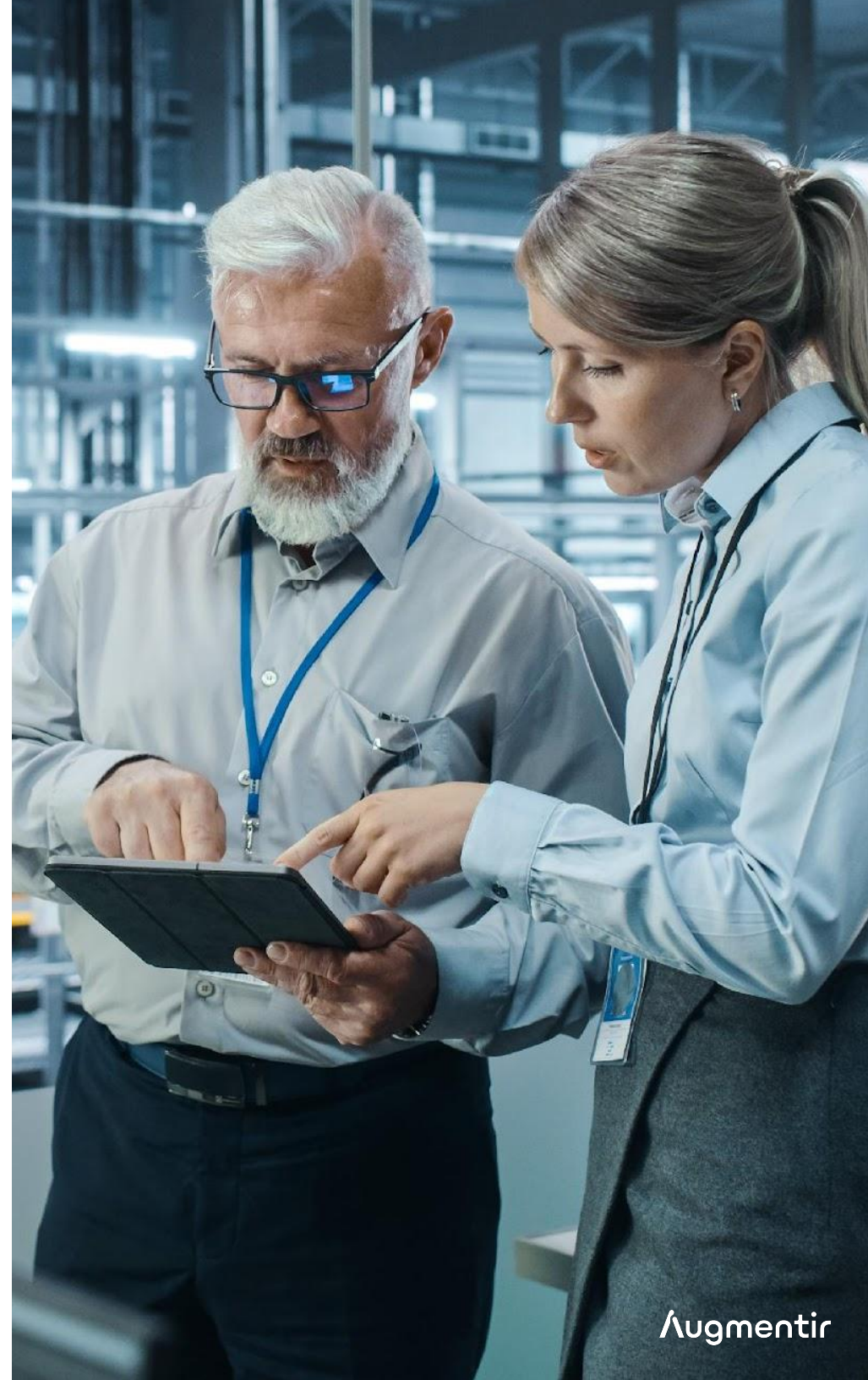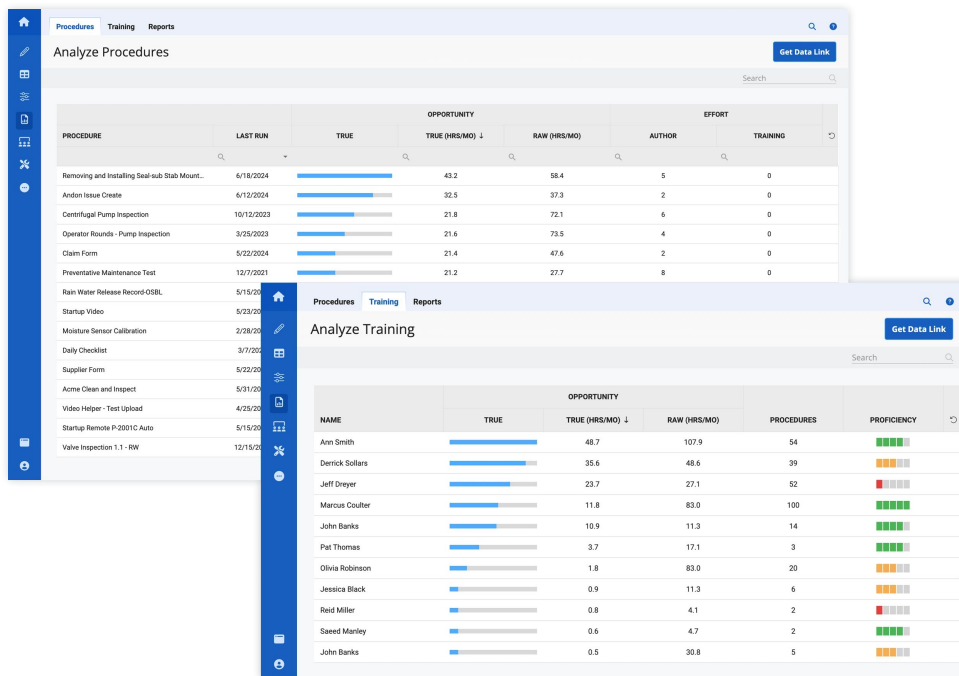
Directly update work procedures to reflect tribal knowledge exchanged during session collaboration sessions. Augmentir's Smart AI captures and accumulates tribal knowledge from SMEs, and using Gen AI technology, it can be turned into sharable corporate assets, leading to better visibility and communication.

