

eBook

Future of Industrial Work

Developing a Sustainable Workforce Strategy

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Future of Industrial Work:

Developing a Sustainable Workforce Strategy



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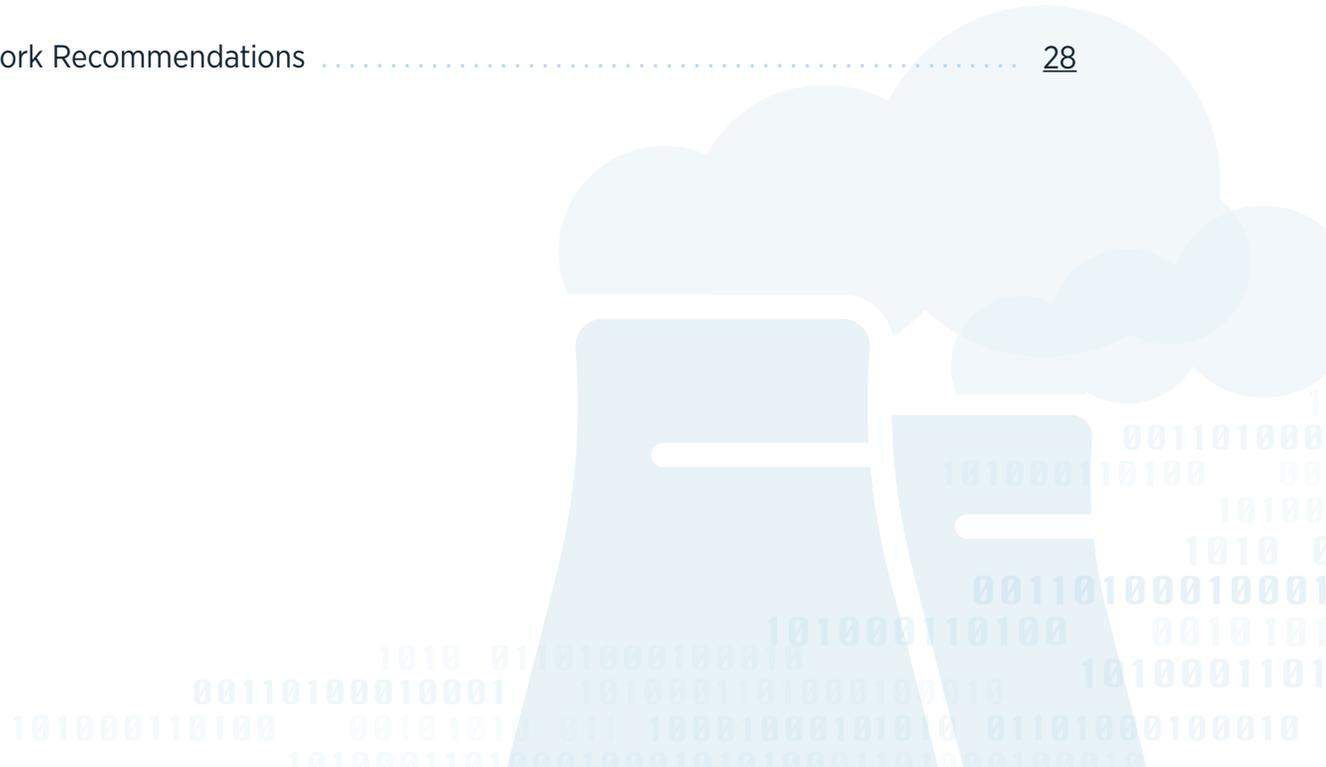
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Section 1

Executive Summary

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Executive Summary

Industrial companies have long-standing workforce challenges. Manufacturing leaders have struggled with distractions from numerous economic recessions, the arrival of “Industry 4.0,” an aging workforce, and the COVID-19 pandemic. Clinging to existing practices has allowed workforce challenges to intensify, even as manufacturing employment has declined over the last 40 years.



Not all manufacturers are struggling. Some industrial organizations are redefining the nature of work for both frontline and corporate jobs across people, processes, and technology by adopting a proactive, comprehensive, and lifecycle-based approach known as the Future of Industrial Work (FOIW).

FOIW Leaders, the top 19% of corporations achieving real success and delivering value, are transforming frontline employee attraction, training, and retention to dramatically outperform followers in frontline workforce Key Performance Indicators (KPIs).

LNS Research found FOIW Leaders focus on three strategic imperatives to drive step change transformation:

1. Reimagining the employee lifecycle to support and serve the frontlines.
2. Prioritizing frontline leadership and culture for the overall success of employees.
3. Deploying human-centric technology designed for and used by the frontlines.



Future of Industrial Work (FOIW) is a proactive, comprehensive, and lifecycle-based approach to building an empowered future-ready frontline workforce.

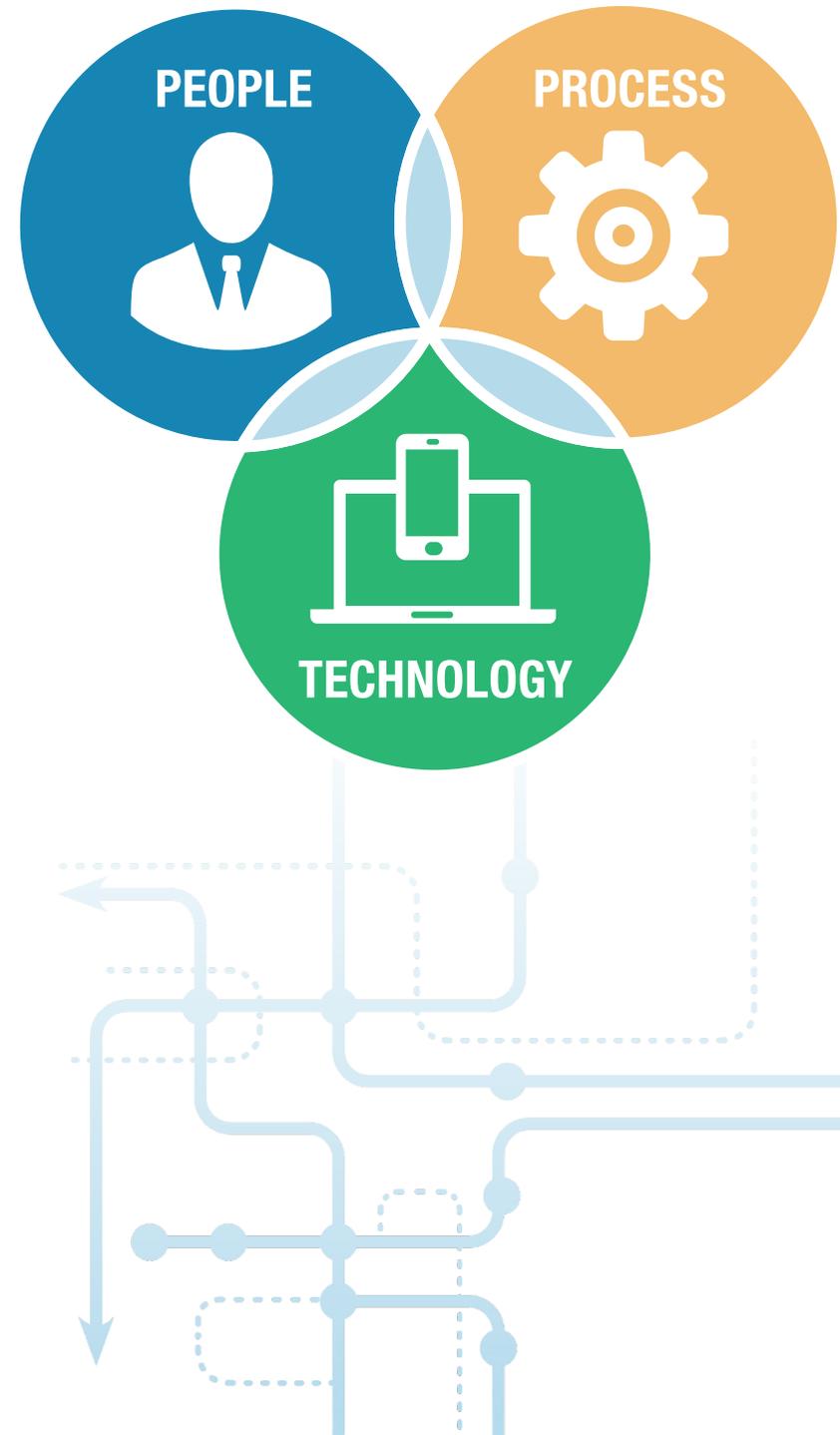
Executive Summary (Cont.)

FOIW initiatives are essential to overcome hiring, training, and retaining challenges across the frontline while optimizing operational performance. Recognizing the need for change and evolving is fundamental to achieving engaged employees, a competent workforce, and Sustainability/ESG goals.

This research studies the business objectives, strategies, practices, and capabilities deployed across people, process, and technology, and asks the following questions:

- Who is succeeding, and why?
- How are leaders performing across frontline workforce KPIs relative to their peers?
- What are the fundamental differences across initiatives?
- Why is technology a key enabler to support and retain the frontline workforce?

This eBook provides best practices for developing a sustainable workforce strategy that builds a future-proof frontline by exploring the benefits of incorporating FOIW initiatives into the organization's overall manufacturing strategy.



