



# Manufacturing Outlook Study

2026



# Introduction

Manufacturing in 2025 was a year of recalibration. After several years of shocks and stop-starts, most producers spent the year re-balancing supply chains, tightening costs in an uncertain environment, and operationalizing the digital assets that they'd begun to build during the pandemic era. Automation continued to move from pilot to production on more factory floors; AI shifted from theoretical to practical use cases (quality, maintenance, scheduling, quoting); and the skills gap persisted despite aggressive hiring and training.

**In surveying for 2026, we saw drastic differences in how manufacturers perceived these challenges and opportunities, including:**



**69%** of respondents plan to invest in physical assets like robots and equipment



**47%** say tariffs and unclear trade policies are making planning harder



**79%** say that the skilled labor shortage remains their biggest challenge

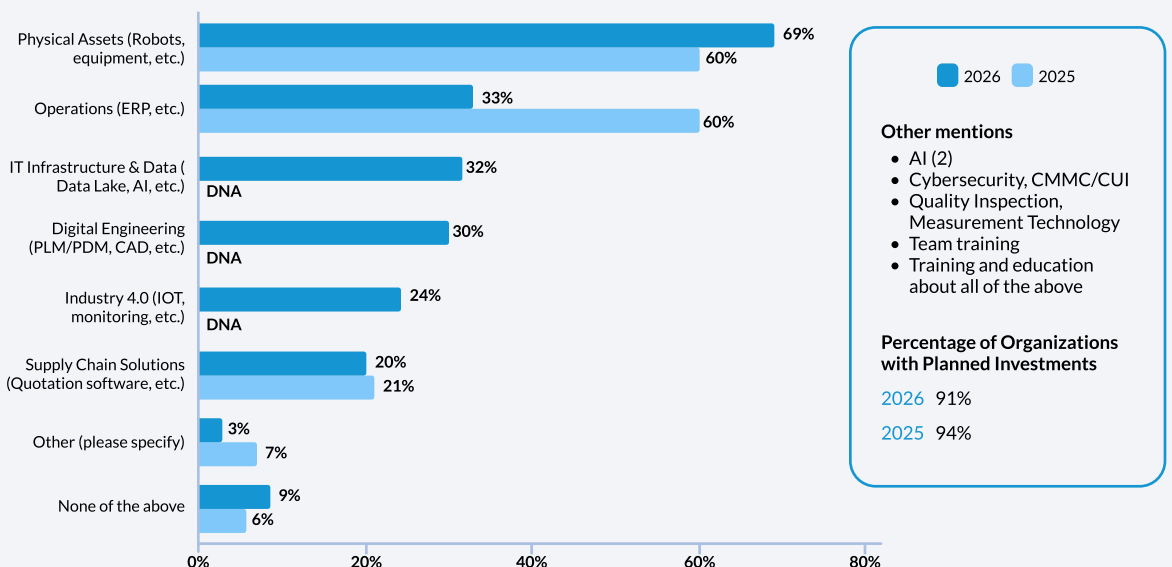
These shifts are poised to set the stage for a more disciplined 2026: a year likely defined by selective improvement over growth, rigorous ROI on capital, and an ever-increasing focus on streamlined data collection and reporting. Capital spending is anticipated to shift toward physical assets instead of broader operational expansion. Growth in 2026 will come from deeper investment in existing projects, extracting greater value from existing assets instead of adding new ones.

# New Areas of Investment



Manufacturers are doubling down on technology as the backbone of stability, efficiency, and growth. After years of talking about digital transformation, 2025 was the year many made it real: installing automation, robotics, and AI-driven systems to counter persistent labor shortages and sharpen productivity. Smart machinery, lasers, cobots (robots that collaborate with humans), and advanced CNC equipment are now core to daily operations, while ERP, MES, and PLM upgrades have connected engineering, production, and supply chain data into unified, real-time ecosystems.