Actionable insights drive continuous improvement

AI-based workforce intelligence insights identify productivity opportunities across work processes and your workforce, delivering the data necessary to continuously improve operational excellence day-over-day, year-over-year.

- Stack rank your largest productivity opportunities across all work processes to focus continuous improvement teams at the highest ROI
- Determine the proficiency and performance of every worker at every task enabling truly personalized workforce development investments

Augmentir

Smart Digitization is the future of training and skills management

The combination of a connected workforce and the digitization of skills management is helping manufacturers bridge the gap between training, skills, and work for today's changing workforce.

With Smart Digitization, companies can deliver continuous value. More specifically, real-time workforce intelligence can provide insights into training, guidance, and support needs, as well as provide real, actionable insights into continuous improvement opportunities.

Smarter Onboarding and Training
Digitize onboarding and training processes to help get workers skilled and operational faster to combat the rapidly churning workforce.
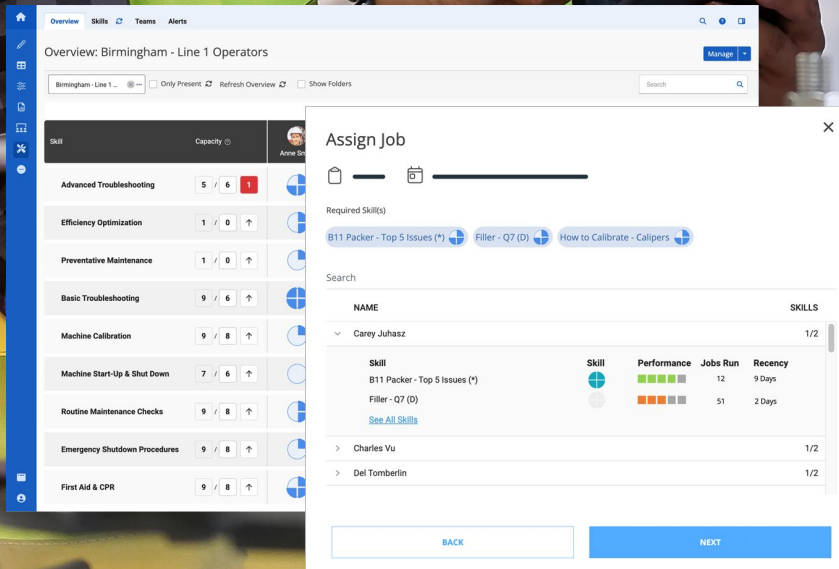
Personalized Guidance at Work
Automatically provide personalized guidance and support so that each worker can perform each task at their individual best, maximizing the performance of your workforce every day.