Section 2

Research Demographics

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Research Demographics

For our Future of Industrial Work study, LNS Research analyzed 332 qualified respondents balanced across company size, geography, and industry to identify:

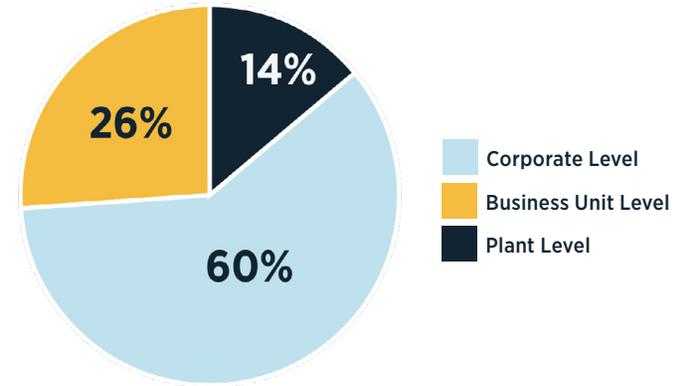
- Business priorities and challenges
- Financial, operational, and hiring KPIs
- Strategies, practices, and capabilities deployed across people, process, and technology

Our research for this report is based on a comprehensive cross-section from around the globe. Its demographics include organizations spanning mostly medium and large sizes, predominantly from Europe and North America.

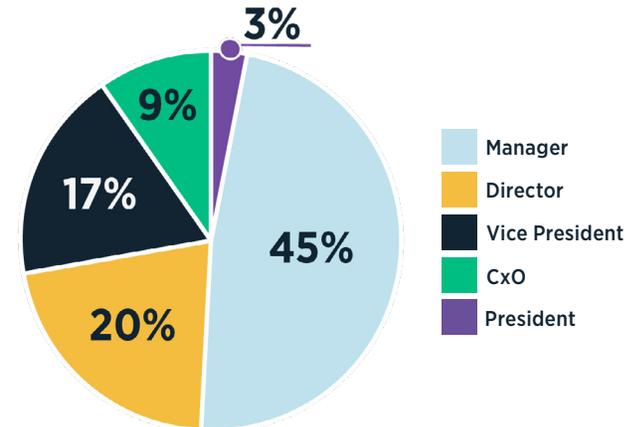
Additionally, this eBook focuses on best practices that organizations across the industrial verticals should adopt to develop a sustainable workforce strategy. Future LNS Research will provide deeper analysis into nuances found across industry verticals with insights comparing the behavior and way of thinking among different roles and responsibilities.

More importantly, the respondents' demographics provide critical insights into industry verticals, organizational roles, and job responsibilities related to workforce initiatives.

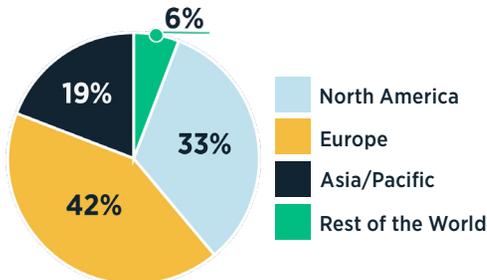
Survey Respondent's Reporting Scope



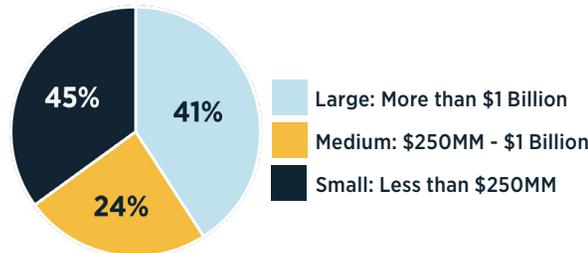
Respondent's Job Title



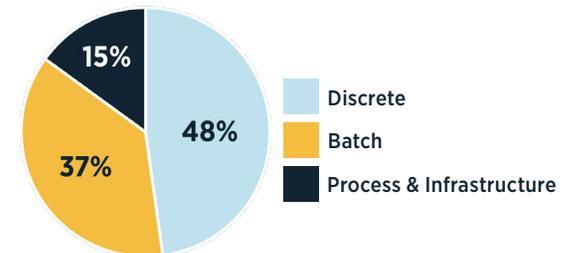
Geography



Company Size



Industry Group



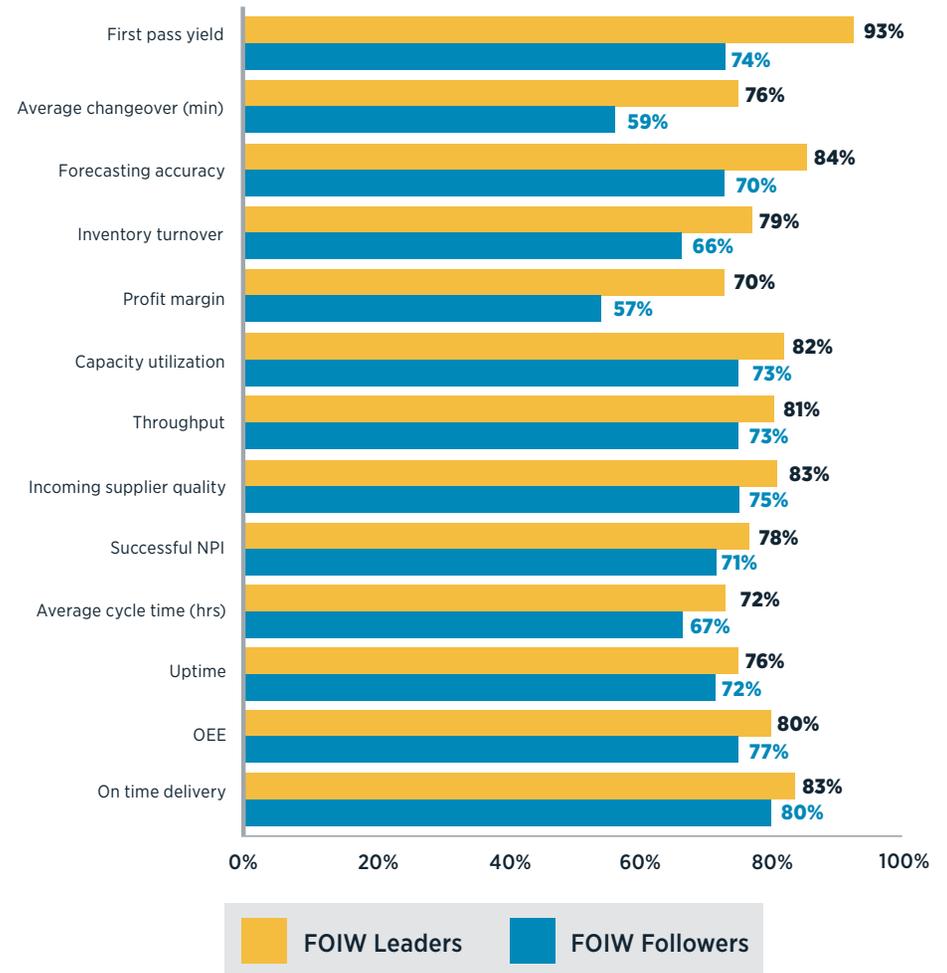
Research Demographics (Cont.)

One-third of industrial organizations have set five key business objectives for the frontline workforce:

1. Increase frontline workforce safety/quality/productivity
2. Increase new hire retention (first 90 days)
3. Upskill employees for new ways of working (i.e., new processes, advanced digital technologies, etc.)
4. Digitally enable the frontline workforce (production, maintenance, etc.)
5. Improve onboarding speed/time to productivity and knowledge management processes

With 72% of industrial organizations reporting that frontline workforce hiring and retention issues have negatively impacted operational performance, most manufacturers are struggling to find solutions. Despite distractions plaguing organizations, including economic recessions, an aging workforce, the pressure to accelerate Industry 4.0, and, of course, the COVID-19 pandemic, not all companies have clung to the status quo. As workforce challenges have intensified, some manufacturers still have developed and implemented best practices.

Comparison of Operational Performance Metrics



Research Demographics (Cont.)

LNS Research found FOIW Leaders, the top 19% with real success and delivering value, are surpassing Followers and are:

- 2.5 times more likely to achieve 25% or more Year-over-Year (YoY) revenue growth rate
- 2 times more likely to exceed frontline workforce KPI goals
- 2.3 times more likely to have higher profit margin performance



Leaders are dramatically outperforming Followers in frontline workforce KPI goals

Recruitment	2.7X
Attendance	3.6X
Training Effectiveness	2.7X
Productivity	1.9X
EHS Performance	2.1X



Section 3

Defining the Future of Industrial Work

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Defining the Future of Industrial Work

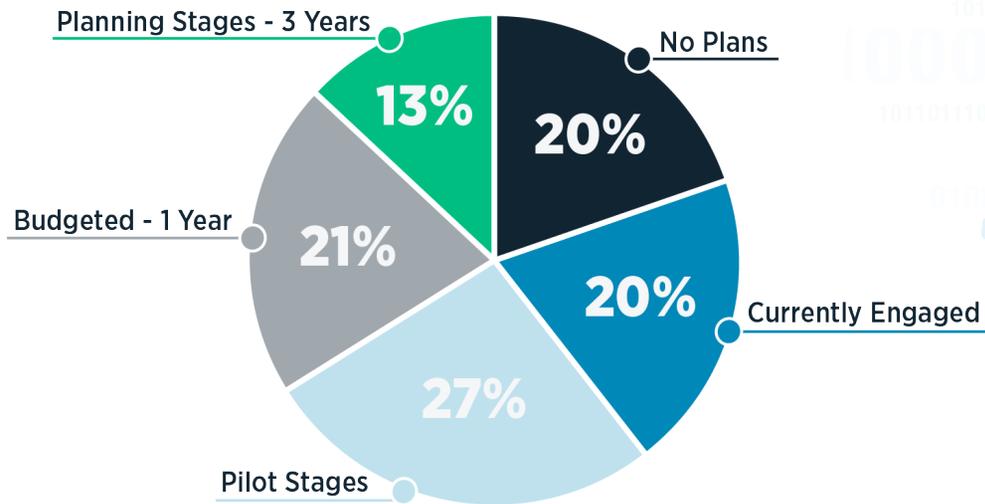
Today, 92% of industrial organizations are taking action to achieve frontline workforce business objectives. Future of Industrial Work (FOIW) initiatives are defined as a proactive, comprehensive, and lifecycle-based approach to building an empowered, future-ready frontline workforce.