Despite this escalation of digital transformation processes, the focus of investment is clearly shifting: 69% of respondents plan to invest in physical assets such as robots and equipment in 2026—up from 60% in 2025—while investment in operational systems like ERP and MES fell sharply to 33%, down from 60% last year. This reflects a pragmatic turn toward technologies that deliver measurable output gains on the shop floor. Machine monitoring, sensors, and predictive analytics continue to strengthen quality and uptime, while AI moves upstream into forecasting and decision support. Cloud-based platforms, stronger cybersecurity, and unified data environments are helping companies centralize information and stay resilient in the face of disruption. Even on the design floor, digital tools like AI-assisted modeling, advanced CAD/CAM, and 3D printing are compressing development cycles and fueling faster innovation. Together, these moves signal an industry no longer experimenting with technology—but building its future on it.

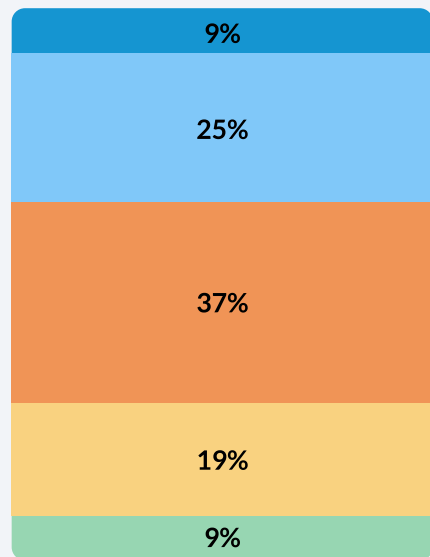


# Manufacturing Pressures in 2026

Manufacturers heading into 2026 are feeling the squeeze from every direction—but the numbers make it clear what’s hitting hardest. Nearly eight out of ten respondents (79%) said the skilled labor shortage remains their biggest external challenge. The talent pool is thinning as older tradespeople retire faster than replacements are trained, leaving plants scrambling to fill essential production and maintenance roles. Industry analysts have been warning about this exact issue, calling the skilled labor gap one of manufacturing’s most persistent threats going into 2026. Right behind labor, 61% of manufacturers pointed to rising costs and inflation as a major challenge—everything from materials and energy to freight continues to eat into margins. CFOs across multiple sectors are echoing that pain, predicting that tariff-related price pressures will stay elevated well into the next year.<sup>1,2</sup>

## Current Uncertainty Around Tariffs

Minimal Impact   Short-Term Impact   Significant Impact  
Major Short-Term Impact   Major Long-Term Impact

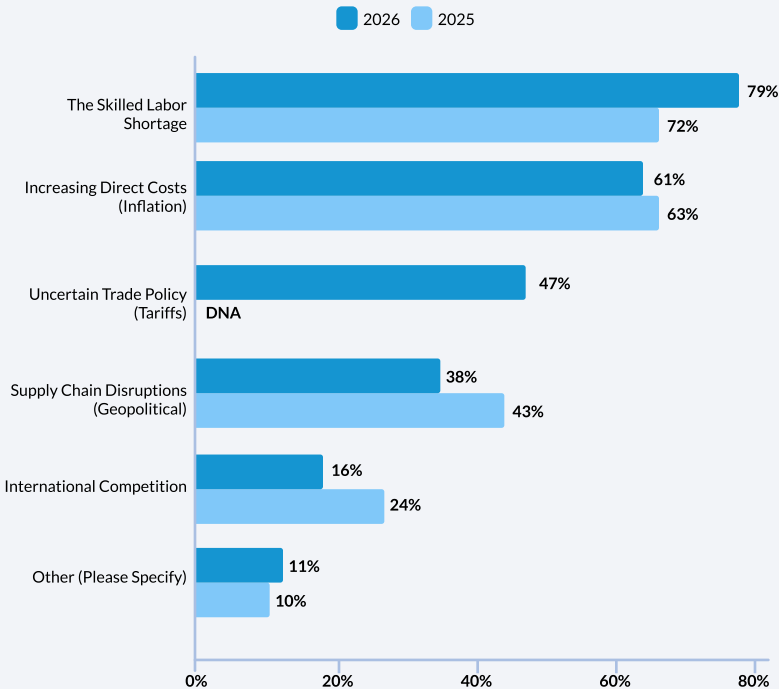


Trade and geopolitics are adding another layer of uncertainty. Almost half (47%) of manufacturers said tariffs and unclear trade policy are making planning harder, while 38% are bracing for supply chain disruptions tied to geopolitical instability. Sixty-six percent of respondents said the ongoing uncertainty around tariffs is having a significant impact on their business—whether through short-term cost volatility or longer-term disruptions to pricing and sourcing strategy. These findings align with industry reports showing that manufacturers are still working through vulnerabilities exposed over the last few years. Only 16% of respondents said international competition was a major concern—proof that most companies are less worried about who they’re competing against and more focused on keeping operations running efficiently despite external chaos. Manufacturers are tightening their focus on people, costs, and control, while adapting to a world that’s still far from predictable.<sup>3</sup>