Support at the Moment of Need
Support workers in the flow of work with easy access to curated knowledge and remote expert support. AI-bots provide autonomous support.

Smarter Upskilling and Reskilling
Understand your workforce at an individual level, in real-time. Use AI-driven insights to intelligently target reskilling and upskilling investments to close skills gaps.

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:

72%
Reduction in new-hire training time

32%
Improvement in productivity

37%
Reduction in defects

25%
Decrease in rework

80%
Decrease in reportable injuries

50%
Decrease in start-up, shutdown, and changeover times

Augmentir

Operational Excellence Across a Range of Use Cases

Connected worker solutions digitize and optimize frontline work across a wide range of factory floor use cases.

QUALITY
Digitize quality data collection and inspection procedures to reduce errors and improve timeliness.

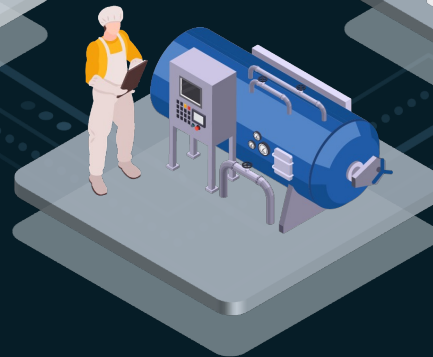## OPERATIONS
Improve the efficiency of operations and enable autonomous maintenance.

MAINTENANCE
Improve the quality, transparency, and efficiency of preventative and autonomous maintenance procedures.

TRAINING
Move training into the flow of work. Identify upskilling and reskilling opportunities.