As struggles to hire and retain employees impact operational performance, workforce challenges have become a burning platform for many C-suite executives. Only 20% of respondents report a lack of executive support or resources as a barrier to a future-proof frontline.

To achieve frontline workforce business objectives, organizations must identify solutions to overcome the challenges faced by the broader manufacturing community:

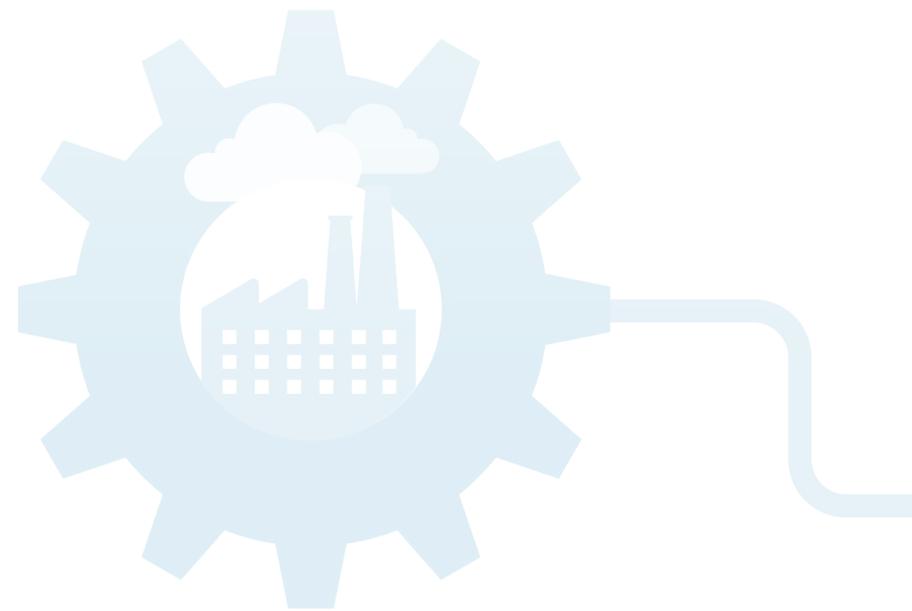
- Capturing and transferring knowledge from experienced workers
- Difficulty attracting qualified job candidates/applicants
- Insufficient frontline workforce skills and competencies

Future of Industrial Work (FOIW) initiatives as a part of the overall transformation program

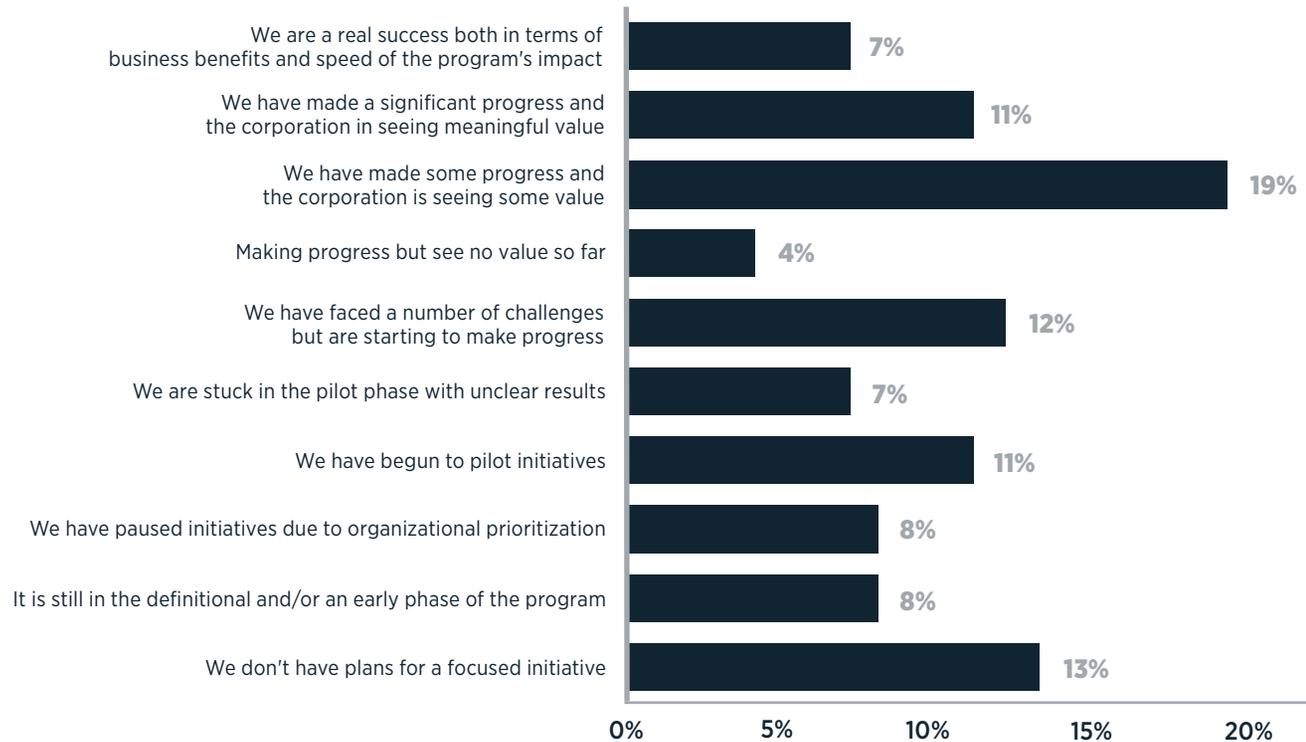


Defining the Future of Industrial Work (Cont.)

Clinging to existing practices has allowed workforce challenges to intensify, and nearly 90% of industrial organizations anticipate digital transformation initiatives, such as automation and Connected Frontline Workforce (CFW) Applications, to impact the frontline workforce. The good news is that Industrial Transformation (IX) programs are more commonly using a proactive and coordinated approach to leveraging digital technologies to create step change improvement in industrial operations. Even better, almost 40% of industrials are delivering corporate value with initiatives to adapt and transform frontline workforce operations.



What is the overall preception of initiatives to adapt and transform frontline workforce operations?



Section 4

Frontline Workforce Business Objectives and Strategic Initiatives



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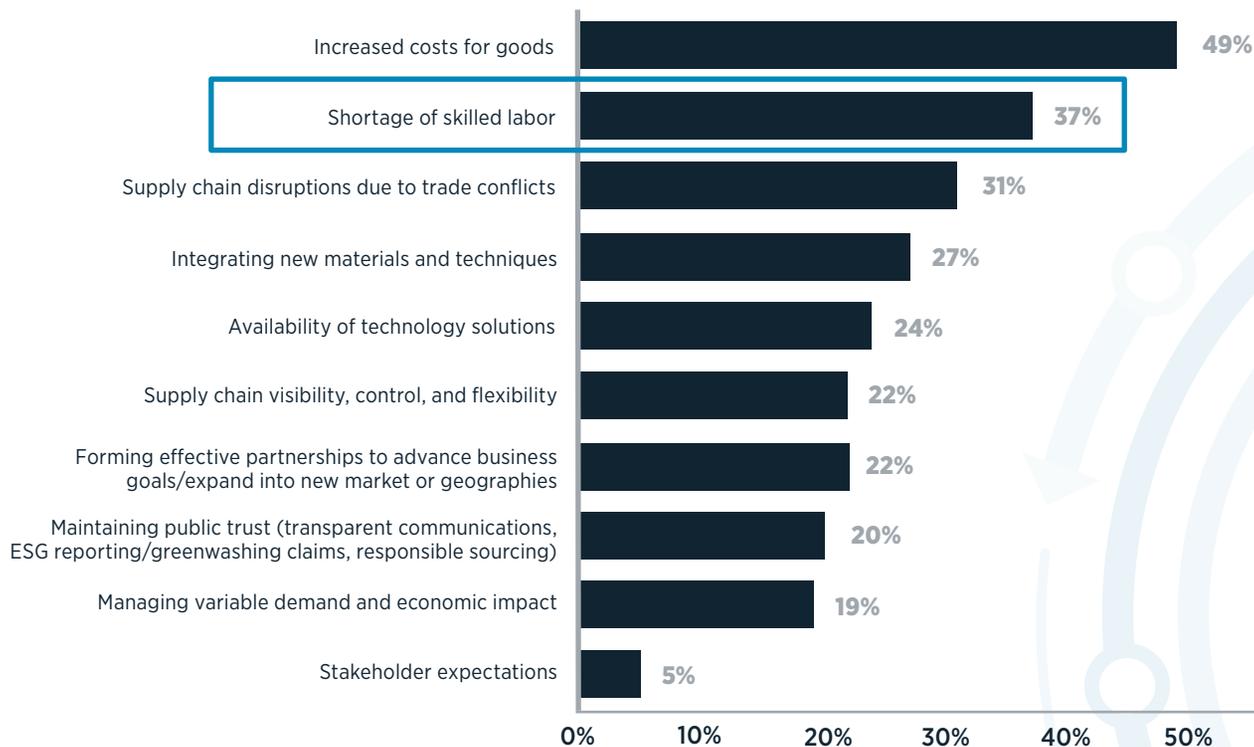
Frontline Workforce Business Objectives and Strategic Initiatives

Today's industrials are facing increased supply chain complexities, Industrial/Digital Transformation pressure, and scrutiny to improve Sustainability/ESG Performance. Manufacturers report increased costs of goods and a shortage of skilled labor among the top challenges to overcoming these industrial trends.

