CPICOR Future of Work in Manufacturing 2024

In the "Future of Work in Manufacturing" report, Epicor combines insights from 1,400 manufacturing leaders and 1,200 manufacturing workers globally, uncovering transformative strategies for workforce satisfaction. This comprehensive analysis highlights three pivotal areas:

- Gaps and alignment between manager and employee sentiment
- Cutting-edge connected worker technologies
- Workforce efficiency and productivity

The report illustrates Epicor's commitment to enhancing operational efficiency and productivity, providing actionable insights for manufacturing leaders aiming to adapt to evolving industry demands while prioritizing sustainability and skill development to maintain competitiveness in a dynamic market.





The manufacturing industry has seen tremendous growth in the past few years. This boost in new projects and new jobs expansion has been pushed forward by a number of recent legislation, including the 2021 Infrastructure Investment and Jobs Act (IIJA), the 2022 Inflation Reduction Act (IRA), and the 2022 CHIPS and Science Act (CHIPS).

However, this growth comes amid incredible changes and challenges, including a looming workforce shortage with as many as 3.8 million additional employees needed in the sector between 2024 and 2033.

This shortage, along with other industry pressures, means that manufacturing leaders can't simply ride the wave to increased success, scalability, and profit. They need to create and execute strategies for hitting production targets and serving customers that include implementing new technologies like artificial intelligence (AI) and automation, using data to drive decision-making, and ensuring that workers feel engaged with what they do every day.

To learn more about manufacturing successes and challenges faced across an organization today, we looked to our 2023 and 2024 "Voice of the Essential Worker" report, as well as our 2023 and 2024 "Voice of the Manufacturing Manager" report. By evaluating responses from both frontline workers and leadership, we're able to get a clearer picture of the state of manufacturing today — and the areas where workers and leadership are not quite seeing eye to eye.

These findings are meant to inform and guide C-suite leaders, operations managers, manufacturing supervisors, IT leaders, and HR leaders in creating and implementing strategies to successfully scale their manufacturing operations.

Kerrie Jordan

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CPICOR

Key Findings





Morale Discrepancies

A significant gap exists between how manufacturing managers and frontline workers perceive workplace morale. In 2024, 57% of managers rated their morale as high compared to only 45% of workers, highlighting a potential disconnect in understanding and addressing employee engagement.

Technological Modernization

Despite increasing investments in technology, only 39% of workers in 2024 viewed their workplace as "very modern," compared to 52% of managers. This suggests a disconnect in the perceived pace of modernization efforts between leadership and the workforce.

Upskilling Challenges

While 91% of managers in 2024 indicated that their companies are prioritizing upskilling, only 70% of workers agreed, marking a 10% decrease from the previous year. This highlights the need for better communication and implementation of upskilling initiatives at all levels.

Sustainability Focus

Sustainability remains a priority for only about half of manufacturing companies. In 2024, 61% of managers and 45% of workers reported that sustainability is a high priority, indicating a need for more visible and impactful sustainability efforts across the industry.

Supply Chain Resilience

75% of manufacturing managers in 2024 identified supply chain resilience and sustainability as critical to their operations. However, challenges such as costs, regulatory hurdles, and technology gaps are hindering the full realization of these goals.

Automation and Workforce Impact

There is growing awareness of the impact of automation, with 73% of managers and 53% of workers in 2024 believing their jobs will change due to automation. However, workers are increasingly less concerned about immediate changes, reflecting a potential shift in perception about the role of automation.

Turnover Trends

While worker-reported turnover decreased by 6% in 2024, manager-reported turnover increased by 25%, indicating differing experiences and perspectives on workforce stability within the manufacturing sector.