SAFETY
Improve safety and digitize safety incident and near-miss reporting.
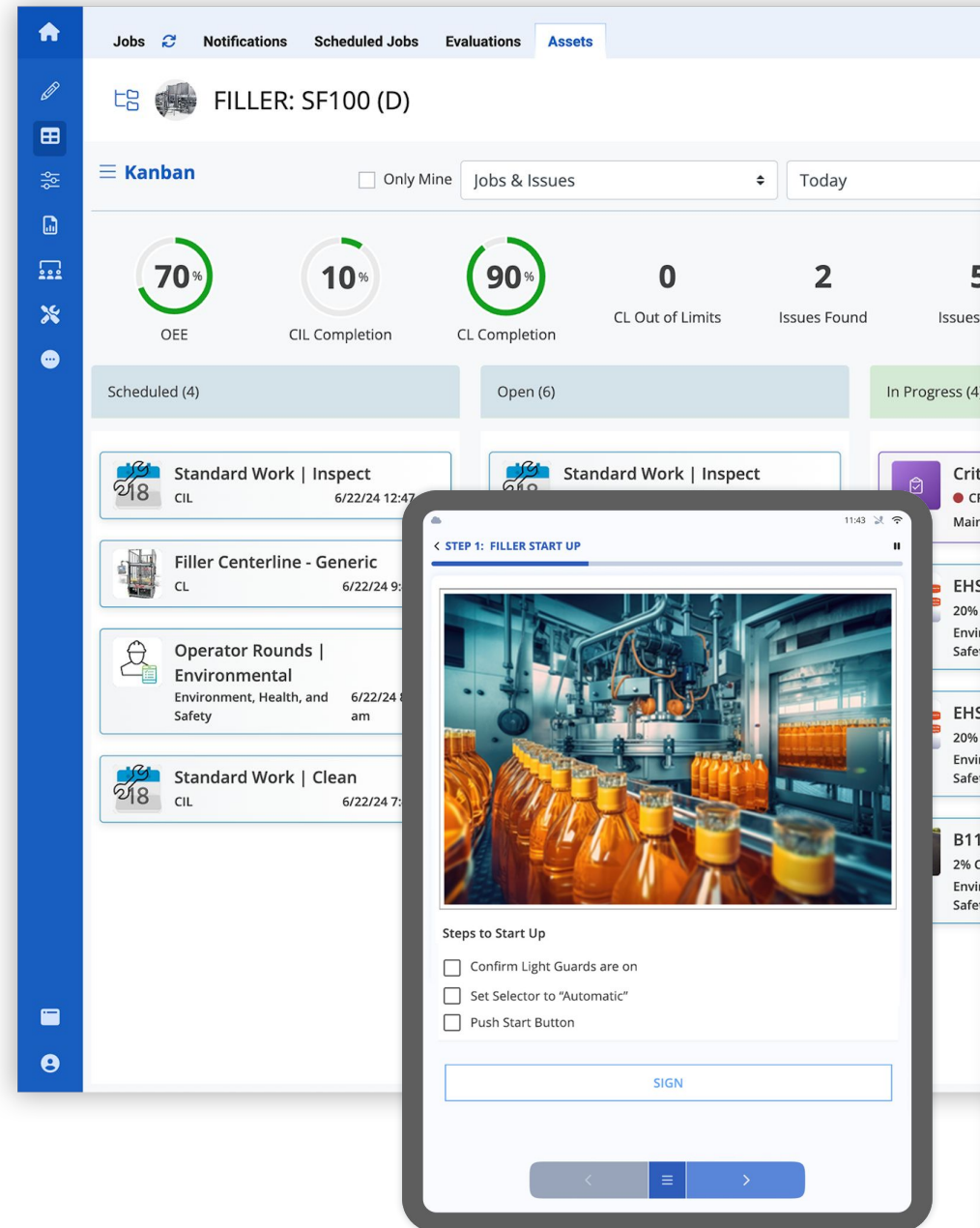
Augmentir

Augmentir

Interested in learning more?

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.

- Track and manage workforce skills, qualifications, and certifications to intelligently schedule work and deliver personalized guidance and support

- Create and run digital work instructions on any iOS or Android mobile device or industrial smart glasses

- Provide easy-to-use tools for team collaboration and knowledge sharing

- Identify opportunities for improving worker skills and driving continuous improvement throughout the organization

BOOK A DEMO

Augmentir

Augmentir

About the Company

Augmentir provides the world's most complete Connected Worker solution that uses AI to help manufacturing companies intelligently onboard, train, guide, and support frontline workers so each worker can contribute at their individual best, helping achieve production goals in today's era of workforce disruption.

Our solution is a SaaS-based suite of software tools that helps customers digitize and optimize all frontline processes including Autonomous and Preventive Maintenance, Quality, Safety, and Assembly.

The solution combines skills management, digital workflow, collaboration, and knowledge sharing to deliver continuous value in a wide range of verticals including Building Materials, Food & Beverage, CPG, Paper & Packaging, Chemical, Oil & Gas, Utilities, Discrete Manufacturing, Automotive, and Life Sciences. Our solution is licensed on a per user-basis where frontline workers can access Augmentir via mobile devices, industrial smart glasses, and computer browsers.

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.

Artificial Intelligence-based connected worker technology holds the key to addressing the top challenges that are preventing frontline workforce excellence and is shaping the future of industrial work.