Manufacturers are struggling to hire and retain frontline workers. In fact, [The Manufacturing Institute](#) found that 93% of respondents were challenged to find skilled applicants for vacancies within their companies. Moreover, Deloitte predicts that by 2030, 2.1 million of the 4 million U.S. manufacturing jobs that need to be filled will remain vacant.

88%
of industrials expect the shortage of skilled labor to negatively impact operational performance.

What are your top challenges in addressing industry trends?



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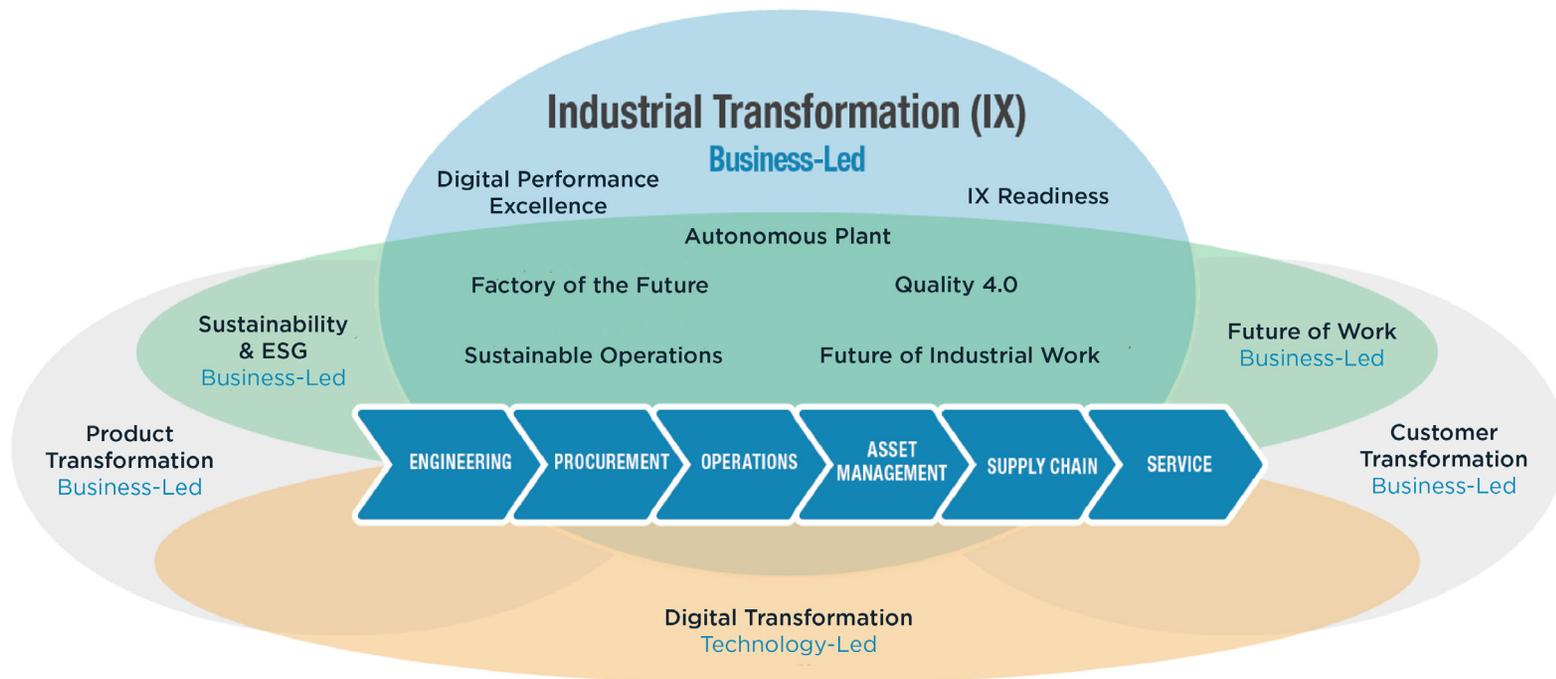
Frontline Workforce Business Objectives and Strategic Initiatives (Cont.)

Frontline workforce business objectives:

Many manufacturing CEOs view solving critical frontline operations challenges as a burning platform. However, not all initiatives are created equal. Companies finding the most success are incorporating Future of Industrial Work (FOIW) initiatives into the overall Industrial Transformation (IX) program.

Industrial organizations have typically been more focused on strategic workforce planning for corporate functions and back-office roles (white-collar). Naturally, initiatives that redesigned workspaces to more open-plan office layouts and added hybrid and remote work options to increase job flexibility usually benefited only a small portion of the workforce.

Manufacturers can no longer afford to overlook the needs of the frontline, with the shortage of skilled labor dramatically impacting the ability to attract and retain blue-collar employees - workers who make up more than 60% of the workforce. The ability to survive the ongoing labor crisis will depend on the organization's ability to evolve age-old work initiatives and include blue-collar counterparts in the workforce planning scope. Collaboration between the organization's Chief People Officer and Operations Vice President (VP), as well as the intersection of IX and FoIW initiatives, can decrease the blue and white-collar divide.



15 Frontline Workforce Business Objectives and Strategic Initiatives (Cont.)

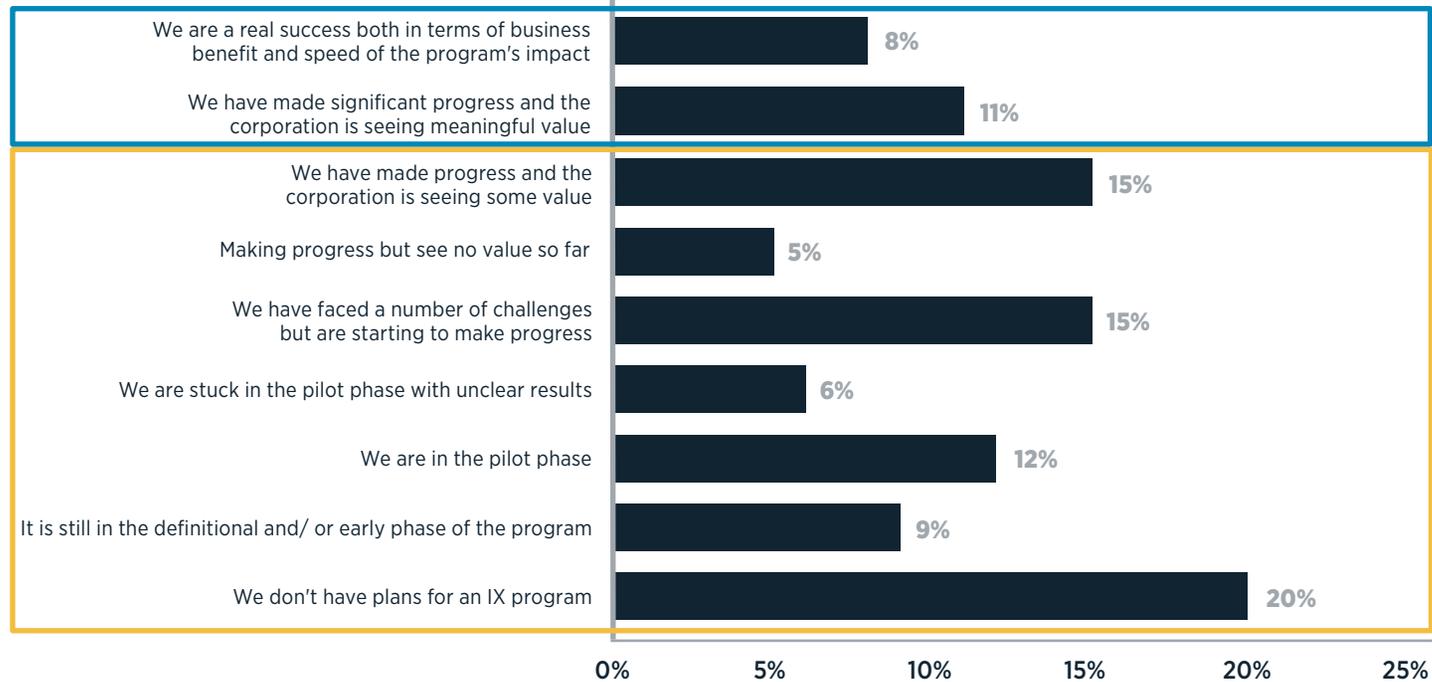
LNS Research found that Industrial Transformation (IX) Leaders, the top 19% with real success and delivering value, are shifting to “new-collar” initiatives with a strong focus on three frontline workforce business objectives:

1. Upskilling employees for new ways of working (e.g., new processes, advanced digital technologies)
2. Improving onboarding speed (e.g., the time to productivity) and knowledge management processes
3. Digitally enabling the frontline workforce (e.g., production, maintenance, etc.)