Key Findings

8 Current State of Manufacturing Work

Technological Impact and Upskilling

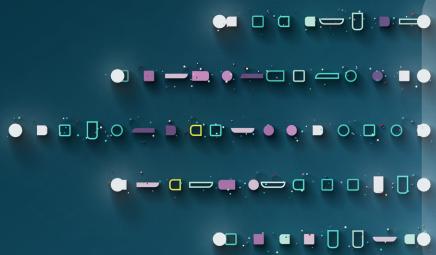


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Part 1:

Current State of Manufacturing Work

Manufacturing is an industry whose crucial contributions support a number of other industries. Yet to be competitive and continue to grow, manufacturing companies need to ensure that they're adopting technologies, policies, and practices that support growth and that they're creating a great work environment for their employees.



Morale in Today's Manufacturing Industry

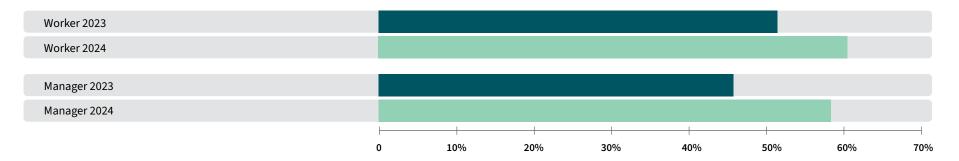
Success in manufacturing isn't just found in having the right processes and technology in place to produce goods and meet quotas. Every company is made of individuals contributing to a common goal. Yet whether those workers are satisfied or frustrated with what they do on a daily basis can have a big impact on business, and high employee engagement can increase productivity, revenue, and worker retention.

Are manufacturing companies today filled with high-morale employees who are positively impacting their operations? 52% of manufacturing workers rated their morale as high, according to our "Voice of the Essential Worker" report in 2023. However, in 2024, 45% rated their morale as high — a 7% drop.

Manufacturing managers see morale in their workplace as much higher. According to our "Voice of the Manufacturing Manager" report, 64% of manufacturing managers rated their morale as high in 2023. Yet in 2024, 57% rated their morale as high — another 7% drop.

Overall, 12% more managers than workers in 2023 and 2024 respectively rated their workplace morale as "very high." This disconnect indicates that managers may not understand the full picture of morale and engagement in their workplace. This difference shows that they are making assumptions about morale being higher than it actually is, which could lead to not taking action to address low or dropping morale and engagement.

High Morale





Contributors to High Morale

The reasons that contributed to creating high morale were similar across both workers and managers, according to our surveys. Common factors or initiatives that contribute to high morale include providing:

- bonuses or higher pay (in the top three for workers in 2023 and 2024; for managers in 2023 and 2024)
- flexible work schedules (in the top three for workers in 2023 and 2024; for managers in 2024)
- more paid time off (in the top three for workers in 2023; for managers in 2023 and 2024)

Managers in 2023 also attributed their workplace's high morale to employee recognition programs or providing opportunities for professional growth. Workers in 2024 also said their morale was boosted by management that focused on listening to staff.

Overall, increasing morale begins with monetary compensation, benefits, and perks like having a more flexible schedule. But worker morale can increase through better feedback programs where leadership listens and takes action on worker concerns. Recognizing employees for the good work they do and providing them opportunities to grow their skills and careers can increase morale as well.

The Challenges Plaguing Manufacturing Today

Even the most successful manufacturing organizations will face challenges. Identifying those challenges and creating strategies to address those challenges will be key to manufacturing success — yet frontline workers and leaders face different challenges each day even as they work towards a common goal.

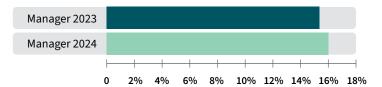
Manager Challenges

According to our "Voice of the Manufacturing Manager" report, manufacturing managers faced the same three top challenges in 2023 and 2024. Their biggest challenge in 2024 was ensuring safety and compliance in their factories (this challenge rose from 15% in 2023 to 16% in 2024). This would include taking steps to make sure workers are safe on the factory floor, that any compliance training needed has been completed, and that all machinery and processes align with local and regional standards.

