## THE CONNECTED W O R K E R CHICAGO

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# Industry Insights: Top Challenges and Investment Priorities in the Connected Worker Landscape

Understanding emerging trends from industry research and surveys

Ahead of **The Connected Worker Chicago Summit**, we've compiled exclusive insights from senior operations, manufacturing and digital executives via surveys and research calls, to benchmark the challenges and opportunities facing leaders today. Discover top industry insights with our informative infographic.

What is a Connected Worker?

The task-centric and time-consuming routines of front-line workers demand unique solutions, especially in comparison to traditional desk workers. The Connected Worker is essentially any individual capable of leverage a range of digital tools and data management techniques to enhance and seamlessly integrate their engagements in both physical and virtual environments.



#### What is a Connected Worker Platform?

A comprehensive and integrated system that brings together various technologies to enhance, support and realize the true potential of Connected Workers. This includes:







Communication Tools



Analytics



**Digital Workflow/ Digital Work Instructions** 



**Process Safety** 



Learning and **Development** 



**Predictive Maintenance and Asset Management** 

#### What are Connected Worker Technologies?

Encompassing a range of digital tools and solutions designed to enhance the capabilities and safety of Connected Workers, key technologies within the Connected Worker ecosystem include:



**Wearables** 



IoT **Sensors** 



**Augmented** Reality (AR)



**Virtual** Reality (VR)



ΑI



**Generative AI** 



**Communication Platforms** 



**Data Analytics & Machine Learning** 



**Mobile Apps** 



**Training Simulators** 



Location **Tracking** 



**Integration Platforms** 

### Top 5 Challenges Facing Senior Executives in Manufacturing



#### **Critical Skills & Talent Gaps**

Addressing and bridging generational knowledge gaps for the purposes of onboarding, upskilling, retention, and safety.



#### **Strategic Integration**

Integrating the 4 key advantage capabilities - Product Management, Manufacturing Operations, Supply Chain and Customer Experience - into one key roadmap.



#### **Transforming Work Culture**

Effectively evolving the 'communities of practice' from more of a knowledge-sharing model to an adoption and creation mindset.



#### **Health & Safety**

A continuous focus on safety, which involves examining areas where employees may be vulnerable to risks.



#### Smart Factory Implementation

Developing a smart factory plan that will underpin and enable all future operations and innovations.







#### Top 3 Connected Worker Initiatives Senior Executives are Exploring



### Large-Scale PLM/MES System Integration

Implementing Product Lifecycle
Management (PLM) and
Manufacturing Execution Systems
(MES) on a large scale to streamline
production processes, optimize
workflows and prepare for the
future of work.



#### SPI (Special Purpose Intelligence) – AI Platform

Establishing a knowledge and data-based AI platform to provide an intelligent foundation for the evolution of the connected workforce, fostering data-driven decision-making.



### Mobiles & Tablets, AR/VR, and UX Focus

Leveraging mobiles and tablets for improved user experiences and accessibility, while incorporating Augmented Reality (AR) and Virtual Reality (VR) for enhanced training and visualization.

### Top 5 Reasons to Invest in Connected Worker Initiatives

Recent surveys found that **48% of industry leaders** are still in the process of establishing a clear path towards the implementation of Connected Worker Initiatives across their organizations.

As the benefits are extensive, here are **5 reasons why the Connected Worker** can be pivotal within your operations:



### **1** Enhanced Safety and Risk Mitigation

Technologies such as wearables and sensors enable real-time monitoring, allowing for immediate detection of potential hazards. This leads to minimized risks, quick response times, and intervention.



### Increased Productivity and Operational Efficiency

Access to real-time information streamlines workflows. Plus, the integration of IoT devices and analytics enables predictive maintenance, minimizing equipment failures and optimizing operational efficiency.



### Cost Savings and Resource Optimization

Prevention of unexpected equipment failures reduces unplanned downtime and maintenance costs, while improved efficiency leads to cost savings through optimized workflows and enhanced resource utilization.



### Real-time Data Insights and Decision-Making

The wealth of real-time data provides actionable insights into operational processes, worker performance, and equipment status. This aids in making informed decisions, optimizing processes, and identifying areas for continuous improvement.



### Workforce Engagement and Satisfaction

Connected Worker solutions empower employees by providing them with the tools and information needed for effective job performance. They also offer training and upskilling opportunities through digital platforms, contributing further to development and job satisfaction.

#### Recent surveys conducted at our Connected Worker Summits found that...

while



of leaders in the industry struggle with **Connectivity** as a **big challenge** when implementing Connected Worker solutions (Q) \$ (4(1)) 34%

of digital leaders and operators highlighted **Change Management** and **user adoption** as their **biggest challenge** 



#### Other challenges included:

Adoption

**Upskilling** 

Data Accuracy Talent Shortage Leadership Buy-In Identifying Scope

**Funding** 

### **Top 3 Areas of Investments for Connected Worker Programs**

The projects and technologies senior executives are investing in within the next 6-12 months.





**Technologies** 

technology.

**Robotics and Automation** 

What: Exploring the use of

**Why:** Investing in robotics

and automation technologies

enhances efficiency in inspection

and maintenance processes. This

includes providing Asset Integrity

teams with improved access to

technology and implementing

manufacturing automation for

streamlined operations.

Cobots (Collaborative Robots)

and manufacturing automation

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#### Advanced Analytics and Artificial Intelligence (AI)

**What:** Robotics, generative AI, predictive and prescriptive analytics.

**Why:** The focus on generative Al and advanced analytics, including predictive and prescriptive analytics, signifies a commitment to leveraging data to optimize manufacturing processes, and improve decision making.





### Information Ecosystem and Persona-Based Apps

**What:** Building persona-based apps and creating an information ecosystem for the workforce.

Why: The emphasis is shifting towards creating a tailored information ecosystem for the workforce. Investing in persona-based apps ensures that employees have access to customized information, fostering a more user-friendly and efficient work environment.

### **Top Investment Priorities for Senior Executives in the Next 12-24 Months**

■ % of Current Senior Execs in the Market for Solution in This Category