Leaders are the top **± 20%** of companies with real success or significant progress

Followers are not planning proactive initiatives and/or are not seeing value from the efforts

What is the general perception of the overall transformation (IX) program in your organization?



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Frontline Workforce Business Objectives and Strategic Initiatives (Cont.)

Strategic imperatives to adapt and transform frontline workforce operations:

LNS Research found that Future of Industrial Work (FOIW) Leaders, the top 19% with real success and delivering corporate value, focus on three strategic imperatives to drive step change transformation:

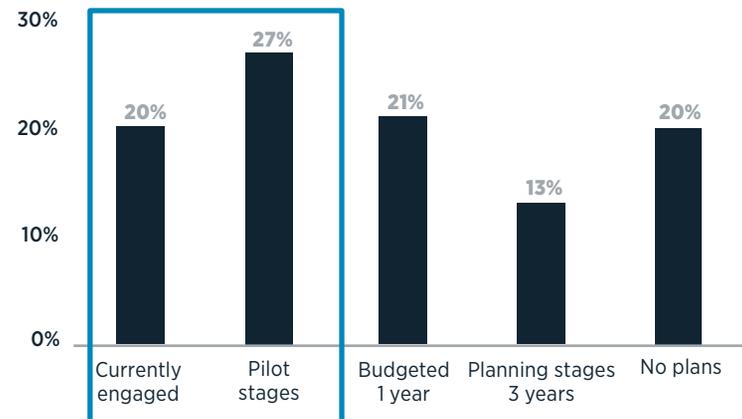
1. Reimagining the employee lifecycle to support and serve the frontlines.
2. Prioritizing frontline leadership and culture for the overall success of employees.
3. Deploying human-centric technology designed for and used by the frontlines.

Companies that have accepted our new reality are taking dramatic actions to attract, retain, and uplift the frontline workforce and are rapidly adopting FOIW initiatives. In fact, nearly 50% of respondents have incorporated FOIW initiatives into their overall Industrial Transformation (IX) program, and more than 20% have budgeted to begin programs that redefine the nature of work for both frontline and corporate jobs in the next year. Research has found FOIW initiatives are delivering significant advantages in meeting operating plans and achieving a competitive advantage during implementation.

The VP of Operations has a key role in developing a strong human-centric manufacturing strategy to achieve a future-proof frontline. Our research shows that 41% of FOIW Leaders tightly align frontline workforce strategies and programs with the organization's business strategy compared to only 6% of Followers. A partnership between the executive leaders of Operations and Human Resources can ensure alignment and accelerate initiatives that adapt and transform the frontline workforce.



47% of manufacturers have FOIW initiatives in the overall IX program



Frontline Workforce Business Objectives and Strategic Initiatives (Cont.)

Establishing a compelling vision and business plan to ignite the entire organization is critical to ensure a holistic buy-in and approach. The FOIW framework can support industrial organizations that are developing frontline workforce initiatives to meet evolving workforce demands, as well as hiring, training, and retention goals. Manufacturers interested in making measurable strides toward a future-proof frontline workforce should take a systematic approach and prioritize organizational maturity to build three essential capabilities:

- Total Employee Experience
- Servant Leadership
- Connected Frontline Workforce (CFW) Applications

Servant leadership is a philosophy in which the leader’s main purpose is to serve, putting others first and helping them to develop and achieve peak performance.



Section 5

Solution to Future-proof Frontline and Operations



Solution to Future-proof Frontlines and Operations

Future of Industrial Work (FOIW) Leaders' actions to adapt and transform frontline workforce operations are optimizing operational performance and finding significant corporate value. Our research found that FOIW Leaders are dramatically outperforming when compared to Followers. They are:

- 11 times more likely to see real success and deliver corporate value from their overall Industrial Transformation (IX) program
- 2.5 times more likely to achieve 25% or more Year-over-Year (YoY) revenue growth rate
- 2 times more likely to exceed frontline workforce KPIs

People, carefully led and managed, are the key to transformation and achieving the step change business improvement sought with FOIW as a part of the overall IX program. Executives should exhibit as much focus on people as they do on technology with a strong change management strategy to shift and evolve the manufacturing culture. The good news is that there are many proven best practices for innovation in people, process, and technology to develop the strategy for a best-in-class operations team.

FOIW Leaders are **11x** more likely to see real success and deliver corporate value from their overall Industrial Transformation (IX) program.

Leaders are dramatically outperforming Followers in frontline workforce KPI goals

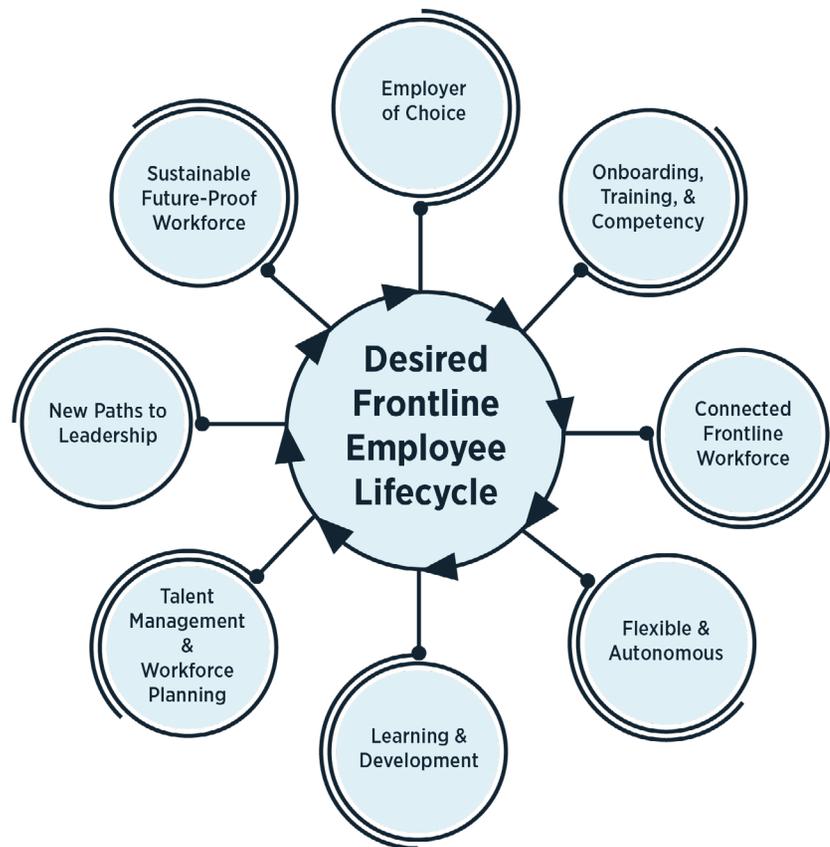
Recruitment	2.7X
Attendance	3.6X
Training Effectiveness	2.7X
Productivity	1.9X
EHS Performance	2.1X

Solution to Future-proof Frontlines and Operations (Cont.)

LNS Research found common trends among FOIW Leaders' solutions to overcome hiring, training, and retaining challenges across the frontline. Initiatives that are more successful in future-proofing frontlines and operations include:

1. Reimagining the employee lifecycle to support and serve the frontlines

Industrial organizations commonly see difficulties in attracting qualified job candidates and applicants as a top challenge



to achieving frontline workforce business objectives. The top tactic FOIW Leaders use to attract, hire, and onboard frontline workforce applicants is "Employer of Choice" branding initiatives (e.g., positive work environment, valued work, competitive benefits), which is used 2.5 times more when compared to Followers.

3x
FOIW Leaders are more likely to fund employee experience improvement initiatives to achieve the Total Employee Experience.

FOIW Leaders consistently incorporate key messages to attract and recruit frontline workforce candidates, such as:

- Meaningful work with the opportunity to gain valuable, transferable skills (e.g., digital skills)
- Work/Life balance
- Pay and benefits above competitors
- Opportunities to advance

Examples of valuable, transferable skills for frontline worker candidates:

- Operations technician gains automation and/or laboratory skills
- Maintenance electrician acquires diagnostic and repair expertise in renewable energy equipment
- Forklift operator training increases mechanical and troubleshooting skills



Solution to Future-proof Frontlines and Operations (Cont.)

FOIW Leaders are reimagining the employee lifecycle to support and serve the frontlines to retain employees. Forty-nine percent of FOIW Leaders are actively developing a strategy and initiatives to achieve an employee-centric lifecycle compared to only 22% of Followers. Actions being taken to improve the Total Employee Experience, an employee-centric view of how a person perceives their employment experience, include:

- Providing Employee Wellness programs to create and maintain optimum physical and mental health
- Putting flexible work arrangements/ approaches in place for frontline hourly employees
- Collecting feedback to improve the employee lifecycle with Human Resources responsible for improving assessment results

Workforce recruitment and attendance KPIs for FOIW Leaders are 2.7 and 3.6 times better, respectively, compared to Followers by focusing more on the overall success of employees and frontline leadership.