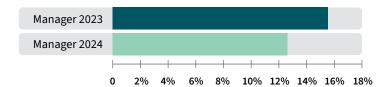
Their second biggest challenge in 2024 was managing a diverse team (this challenge fell from 16% in 2023 to 13% in 2024). This could not only be diversity within teams, but the diversity of roles, skills, and locations across a manufacturing company, from data analysts in the home office to frontline workers on the factory floor.

Finally, hitting production targets is another challenge for manufacturing managers (this challenge fell from 16% in 2023 to 12% in 2024). Failing to hit targets can be caused by supply chain disruptions, mechanical issues, too many manual processes delaying production, or insufficient planning or forecasting.

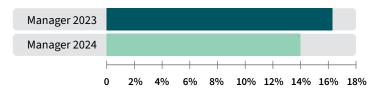
Ensuring safety compliance



Managing a diverse team



Hitting production targets



Worker Challenges

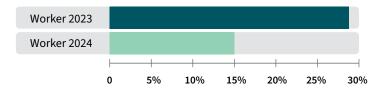
According to our "Voice of the Essential Worker" report, manufacturing workers faced the same two top challenges in 2023 and 2024. Their biggest challenge in 2024 was the increased cost of raw materials (this challenge fell from 29% in 2023 to 15% in 2024).

When asked why an increase in the cost of raw materials — typically a back office or management concern — would impact frontline workers, they said it was because increased costs "leads to tighter budgets, affecting my ability to access resources needed for my job," chosen by 54% of respondents. 47% also said that increased costs lead to "increased stress due to the potential for job insecurity if the company can't sustain the costs." In other words, they feel that their job is in jeopardy if their company can't effectively manage rising raw materials costs.

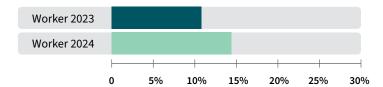
A second common challenge was their overall workload (which increased from 11% in 2023 to 14% in 2024). Feeling challenged by their workload could mean there's simply too much work to do, they don't have the proper training or resources to handle their workload, or staff turnover has resulted in increased workloads.

Other top challenges for workers in 2023 included supply chain shortages which, like the increased costs of raw materials above, can impact workloads and job safety if not properly managed by leadership. In 2024, additional challenges included bad supervisors — managers who poorly communicate, show favoritism, and lack empathy — and outdated technology, likely contributing to higher workloads due to a lack of efficiency.

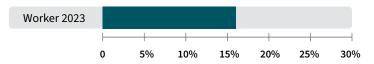
Increased cost of raw materials



Workload



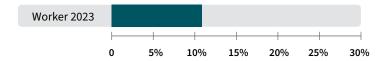
Supply chain shortages



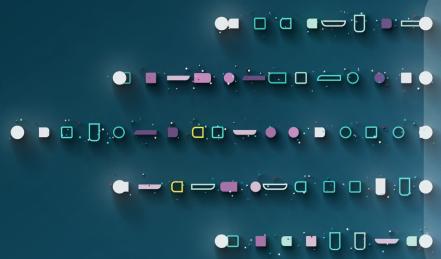
Bad supervisors



Outdated technology







Part 2

Technological Impact and Upskilling

From using AI to improve materials forecasting to using IoT devices on the factory floor, technology is reshaping manufacturing today. By making investments in new technologies, manufacturing companies can increase efficiency, save costs, and decrease their time to value. Yet reaping the benefits of new technology means implementing strategies to modernize manufacturing operations first — and ensuring that employees have the skills to manage those new technologies.



Modernizing Today's Manufacturing

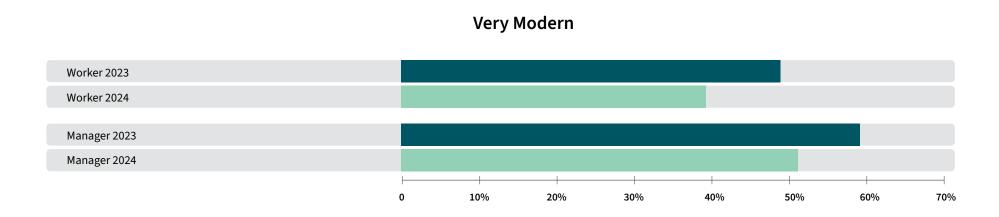
Technology is changing the world around us at a rapid pace. Yet to stay ahead of competitors manufacturing companies need a strategy for embracing and implementing technology. Modernization initiatives like digitization and adopting new technology can only serve to help a manufacturing company.