Seventy-one percent of respondents said the skilled labor shortage is directly impacting their business, confirming that workforce constraints remain a top operational challenge. Ninety percent reported that their manufacturing departments are the most affected, followed by 48% in operations and 40% in design and engineering. This mirrors national trends showing production roles continue to face the largest labor gaps, while shortages are spreading into technical and support functions. The data shows that manufacturers are still struggling to maintain throughput and efficiency with fewer skilled workers available.<sup>4</sup>

To address the issue, 62% of companies are focusing on improving employee recruitment, enablement, and retention. This aligns with broader industry efforts to strengthen pipelines and upskill existing teams as the most direct path to stability. Manufacturers are prioritizing hiring strategies, training programs, and retention initiatives to close critical skill gaps and reduce turnover. The message is consistent across the industry: without a stronger and more capable workforce, productivity and growth remain at risk.<sup>5</sup>



# Covering Gaps with Data Access

Smarter use of parts data is emerging as one of the most practical tools for easing the impact of the labor shortage. Real-time access to accurate component information allows manufacturers to automate inventory tracking, cut down on manual checks, and keep production moving without the constant firefighting that eats up limited labor hours. Predictive maintenance systems powered by analytics are also helping prevent downtime, allowing smaller teams to stay focused on production instead of breakdowns. AI-driven insights are streamlining procurement, reducing repetitive order management, and tightening coordination between purchasing and the plant floor. Together, these data-driven efficiencies free up skilled workers for higher-value tasks and help manufacturers maintain throughput even as headcount remains tight.



Data platforms and data lakes are quickly becoming essential tools for manufacturers looking to counter the impact of ongoing labor shortages. By centralizing parts, supplier, and production data into a single, connected ecosystem, these systems eliminate the silos that drain time and productivity. According to our research, the average employee spends roughly one hour each day searching for parts data, a costly inefficiency that compounds across departments. Fifty-six percent of respondents said their biggest challenge with parts data is poor cross-departmental collaboration, while 39%, up significantly from 2025, reported that fragmented or outdated systems are slowing critical decisions. These pain points directly support the industry's move toward integrated data environments, with studies showing manufacturers using advanced analytics and data lakes cut unplanned downtime by about 20% and improved yield by 15%.<sup>6</sup>

By providing real-time access to accurate component data and enabling predictive maintenance and AI-driven insights, data platforms streamline procurement, automate inventory management, and reduce manual workload. The result is a leaner, more agile operation where teams spend less time hunting for information and more time executing—maintaining throughput and efficiency even as skilled labor remains scarce.

# About the Study

The data presented in this report is based on a survey conducted by CADDi, in partnership with SME & Mercury Research LLC, from September 25 to October 12, 2025. This independent third-party study gathered responses from 195 participants, all of whom work in the manufacturing industry and hold job titles of manager or higher. Statistical analysis was performed using SPSS, a leading software package for data tabulation and interpretation. To maintain the study's integrity and reliability, questions with fewer than 30 respondents were generally excluded from the final dataset. This rigorous methodology ensures that the insights provided accurately reflect the challenges and trends shaping the manufacturing industry, particularly in areas such as labor shortages, strategic parts data utilization, and digital transformation.

## About CADDi

CADDi is an AI data platform for innovative manufacturing companies. We are on a mission to democratize your drawings and supply chain data. Our primary product offering in the United States, CADDi Drawer, leverages patented AI to aggregate, analyze and extract everything you need from your data to produce better products. In 2024, CADDi was the sole manufacturing SaaS company featured on Fast Company's Most Innovative Companies 2024 list, and won Best Business Intelligence and Engineering Management Software in the 2024 SaaS awards.

### Sources Cited

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