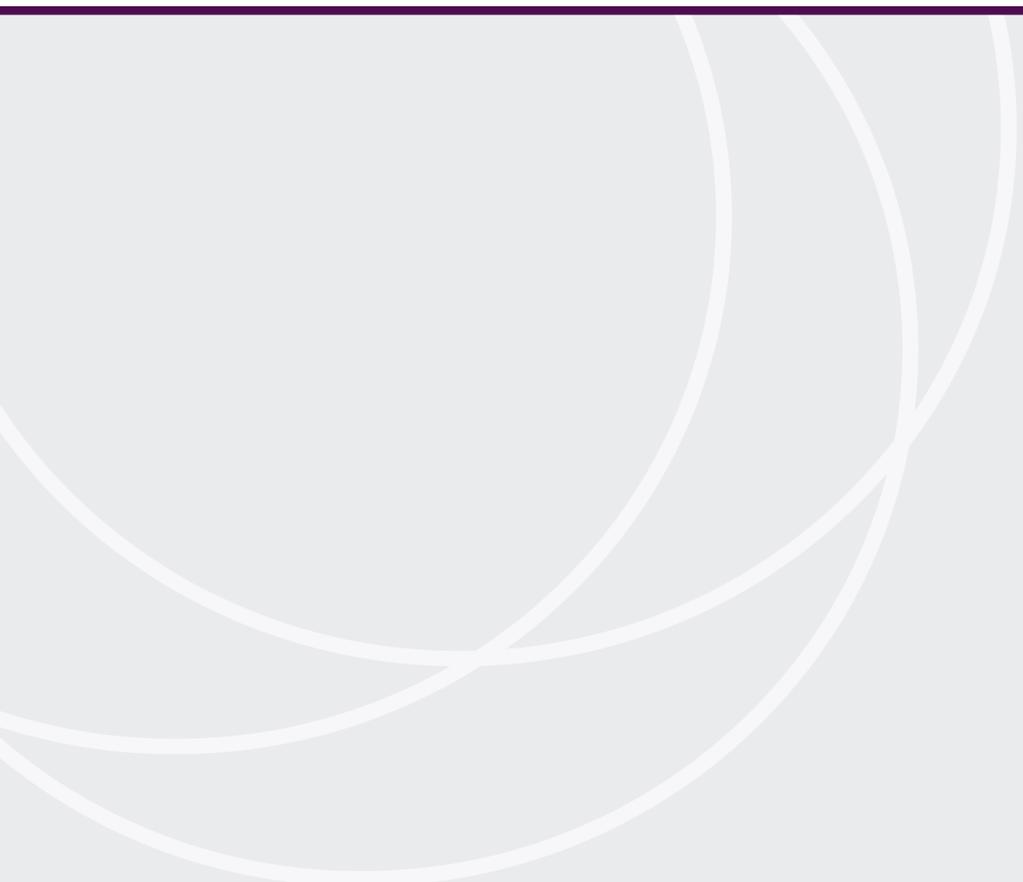


From Capital to Capacity

How HR Leaders in Manufacturing Protect
and Accelerate Return on Investment

Competition for Frontline Talent

Workforce Planning for an Increasingly Localized and Aging Talent Pool



1

Preparing for Growth in Manufacturing

Across the economy, executive teams are taking a more cautious posture on long-horizon investment, building financial models dependent on doing more with less. **Manufacturing is moving in the other direction.**

Federal incentives and renewed demand for domestic supply chains are pulling production closer to the United States. The result is a surge in capital investment, including a sharp rise in manufacturing facility construction since late 2021.



The investment cycle behind this growth is **uniquely time-bound**. Each new line, expansion, or greenfield build brings a set ramp timeline and new capacity that requires a reliable workforce. As a result, HR leaders in manufacturing are dealing with the growing pains of rapid expansion.

► HR Challenge

Turn capital investment into on-time operating capacity.

To help HR leaders navigate this shift, we have identified three trends uniquely impacting growth readiness in manufacturing. In this report, we will explore these trends and how manufacturers can better review, refine, and redesign HR strategies to truly impact bottom-line investment outcomes.