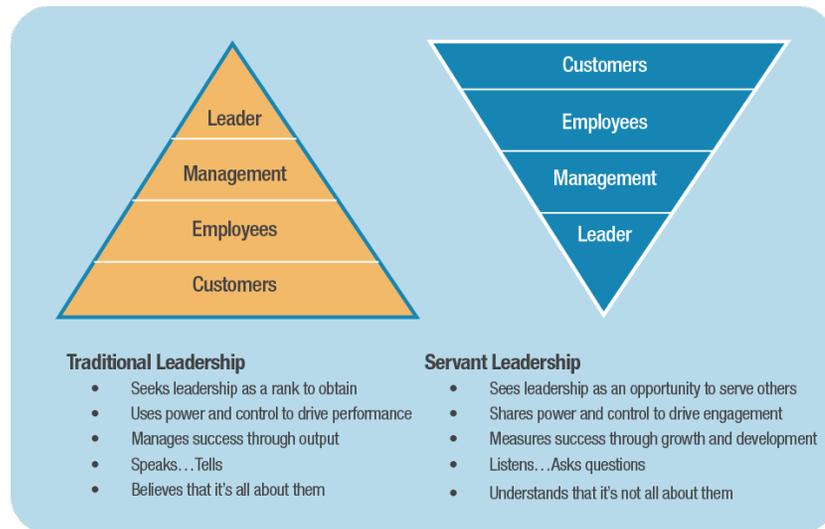
Solution to Future-proof Frontlines and Operations (Cont.)

2. Prioritizing frontline leadership and culture for the overall success of employees

Leadership and culture play a key role in the success of FOIW initiatives. Onboarding new employees is challenging for most manufacturers with insufficient frontline workforce skills and competencies, considering significant challenges in capturing and transferring knowledge from experienced workers. FOIW Leaders deploy 3.5 times more tactics for hiring and onboarding frontline employees to improve onboarding speed and effectiveness, including:

1. Supporting, via mentors, new employee onboarding (e.g., informal or formal)
2. Conducting formal interviews with interview guides (e.g., 1:1 or a panel)
3. Contacting leadership/team members prior to Day 1/routine onboarding checkpoints
4. Utilizing pre-hire assessments (e.g., qualifications, personality/behavior style, learning/leadership potential, etc.)
5. Providing structured training to employees
6. Removing bias from the job posting and hiring process (e.g., unconscious bias training)
7. Facilitating informal candidate discussions with an interviewer

FOIW Leaders focus on shifting culture from Traditional to Servant Leadership



C-Suite executives are
2.5x
 more likely to be directly responsible for frontline workforce initiatives when comparing Leaders to Followers.

Solution to Future-proof Frontlines and Operations (Cont.)

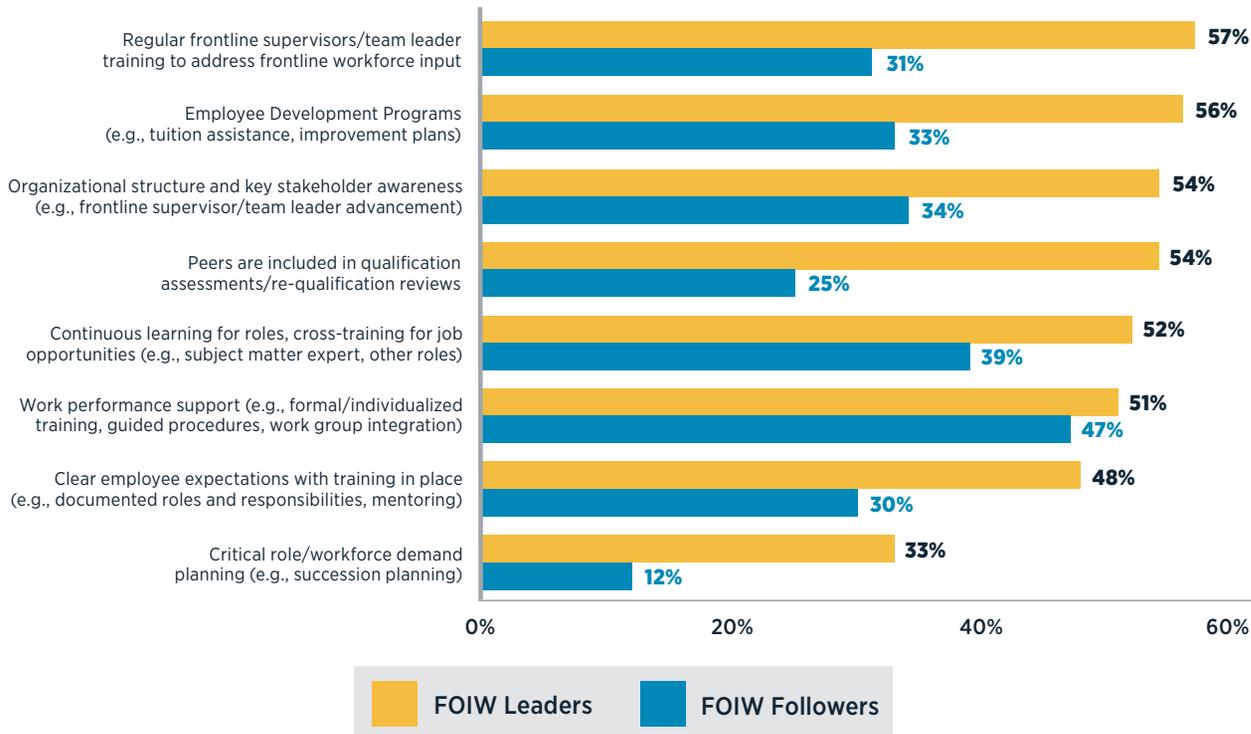
Supporting employees in succeeding and advancing in their careers is key to building a positive culture and improving retention. The top work performance and development tactic FOIW Leaders use is providing regular training to frontline supervisors and team leaders to address frontline workforce input – almost two times more than Followers. FOIW Leaders describe frontline workforce culture as follows:

- Employees typically know when leadership expects escalation/communication

- Leadership regularly provides employee coaching to improve employee task outcomes
- Employees feel leadership provides adequate support

By prioritizing the overall success of employees and front-line leadership, FOIW Leaders’ KPIs are performing 2.7 and 1.9 times better in training effectiveness and productivity, respectively, compared to Followers.

Work performance and development tactics/activities consistently used across the frontline to help employees succeed and advance in their career



Manufacturing leadership techniques suggested to improve employee success:

- Frontline roles are provided structured training and career development
- Employees are matched with two mentors for the first year of employment
- Frontline supervisors are pre-screened for management, leadership, communication, and collaboration abilities
- Manager and leadership roles receive initial and ongoing workforce development training

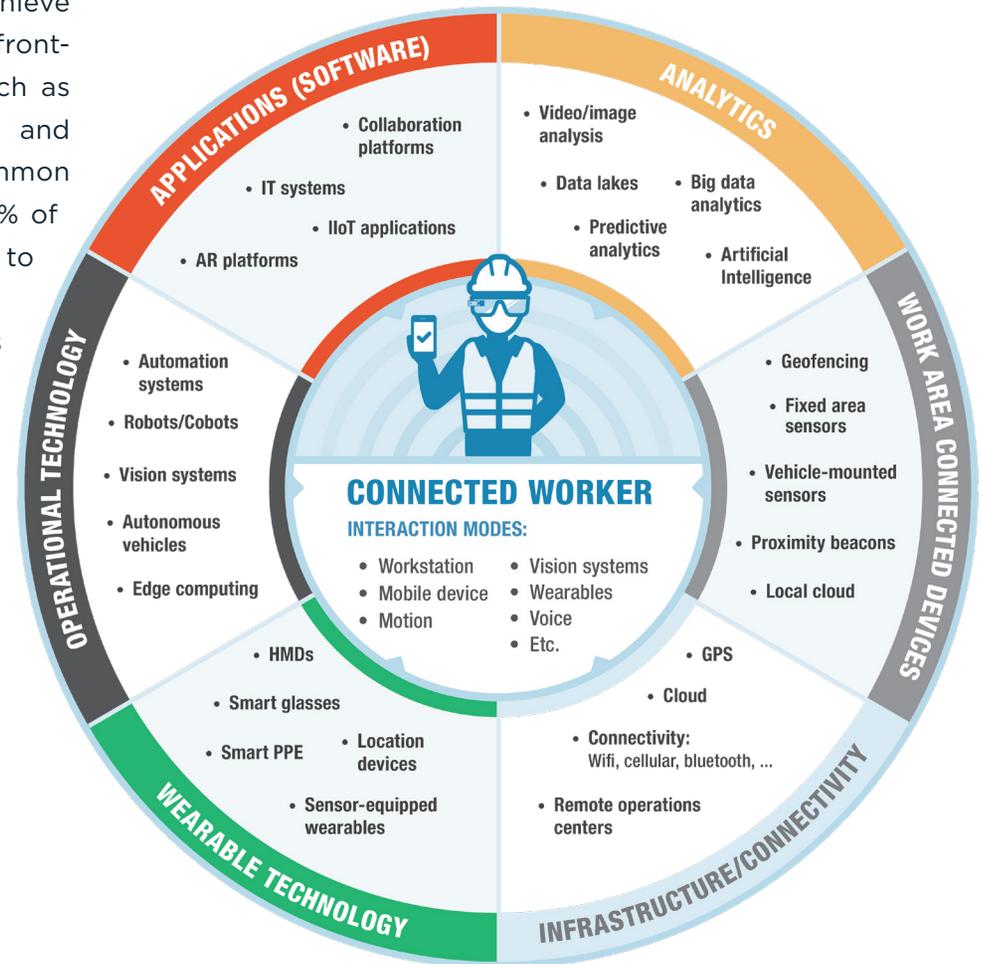
Solution to Future-proof Frontlines and Operations (Cont.)