What are worker and manager opinions on their own company's modernization efforts? In 2023, 48% of manufacturing workers rated their workplace as "very modern." Yet in 2024, only 39% rated their workplace as "very modern" — a 9% drop. Similarly, 58% of manufacturing managers rated their workplace as "very modern" in 2023. Yet in 2024, 52% rated their workplace as "very modern" — another 6% drop.

It seems that calling a workplace "very modern" should only increase as emerging technologies increase and become more widespread. One reason why around half of workers and managers don't see their workplace as "very modern" is because they don't see their workplace adopting new technologies like AI, IoT, 3D printing, and other modern technologies. Another reason could simply be comparison. They see their world outside of work being transformed by digital initiatives and merging technologies, and may interact with those technologies every day. Yet once they step into work they find a workplace that's not keeping up with the fast past of modernism outside the factory walls.



Here again we see that 10% more managers than workers in 2023 rated their workplace as "very modern," as did 13% more in 2024. As managers are likely the ones contributing to the decisions around adopting new technology, they may be more in tune with modernization efforts around them. However, frontline workers aren't seeing the same picture.



As for which technologies they're investing in, workers and managers mention common top technologies:

- artificial intelligence (in the top three for workers in 2023 and 2024; for managers in 2023 and 2024)
- robotics (in the top three for workers in 2023 and 2024; for managers in 2024)
- data analytics/big data (in the top three for workers in 2023 and 2024; for managers in 2023 and 2024)
- 3D printing (in the top three for workers in 2024; for managers in 2023)

Managers in 2023 also used cloud computing; managers in 2024 also used automation; workers in 2023 also used augmented reality.

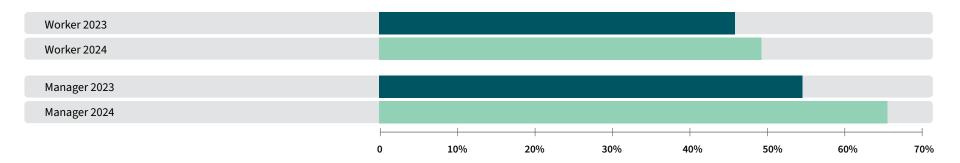
Technology Investments Needed for the Future

One way to make your manufacturing company "very modern" is to increase investments in technology. According to our "Voice of the Essential Worker" report, 45% of manufacturing workers said they're investing in new technology more than ever in 2023, and in 2024, 49% said the same — a 4% increase. According to our "Voice of the Manufacturing Manager" report, 55% of manufacturing managers said they're investing in new technology more than ever in 2023, and in 2024, 65% said the same — a 10% increase.

These year-over-year increases show a positive trend in increasing investments. However, again we see a disconnect, with 10% more managers than workers in 2023 and 16% more in 2024 saying they're investing in new technology more than ever. This is, again, likely due to management being closer to the decision-making around technology investments than frontline workers.

Manufacturing workers and managers are still only half-and-half on other areas of tech investment as well. 50% of manufacturing workers said their company is eager to embrace new technology in 2023, and in 2024, 48% said the same. Also, 62% of manufacturing managers said they are making innovative technology a higher priority than ever in 2023, and in 2024, 65% said the same.