**Competition for
Frontline Talent**



**Productivity
and Automation**



**Disengagement
and Labor
Action Risk**

Competition for Frontline Talent

Manufacturing expansion is accelerating into a labor market that cannot currently support it.

Multiyear capital ramps are colliding with localized labor shortages, aging skilled trades, and constrained sourcing pathways, creating a structural capacity ceiling on growth. As of Q4 of 2025, demand for frontline workers in both skilled and core production roles is widespread across the sector. Given the time-bound nature of these investments, HR leaders are facing multiyear capacity constraints—not a short-term hiring spike.

If current trends hold, models show that over the next decade we could see a full-scale blue-collar worker shortage.

Key Stats

1.9M

Unfilled
manufacturing
jobs by 2033

26%

Increase in
registered
apprenticeships in
advanced
manufacturing

~72%

of manufacturers
express a need
for more skilled
production
workers

The Constraints of Local Talent Dependence

One factor of this trend reflects a hard reality in manufacturing: Each plant draws from a hyper-local labor market, and competitors within the same commute radius are recruiting from the same limited pool of available and qualified workers. Further constraining HR leaders, U.S. immigration policy has reduced pathways for non-local talent pools, leaving fewer alternatives for sourcing.

The biggest limiting factor for growth is whether HR leaders can create talent acquisition and workforce development plans that are competitive enough to attract and retain this shrinking and highly local talent pool.

Competition for Frontline Talent

The Risk of an Aging Workforce

In addition to the localization of talent, the workforce profile in manufacturing skews older than the overall employed workforce, particularly compared with other frontline dependent industries like retail, construction, and hospitality. This creates retirement exposure that shows up as persistent backfill load even when headcount is flat.

There is some positive growth in interest from younger generations, as we have seen increasing rates in blue-collar apprenticeships, particularly in manufacturing. However, this new generation of blue-collar workers brings new employer value expectations as Gen Z workers have shown that they want more out of work than just a paycheck.

Cumulatively, the collapse on both ends of the talent pipeline constrains growth hiring with replacement demand and experience continuity risk, particularly in key skilled production areas such as technicians, welders, and machinists.

▶ Want to pressure-test your long-term workforce assumptions against broader labor market shifts? Watch our on-demand webinar [***Workforce Planning for 2030: How Today's HR Decisions Will Shape the Future Talent Market***](#) to learn how leading organizations are modeling talent risk and readiness strategies.

Three Key HR Levers for Addressing Frontline Competition

Review

Local Market Intelligence

Manufacturing labor markets are hyper-local, meaning that frontline competition is determined by local standards, reputation, and alternatives rather than national talent branding.

Accordingly, HR leaders should review how local market intelligence functions, including: benchmarking wages, schedules, reputation, and alternative employment pathways within the commute radius.

Refine

Qualification and Retention

In a constrained labor pool, the advantage shifts from attracting more applicants to identifying the right talent.

HR should tighten the definition of "job-ready" and align screening and assessment accordingly. Once qualified talent is identified, talent teams must take a more "customer-centric" approach, ensuring more consistent and personalized engagement beyond just initial onboarding.