1987 — Wonderware / Nasdaq

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

1997 — Lighthammer / SAP

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

2009 — ThingWorx / ptc

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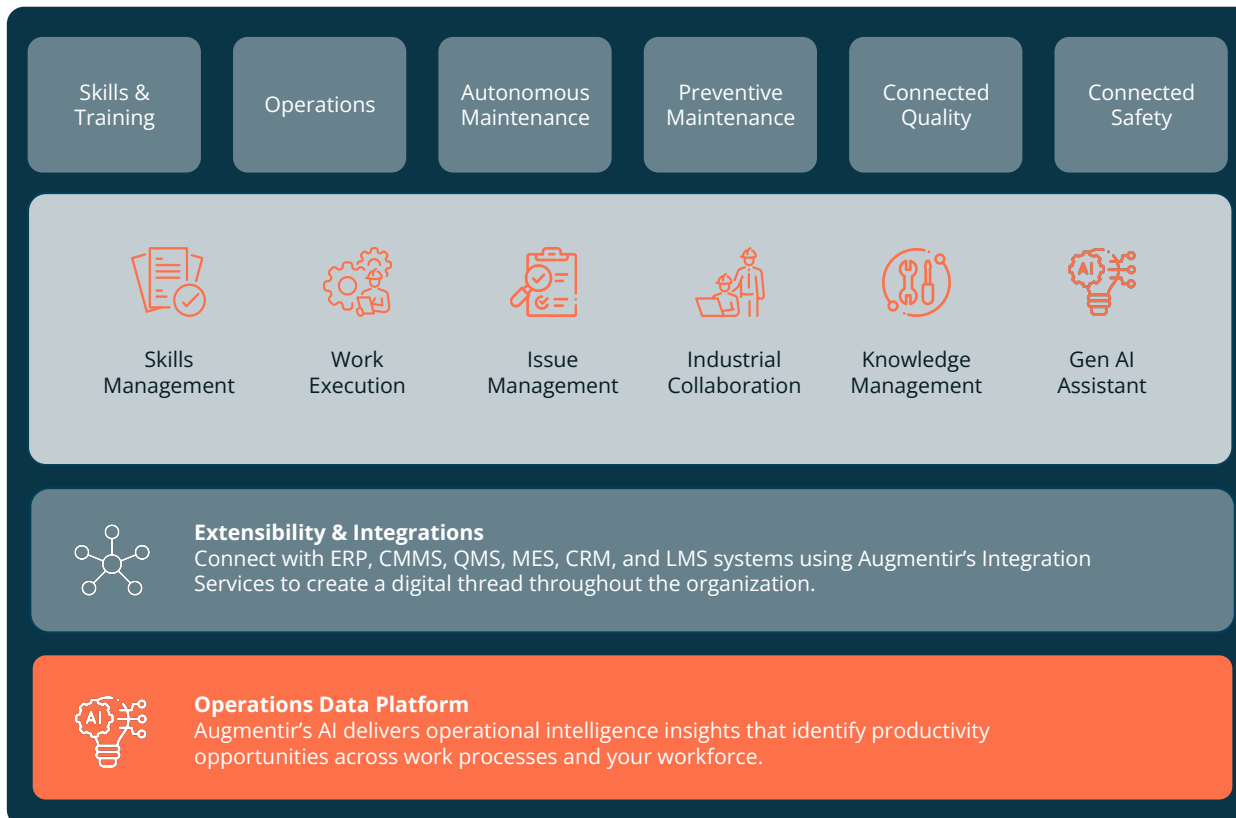- Today, Gartner's pick as the leading Industrial IoT Platform

2018 — Augmentir

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

Augmentir

AI-Powered Connected Worker Solution

Augmentir is a connected worker solution that allows manufacturing and industrial companies to digitize and optimize processes that support frontline workers from "hire to retire".

The complete suite of connected worker capabilities are built on top of Augmentir's patented Smart AI foundation, which closes the loop between training and work execution, delivering the data and in-line insights necessary to continuously improve operational excellence day-over-day, year-over-year.

Skills & Training	Operations	Autonomous Maintenance	Preventive Maintenance	Connected Quality	Connected Safety

Skills Management	Work Execution	Issue Management	Industrial Collaboration	Knowledge Management	Gen AI Assistant

Extensibility & Integrations
Connect with ERP, CMMS, QMS, MES, CRM, and LMS systems using Augmentir's Integration Services to create a digital thread throughout the organization.

Operations Data Platform
Augmentir's AI delivers operational intelligence insights that identify productivity opportunities across work processes and your workforce.