Invest in Tech More Than Ever



Prioritizing Upskilling Initiatives

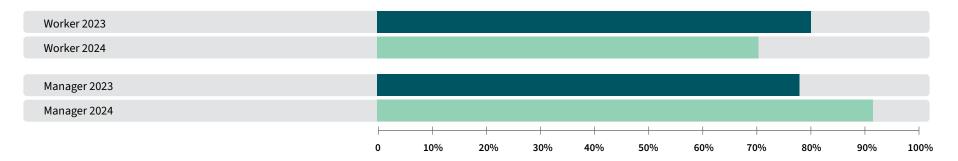
Manufacturing companies can't simply adopt more technology without ensuring they have the people trained to manage, implement, or use that technology. This is why with new technology comes the need for upskilling, or increasing a worker's skillset to help them improve in their current roles. This will be especially important as AI becomes a skill that workers can use to automate more of their manual tasks.

The good news is that manufacturing companies are already making investments in upskilling their workers. According to our "Voice of the Manufacturing Manager" report, 77% of manufacturing managers said their company is prioritizing upskilling in 2023, and in 2024, 91% said the

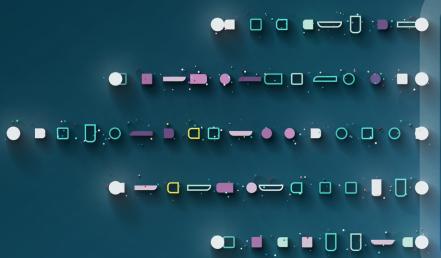
same — a 14% increase. According to our "Voice of the Essential Worker" report, in 2023, 80% of manufacturing workers said their company is prioritizing upskilling. However, in 2024, 70% said the same — a 10% decrease.

Here again is another disconnect between what managers see in their organization and what workers see. The already high response to prioritizing upskilling and the 14% increase from managers may be due to putting initiatives in place at the leadership level that have not yet been implemented at the worker level — accounting for the lower responses and 10% decrease in seeing it prioritized.

Prioritizing Upskilling







Part 3

Sustainability in Manufacturing

Sustainability is not only good for the environment, it's necessary for a manufacturing company's operational longevity. This includes not only sourcing materials from sustainable vendors, but putting in place policies and approaches that reduce waste, optimize energy, and that use predictive analytics and forecasting to make operations more efficient.



Prioritizing Sustainability Today

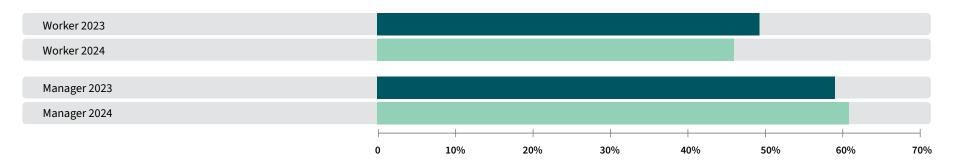
Part of a manufacturing company's modernization efforts should include implementing strategies for sustainability. This will help companies more effectively use their resources, be more compliant with rising Environmental, Social, and Governance (ESG) requirements, and set themselves up to scale into the future.

However, only about half of manufacturing companies are prioritizing sustainability. According to our "Voice of the Essential Worker" report, 49% of manufacturing workers said sustainability is a high priority in 2023, while in 2024, 45% said the same — a 4% decrease. According to our "Voice of

the Manufacturing Manager" report, 59% of manufacturing managers said sustainability is a high priority in 2023, while in 2024, 61% said the same — a 2% increase.

Again, we see a disconnect between workers and managers, with 10% more managers than workers in 2023 and 16% more in 2024 saying sustainability is a high priority. This is also likely because managers are closer to the decisions made around sustainability initiatives, and know the priority that leadership is placing on sustainability more so than workers, who may not be aware of or see the sustainability efforts being put in place.

Sustainability: High Priority





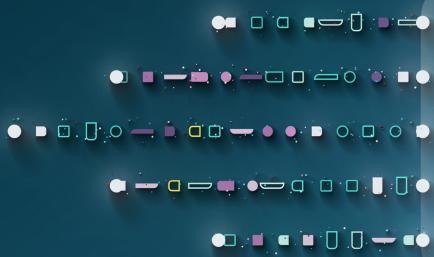
Sustainability and Resilience in the Supply Chain

Manufacturing leaders should also focus their efforts on improving the sustainability and resilience of their supply chain as well. For the 2024 "Voice of the Manufacturing Manager" report, manufacturing leaders shared their insights into how they're approaching strategies for building a better supply chain.