Redesign

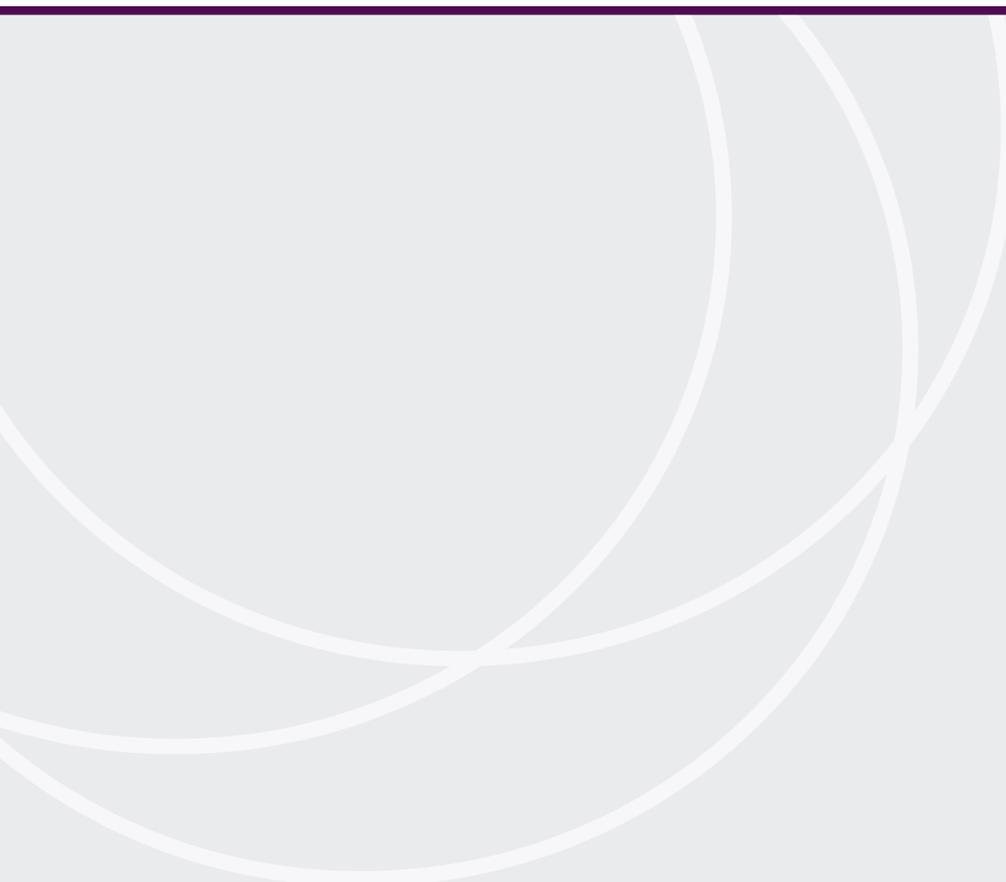
Time-to-Proficiency

Speed-to-productivity has become as important as time-to-fill; the true differentiator becomes how quickly a new employee reaches safe and reliable performance.

With a limited pool of workers, HR leaders should treat mentorship, cross-training, and trainer capacity as production infrastructure. Development pathways must be designed to balance safe and reliable performance with speed.

Productivity and Automation

Improving Output When Labor Costs Outpace Measurable Gains



2

Productivity and Automation

New capacity creates value only if plants can turn labor hours into reliable operating performance.

In many ways, the productivity challenge is nothing new. Research from the University of Chicago has pointed to the fact that without the technology sub-sector, manufacturing productivity has been stagnant for decades.

There was a steady productivity increase across Q1-3 in 2025, and manufacturers kept labor costs relatively low. However, recent capital investment means that HR teams are being tasked with digging out of the deficits that 2023 and 2024 brought about.

As the market for frontline workers becomes more competitive, the divide between compensation and return on investment could get out of hand quickly.

Manufacturing Productivity vs. Labor Costs, 2023-2024

U.S. Bureau of Labor Statistics

	2023	2024
YOY Productivity Change	-0.4%	+1.1%
YOY Labor Cost	+4.5%	+4.7%

There is no doubt that the increase in labor costs is being driven by persistent competition to attract and retain frontline workers. However, in this era of growth, the biggest challenge will be ensuring that compensation translates into stable throughput.

Without careful attention toward workforce planning and process design, new production capacity can quickly fall prey to worker fatigue, reduced quality, and costly rework.

Productivity and Automation

Automation and AI Are Not the Total Solution

Many HR leaders are hoping that AI and automation can reduce the pressure of productivity while keeping unit labor cost down. Eighty percent of manufacturing executives plan to significantly invest in “smarter manufacturing,” and twenty nine percent plan to invest in some sort of artificial intelligence.

However, the productivity payoff of AI and automation is not automatic. Automation often raises the skill floor before it raises output. Recent research on AI adoption in manufacturing found that AI deployment initially diverts resources toward integration, training, and process redesign, creating temporary efficiency losses.

Without enough technical coverage across shifts, automation can increase errors, and the organization experiences the downside as downtime and slower recovery, not as sustained throughput gains. HR leaders should view this technology as a long-term investment, not a short-term productivity fix.

▶ To assess whether your workforce operating model is prepared for scaled AI adoption, read our insight paper, [***The Three Levers Every CHRO Needs to Close the AI Readiness Gap***](#). The resource outlines how leading HR teams align skill development, change readiness, and leadership capability before technology deployment.