Skills & Training: Digitize the entire skills and training lifecycle to efficiently manage skills for your rapidly changing workforce.

Digital Workflow: Digitize simple and complex workflows and use Smart AI insights to deliver personalized digital work instructions and identify productivity opportunities.

Issue Management: Raise issues and track maintenance notifications with a visual Kanban board. Escalate notifications to CMMS.

Industrial Collaboration: Connect workers across locations and shifts. Enable team collaboration for faster issue resolution.

Knowledge Management: Simplify access to content around assets, work instructions, and skills.
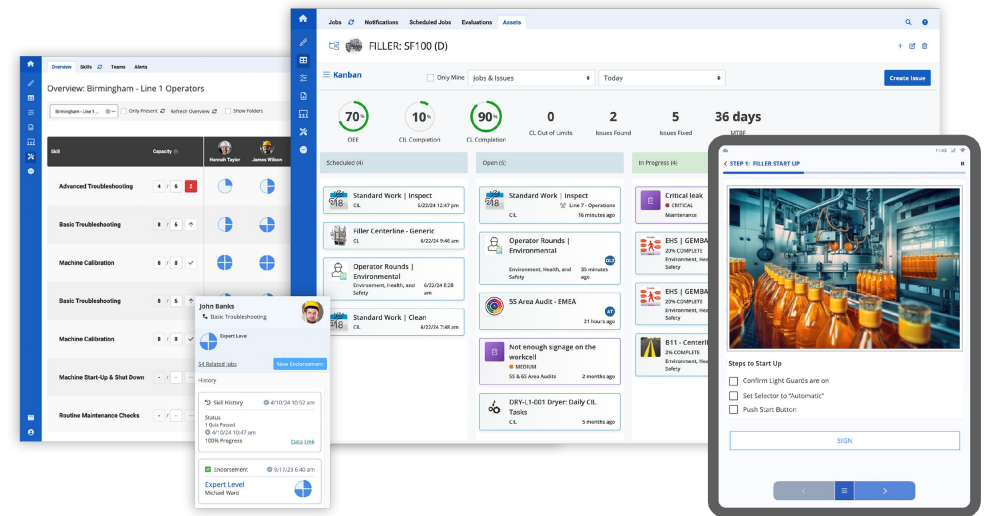
AI-Based Performance Support: Augmentir uses connected worker data and ML algorithms that combine worker skill levels, job recency, and actual work performance to deliver actionable insights.

Powering the Future of Manufacturing with AI

In this era of workforce disruption and churn, the static or paper processes of old are no longer sufficient to attain production goals.

The digitization of frontline processes has become a must-have to keep up with the velocity of change – but not just digitization – smart digitization.

Augmentir enables companies to digitize all the processes that impact frontline workers from the "hire to retire" providing AI-based smart insights that reduce time to productivity, enable targeted reskilling and upskilling, and provide individualized guidance and support at the point of work so that you get the best each person has to offer.

Safety

Digitize safety incident and near-miss reporting. Digital checklists and executive scorecards help ensure compliance, minimize impacts, and highlight key safety KPIs and at-risk procedures.

Quality

Replace paper and digitize quality data collection and inspection procedures to reduce errors and waste and improve timeliness to ensure that you are always "audit ready".

Operations

Ensure equipment uptime and yield and improve the safety, quality, and efficiency of assembly and operator care routines performed by plant management, operations, and maintenance.

Autonomous Maintenance

Give operators more control over equipment upkeep to identify issues before they become failures. Use Smart Digital Work Instructions to empower a wider range of workers to perform maintenance jobs safely and correctly.

Preventative Maintenance

Improve the quality, transparency, and efficiency of maintenance and repair procedures. Provide your workers with access to remote expert assistance in the flow of work to help solve problems quickly.

Workforce Development

Digitize the entire skills management lifecycle and instantly visualize the skills matrix for your team, see what skill gaps exist, and take action to fill them. Smart AI insights enable targeted reskilling and upskilling.

Visit augmentir.com to learn how Augmentir can help digitally transform your frontline operations.

Augmentir

www.augmentir.com