75% of managers said that supply chain resilience and sustainability are very important to their organization. The top initiatives they're taking to improve their supply chain resilience include implementing digital tracking tools for better visibility, adopting sustainable materials and practices, and diversifying their suppliers.

They're also using some of the technologies listed above to help improve their supply chain, including IoT for real-time tracking, AI for predictive analytics, and blockchain for transparency. However, the biggest challenges impacting their supply chain resilience and sustainability improvements are costs, regulatory challenges, and a lack of technology.

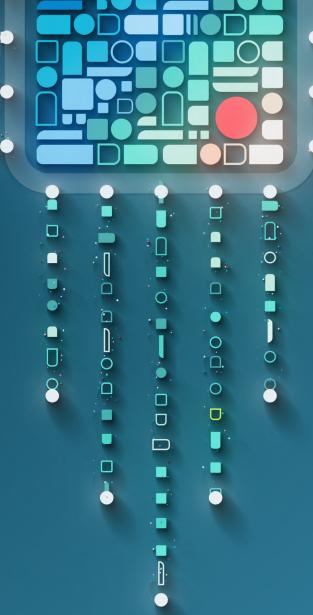




Part 4

Future Trends and Workforce Preparedness

As technology implementation increases, including AI and automation, manufacturing leaders need to prepare their workforce for how it will impact them in the future. Future planning not only includes strategies for increasing efficiency, productivity, and modernization, but also ensuring that employees are staying engaged as well.



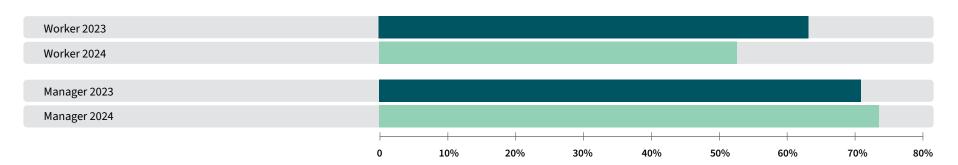
Anticipating Automation

Automation is becoming a key player in manufacturing, and helps manufacturing companies reduce human error, increase efficiency, and save costs. Manufacturing managers and workers are already anticipating the landscape of their jobs changing with the increase in automation.

71% of manufacturing managers believe their jobs will change with the introduction of automation in 2023, while in 2024, 73% believed the same — a 2% increase. Because they're closer to higher-level decision-making, managers may more readily see how automation will change their jobs.

Surprisingly, 64% of manufacturing workers believe their jobs will change with the introduction of automation in 2023, while in 2024, 53% believed the same — an 11% decrease. There's been a lot of buzz — or fear — around AI or automation "taking jobs," which is reflected in the 2023 number. However, between last year and this year, worker confidence that their job won't change because of automation has increased. This sentiment could be due to a number of reasons. The hype around AI has slowed down, and so they may see that change won't be immediate. They may also see how automation can be a tool to help them with their current role, thus not changing it too significantly.