Three Key HR Levers for Balancing Productivity and Labor Cost

Review

Process-Driven Job Design

Productivity gains often sit inside job architecture, not compensation levels. More productive environments begin with an assessment of waste in job design, staffing models, and employee understanding of expectations.

Partnering with operations, HR leaders must clarify role boundaries, reduce rework loops, and standardize expectations across shifts.

Refine

Skill-Based Compensation

If compensation pressure is unavoidable, HR leaders should use increases more tactically to support skill growth and technological investment.

To achieve this, HR teams must define the skills that truly elevate performance and create visible certifications with accompanying financial incentives tied to progression or completion.

Redesign

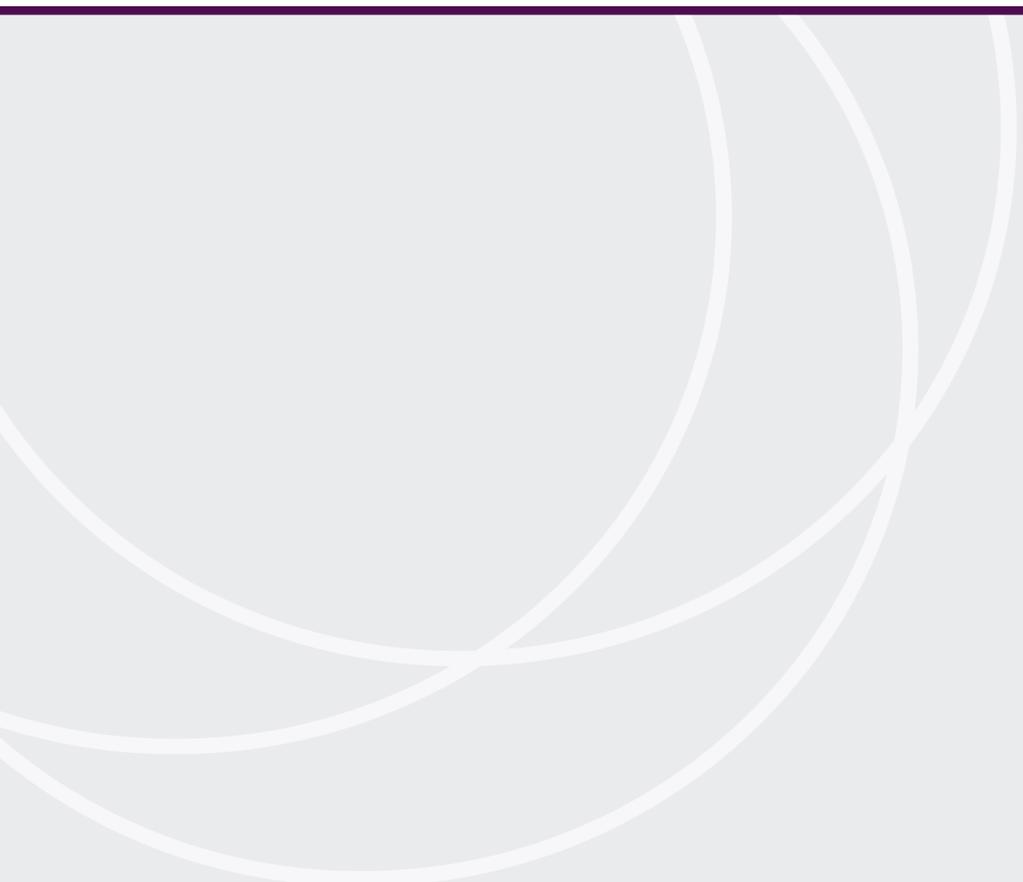
Change-Readiness Infrastructure

Change management clarity will be the biggest differentiator in whether automation investments pay off.

Before go-live of new automation or artificial intelligence pilots, HR leaders should redesign readiness to ensure training coverage and escalation processes. Frontline workers and supervisors must be empowered both to operate new tech and to surface issues early and act on them without fear of penalty.

Disengagement and Labor Action Risk

Improving Engagement in an Employee-Favored Frontline Labor Market



3

Disengagement and Labor Action Risk

In a time-bound growth plan, trust failures are an execution risk, not a “culture problem.”