3. Deploying human-centric technology designed for and used by the frontlines

FOIW Leaders are taking differentiated actions to achieve frontline workforce business objectives. Integrating frontline initiatives with other transformation initiatives, such as Connected Frontline Workforce (CFW), Quality 4.0, and Factory of the Future initiatives, is 2.3 times more common among FOIW Leaders than Followers. Furthermore, 51% of FOIW Leaders completely integrate initiatives compared to only 7% of Followers.

CFW solutions are deployed by FOIW Leaders across 3.5 times more use cases than Followers to significantly enable the organization to achieve engaged employees, workforce competency, and Sustainability/ESG Goals. In fact, FOIW Leaders perform 2.1 times better than Followers regarding frontline Environmental Health and Safety (EHS) performance. The top capabilities FOIW Leaders have scaled across the enterprise to achieve these results include:

- Skills management
- Advanced analytics
- Digital Knowledge Management
- Digital work instructions

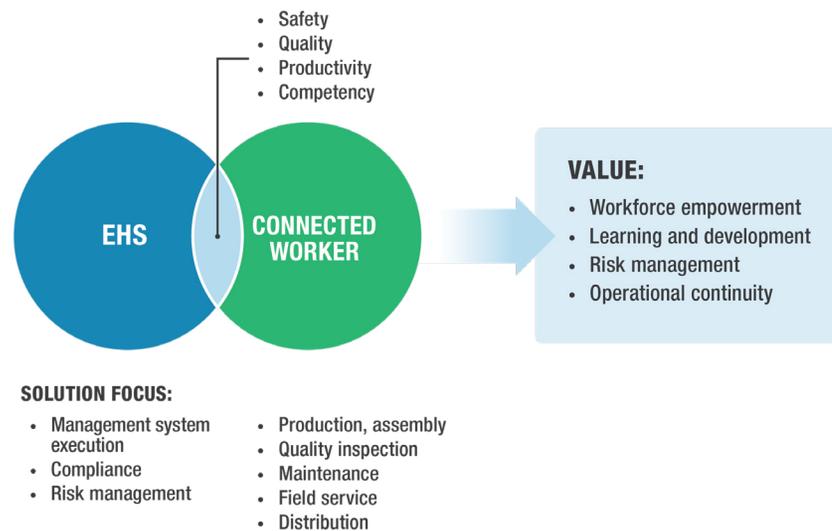


Solution to Future-proof Frontlines and Operations (Cont.)

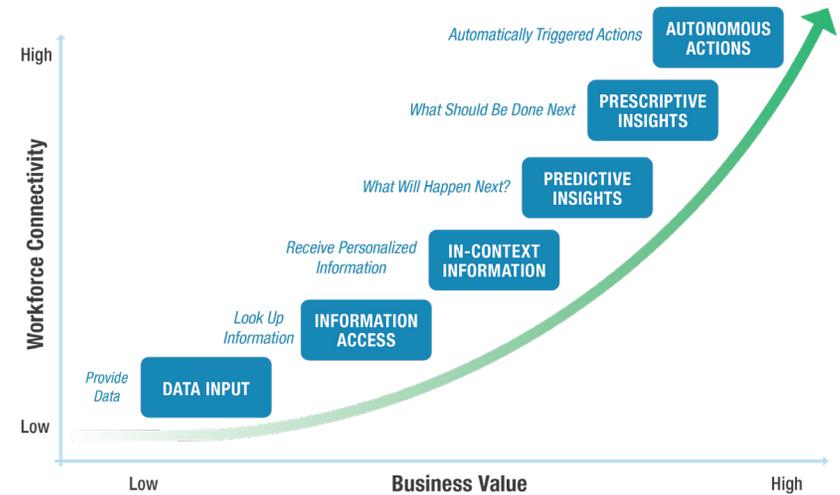
CFW solutions make innovative use of digital, human-centric technologies to systematically transform how work is done for improved productivity, safety, and quality performance. FOIW Leaders are over four times more likely to adopt and scale CFW key capabilities across the enterprise. As workforce connectivity increases, business value and employee engagement exponentially increase.

FOIW Leaders use CFW solutions designed for and used by the frontline to significantly improve how the frontline workforce is supported and served. The innovative use of digital technology extends the functionality and enables a context-relevant, multi-directional flow of data, digital content, information, insights, and actions. More than 34% of FOIW Leaders have deployed CFW solutions embedded with Artificial Intelligence (AI) and Machine Learning (ML) to build and manage the frontline workforce while improving data management on the shop floor.

Connected Worker and EHS Solution Synergy

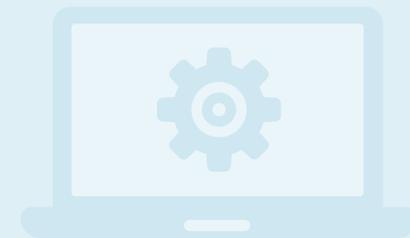


Connected Worker Value Curve



Recommended technology practices to digitally enable the frontline:

- Frontline employees can access training material and task support resources directly from the shop floor
- Digital tools allow technicians to track training progress and self-manage requests to build additional skills
- Connected Frontline Workforce (CFW) Applications provide real-time collaboration across the workforce
- Learning and development systems provide employees with a transparent path to role qualifications and certifications



Solution to Future-proof Frontlines and Operations (Cont.)

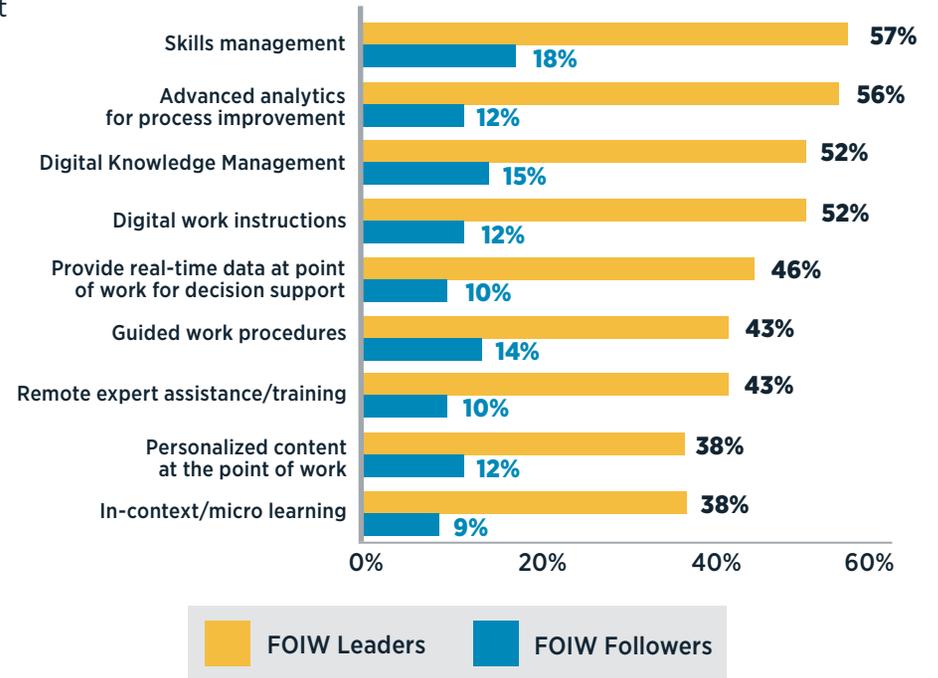
Integrating CFW initiatives into the overall IX strategy is a differentiating component of FOIW Leaders' initiatives, with more than 50% having fully implemented a CFW solution in at least one plant/site for the following use case types:

- Quality
- Manufacturing/Product assembly
- Operations
- Safety
- Learning and Development
- Warehouse Operations (Storage, Shipping, and Receiving)
- Security

FOIW Leaders are **9x** more likely to deploy and scale workforce-centric technology than Followers.



Extent Connected Frontline Workforce (CFW) key capability is adopted and scaled across the enterprise



Section 6

Future of Industrial Work Recommendations

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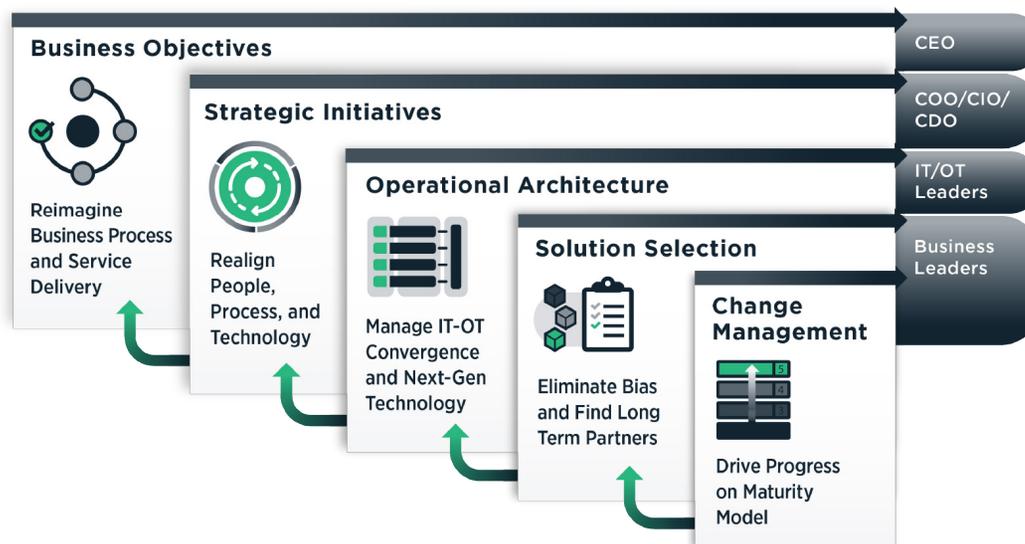
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Future of Industrial Work Recommendations

Frontline workforce initiatives are critical to achieving sustainable operations. Hiring, training, and retaining next-gen employees require a solid strategy and approach to adapt and transform frontline operations. Following the Industrial Transformation (IX) Framework can ensure success across the organization.