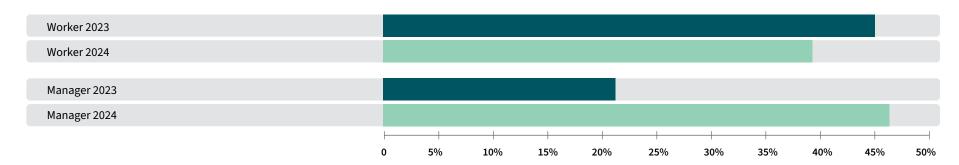
Automation



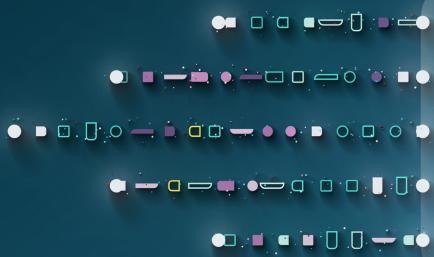


Manufacturing leaders also need to anticipate how they'll retain employees and how to decrease turnover. In 2023, 45% of manufacturing workers said their turnover has increased over the past year. In 2024, 39% said their turnover has increased over the past year — a 6% decrease. Conversely, in 2023, 22% of manufacturing managers said their turnover has increased over the past year. In 2024, 47% said the same — a 25% increase.

Tunover Increasing







Part 5

Strategic Insights for Leadership

Based on the insights above, here are some strategies manufacturing leaders can adopt today to address worker morale, sustainability, modernization, and more.



Modernization and Technology Implementation

Today's technologies like robust ERP systems, data analytics dashboards, automation, and even AI can help solve manufacturing challenges and contribute towards strategic goals.

Modernization starts by evaluating where you can leverage technology to see improvements and returns, then explore which technologies to invest in that will help move your business forward. Create an implementation plan that includes communicating your new technology to the company, training employees on how to use it, and tracking your results.

Continue to adopt modernization initiatives like digitizing paper documents, automating processes, being more responsive to market changes, collaboration, empowering employees through technology, and making data more accessible through cloud implementation. Use AI in use cases across inventory management, planning and forecasting, supply chain, productivity, data management and analytics, employee training, and customer ordering.

Ultimately, modernization efforts will help you attract great talent, increase your competitive edge, and deliver high-quality products to customers on time.



Upskilling

Continue creating opportunities for workers to learn new skills, especially as you bring more technologies on board and will need trained workers to implement and manage those technologies. Upskilling is also another way to increase employee morale. Upskilling can be offered through on-site or on-the-job training, or by providing access to an online training platform where workers can self-pace their training, earn new certifications, or learn new hard and soft skills. Manufacturing organizations can also make themselves more appealing to job seekers by offering opportunities for upskilling and career growth.

Supply Chain Management

75% of manufacturing leaders view supply chain resilience and sustainability as very important initiatives they need to create new strategies for going forward. These strategies include implementing digital tracking tools for better visibility, adopting sustainable materials and practices, and diversifying suppliers. To have better insight and visibility into your supply chain, implement technologies like IoT for real-time tracking, AI for predictive analytics, and blockchain for transparency.





Morale and Engagement

A highly engaged workforce brings a number of benefits to any company, from increased productivity, saved costs from lower turnover, and increased revenues. Implement initiatives for increased engagement that include offering more paid time off, bonuses, or higher pay, creating recognition programs, offering career development, and providing better tools and technology.

Additionally, focus on creating a culture of open communication and feedback that centers on listening to employees and their concerns. This is especially important given the disconnect between what managers believe about their organization and what frontline workers believe. Encourage employees to bring concerns or even new ideas to management — and show you're listening by taking action to resolve those issues.

Conclusion

The manufacturing industry is seeing tremendous growth in the past few years, but they have to be ready for the future. Manufacturing leaders can ensure they're well-positioned for the future by creating strategies that factor in the insights from their frontline workers to improve their organization in holistic, sustainable, and scalable ways.





Methodology

To gain a comprehensive understanding of the manufacturing industry's successes and challenges, we analyzed data from four key reports:

- 2023 Voice of the Essential Manufacturing Worker Report
- 2024 Voice of the Essential Manufacturing Worker Report
- 2023 Voice of the Manufacturing Manager Report
- 2024 Voice of the Manufacturing Manager Report

These reports provide valuable insights into the perspectives of both frontline workers and leadership across the manufacturing sector. By evaluating responses from 1,400 manufacturing leaders and 1,200 manufacturing workers, we were able to identify critical trends, challenges, and opportunities within the industry.

The surveys were conducted online via Pollfish using organic sampling. Learn more about the Pollfish methodology here.

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