When new lines are launched, problems are inevitable. Plants rely on supervisors and frontline teams to catch issues quickly, escalate them clearly, and execute consistently across shifts.

In this environment, performance depends on trust; workers must feel safe speaking up, and supervisors must respond in ways that build credibility day after day. If workers do not believe problems will be handled fairly, issues can quickly lead to attrition and labor actions such as slowdowns, work stoppages, and strikes.

Disengagement Fueled Attrition

Frontline employee disengagement in the manufacturing industry manifests primarily through perceived unfair treatment in the workplace, inadequate supervisor quality, and constrained career pathways.

A recent Manufacturing Institute–APA study found that employees who reported unfair treatment were found to be **nearly ten times more likely to express an intention to search for a new job within a year** compared to their peers who perceived fair treatment, demonstrating a powerful relationship between operational trust and retention risk.

The quality of social bonds, specifically relationships with coworkers and direct managers, emerges as a dominant mechanism for retention within manufacturing environments. Survey research indicates that nearly **97% of manufacturing employees attribute their decision to stay to these relational ties**, underscoring the critical role of daily interpersonal dynamics in anchoring employee engagement and stability.

Manufacturing Retention Drivers, 2023

The Manufacturing Institute, Center for Manufacturing Research

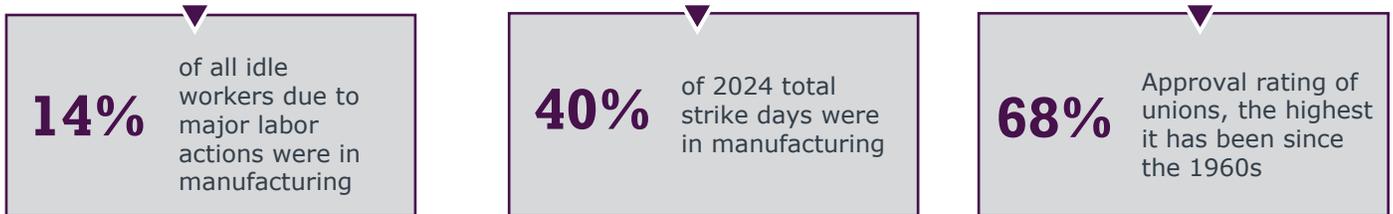


Disengagement and Labor Action Risk

Labor Action Consequences and Considerations

When experiences do not match the stated value proposition, turnover rises and word-of-mouth reputation erodes local competitiveness. However, attrition is not the only risk of employee disengagement. Labor relations readiness sits inside the same stability system, even for nonunion sites. Outside of major strikes such as the 2023 UAW strike against the “Big 3” automakers, labor activism has seen a significant upswing in recent years. Across sectors, union petitions filed with the National Labor Relations Board doubled from 2021 to 2024.

Key Stats



One driver of this upswing of labor activism is the competitive labor market for frontline workers in manufacturing. Employees have more leverage than ever and are seeing greater returns from collective action. In the case of the United Auto Workers strike of 2023, some workers saw pay increases of \$20 to \$35 per hour.

Three Key HR Levers for Balancing Productivity and Labor Cost

Disengagement is no longer an acceptable consequence of increasing productivity, but rather a bottom-line risk on ramp-up risk and long-term return on capital investment. To strengthen employer value and protect growth plans, HR leaders need to partner with plant level leadership to define response standards that hold across shifts and identify opportunities to make that response as candid as possible.



Employee Voice Architecture

When frontline employees do not have a reliable way to raise issues and see follow-through, problems surface late. Over time, small frustrations can harden into formal conflict because it feels like the system is unresponsive.

Intake systems should track concerns visibly across shifts with structured follow-through to prevent frustration from converting into attrition or labor escalation.

Pay Transparency

When pay decisions feel opaque or inconsistent at the plant level, employee assumptions can accelerate distrust during ramp-up periods when schedules are tight and demands are high.

To reduce this risk, HR leaders should standardize wage bands to ensure clear progression criteria and review cadence—and equip supervisors with consistent explanations.