1. Business objectives must include a clear mission and vision with specific, measurable goals

- The C-suite should own, actively support, and promote frontline workforce initiatives
- High-level leadership should directly engage with the frontline on the factory floor to make personal connections
- Frontline Operations' Key Performance Indicators (KPIs) should be included in the metrics closely tracked to identify improvement areas



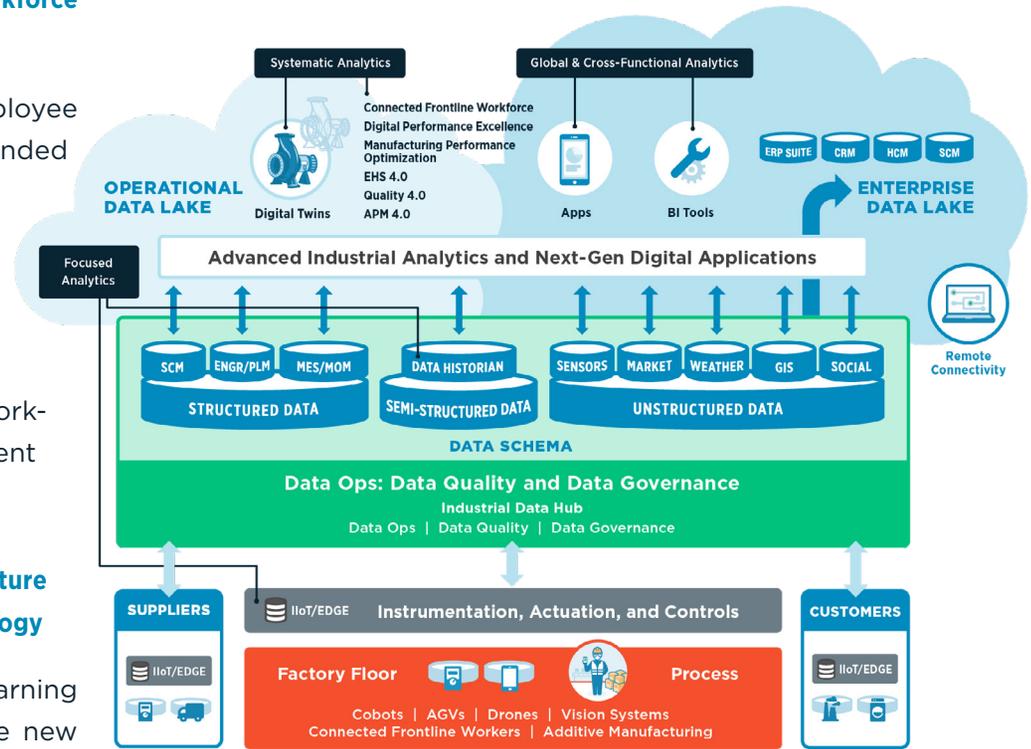
Future of Industrial Work Recommendations (Cont.)

2. Strategic initiatives should tightly align frontline workforce strategy with the organization's business strategy

- Leadership should actively pursue the Total Employee Experience, an employee-centric lifecycle demanded by the next-gen workforce
- Frontline workforce initiatives should be introduced and re-evaluated based on workforce objectives
- Organizational roles should include frontline workforce Initiative KPIs as performance management success factors

3. Designing and implementing a strong operational architecture can enable IT-OT convergence and future next-gen technology

- Digital Knowledge Management is essential for learning and development and should include innovative new training methods and practices for highly rated training materials (e.g., touch screens, connected worker solutions, AI, AR/VR, short videos, guided assistance)
- An organization's data health relies on being able to find quality data across systems to provide real insights and drive prescriptive actions
- The LNS Research Operational Architecture is a guide that provides an enterprise-wide solution essential for digitizing processes to fill gaps in workforce knowledge



Future of Industrial Work Recommendations (Cont.)

4. Solution selection processes are key to ensuring providers are capable of meeting long-term business objectives

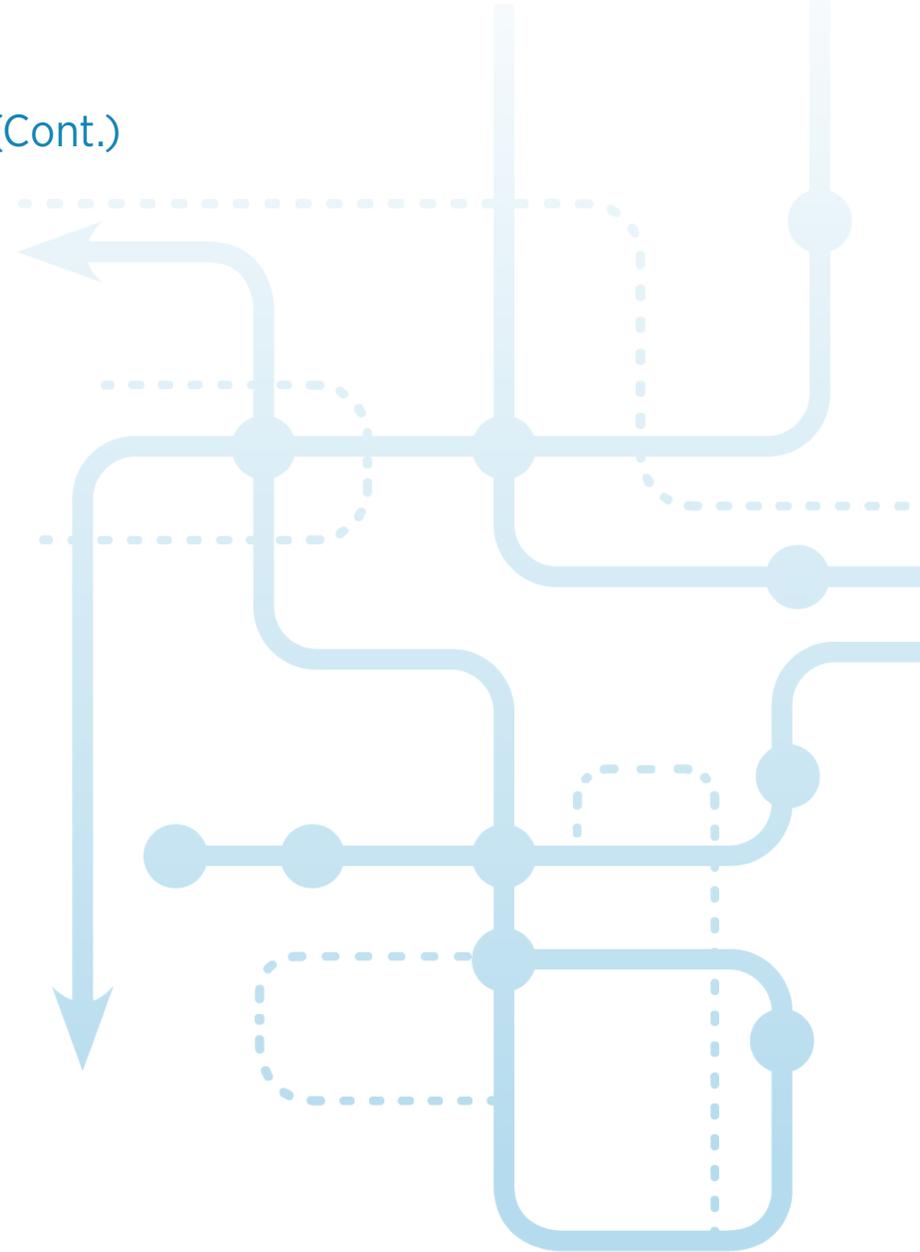
- Emerging, human-centric technology is an essential component of frontline workforce initiatives to serve and support employees; business initiatives should be considered when identifying vendors offering viable solutions for digitally enabling a future-ready frontline workforce
- A complete CFW solution often requires additional technologies to be integrated, with most cases using a combination of user interface devices, connectivity/infrastructure, integration with operational technology systems, wearable technology, and work area smart connected devices (e.g., handheld mobile devices, head-mounted displays, IIoT smart connected devices, location/geo-positioning technologies, advanced analytics, including AI and ML, and Augmented Reality/Virtual Reality)
- The LNS Research CFW Solution Selection Matrix (SSM) Guidebook provides our point of view on the emerging and dynamic market to assist industrial organizations in understanding CFW Applications as a technology category



Future of Industrial Work Recommendations (Cont.)

5. A formal change management process should be used for workforce management to accelerate progress and maturity

- Frontline workforce initiatives should adopt change management (e.g., processes, equipment, organization, etc.) process capabilities across the enterprise
- Involving the workforce in improvement planning (e.g., workplace safety, job design, process revisions, speed to qualification, etc.) is critical to ensure the workforce is engaged in the change instead of dragged along for the ride
- Communicating initiatives, improvement actions, and program success to the workforce (e.g., policy changes, community support, sustainability efforts, etc.) ensures employees are aware of the organizational commitment to improving the Total Employee Experience



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