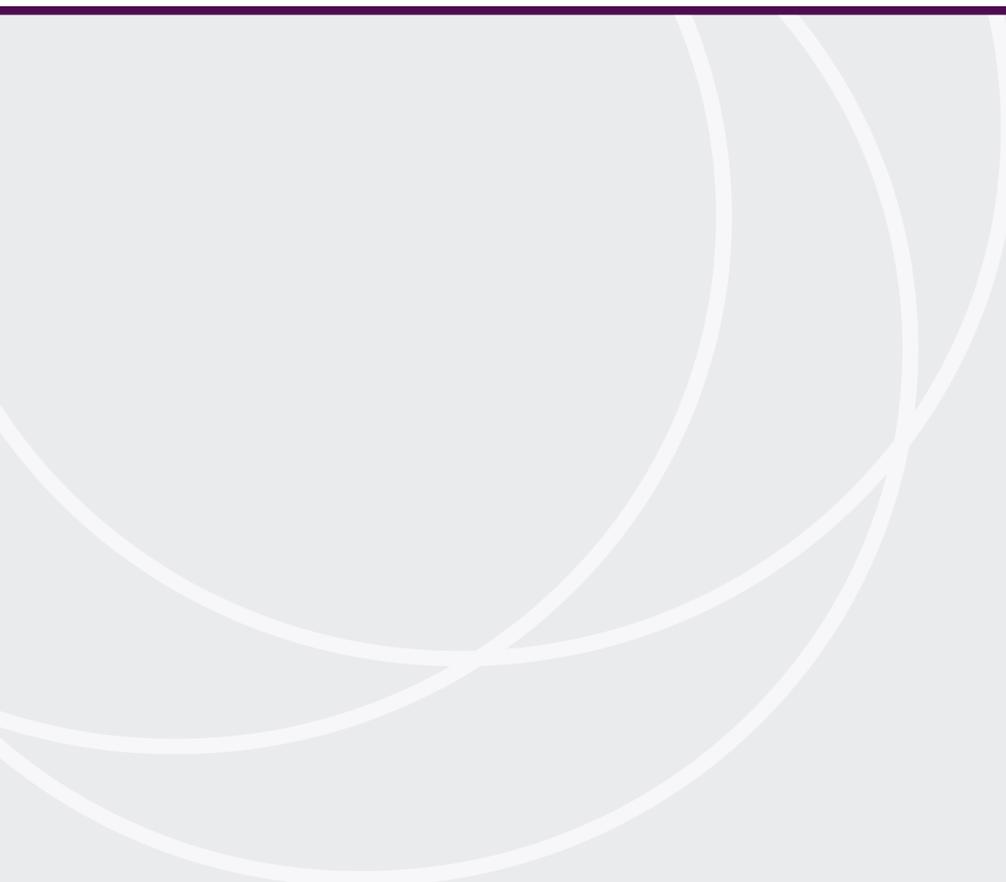
Supervisor Consistency

When safety concerns and working-condition problems linger without clear ownership, employee voice shifts toward escalation. Improving supervisor consistency is the fastest path to restoring trust.

Beyond leadership development training, supervisors need defined response protocols, escalation pathways, and restart routines following disruption.

Framework for Growth

Maximizing Human Capital Potential and Return on Capital Investment



4

Framework for Growth

The current manufacturing expansion cycle has exposed a structural gap between capital deployment and workforce readiness. The consequence of leaving this gap unaddressed is not simply higher HR complexity but delayed throughput, margin compression, and volatility in return on invested capital.

In this environment, HR strategy directly influences financial performance. The constraint is no longer talent management; it is the design of the workforce operating model. Accordingly, HR leaders cannot afford to treat labor market constraints, productivity challenges, and trust fragility as separate challenges. The organizations that win in 2026 and beyond are those that view them as **interconnected variables and essential determinants of new capacity performance**.

The following closed-loop impact framework positions HR as a stabilizing mechanism inside the capital cycle, outlining how leaders can convert the levers outlined in this paper into reliable ramp execution and more predictable capital return.



▶ **HR Opportunity**

If you are translating capital expansion into workforce execution plans for 2026, the HR Executive Board can help you pressure-test your strategy against peers and identify the highest leverage moves in manufacturing human capital management. [**Connect with an expert to learn more about how the HR executive board can help.**](#)

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