SUPPLY×CHAIN connect™

November 2026

How the New Congress Could Impact

SUPPLY CHAINS

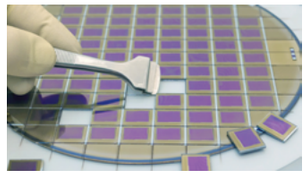


CONTENTS November 2026



How the New Congress Could Impact Supply Chains (Page 4-5)

From tariffs and trade policy to AI oversight and energy costs, here's what supply chains should expect when the new Congress convenes in January.



AI is Testing the Limits of Chip Production (Page 6-7)

Semiconductor manufacturers are racing to meet AI demand while dealing with capacity shortages that began years ago.



The Next Chapter in Supply Chain Automation (Page 8-9)

Artificial intelligence is changing how companies plan their supply chains, though Gartner expects autonomous decisions to account for a small share of planning activity by 2030.

PODCASTS

The Podcast Channel for Supply Chain Professionals (Page 10-11)

Supply Chain Connect provides supply chain and purchasing professionals with essential news, information and analysis about the technology and business trends that impact the global supply chain industry.



Organizations Double Down on Supply Chain Sustainability (Page 12-13)

New evidence suggests that companies are making supply chain sustainability a priority despite geopolitical uncertainty and ongoing challenges with execution.



PMI Expands in October for 10th Month in a Row (Page 14-15)

Despite ongoing constraints and disruptions, the U.S. manufacturing sector continues to plow full speed ahead toward 2027.



Supply Chain Workforce is Unprepared for AI (Page 16-17)

Seven key takeaways from a new ASCM and DSCI report on supply chain AI adoption and workforce readiness.



6 Ways to Build a More Efficient Supply Chain (Page 18-19)

Here are six supply chain management practices focused on better forecasting, stronger supplier relationships and fewer operational disruptions.



Bipartisan Energy Bill Gets One Step Closer to Passage (Page 20-21)

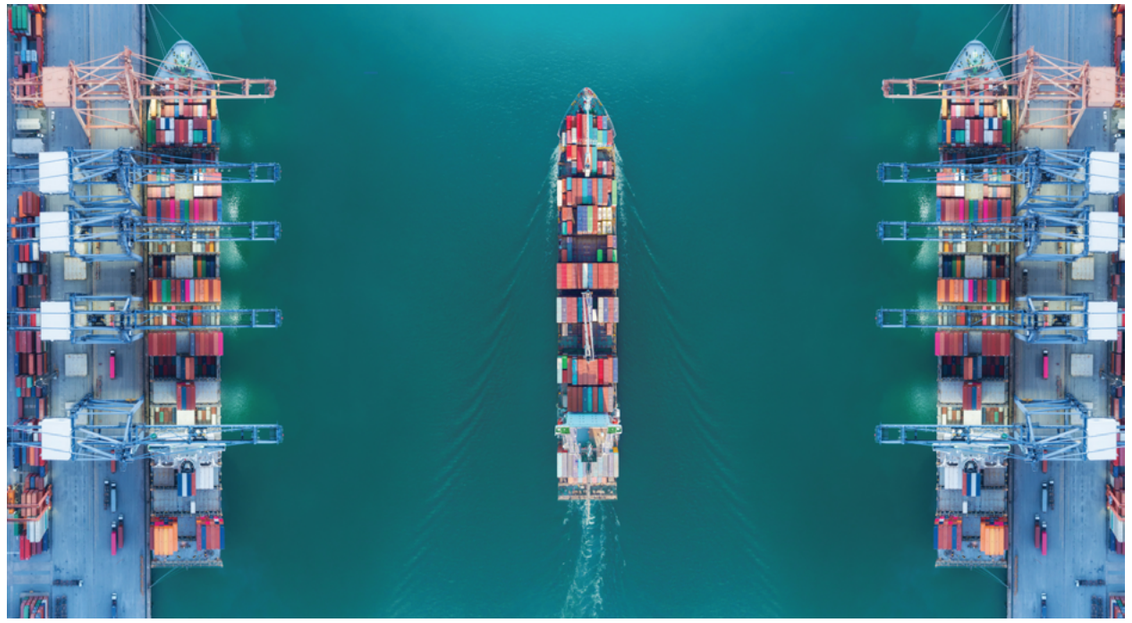
After years of discussion and debate, a bipartisan energy bill passes the Senate and heads to the House for next steps.



Supply Chain Cybersecurity Takes Center Stage (Page 22-23)

As cybercriminals find new ways to exploit third-party vulnerabilities, companies are strengthening their supply chain cybersecurity and protecting their operations.

By AVERY LARKIN



How the New Congress Could Impact Supply Chains

From tariffs and trade policy to AI oversight and energy costs, here's what supply chains should expect when the new Congress convenes in January.

The midterm election results are in, setting the stage for the next two years of national policy decisions and business priorities. Supply chains have been hit particularly hard by tariffs, the war in Iran, rising fuel costs and other developments, and another round of changes could be coming.

While the political implications of the election are still unfolding, the results are expected to affect businesses across nearly every industry. With the new Congress set to convene on Jan. 3, here are some key policy shifts that could affect U.S. and global supply chains.

Tackling Trade and Tariff Issues

Tariffs have driven up import costs and complicated sourcing decisions over the last two years. The midterm results could bring more congressional scrutiny of trade policy, although PwC says major changes to existing tariffs appear unlikely in the near term. For example, it says tariffs supported by Section 301 or Section 232 investigations could remain on firmer ground, while the Supreme Court's 2026 IEEPA decision has already limited the use of that statute as an independent tariff authority. "While the total amount of tariffs could stay the same," PwC says, "mechanisms to administer tariffs may change."

PwC says Congress could launch extensive oversight efforts in both chambers using different investigative tools to scrutinize tariff decisions, exemptions and trade agreements. "Senate investigations could be particularly prominent as potential 2028 presidential contenders seek to demonstrate leadership on economic accountability and rising costs," PwC says. "Congress could also pursue legislation to reclaim some tariff authority, although any measure would still face a presidential veto unless it attracted enough bipartisan support."

More Regulatory Uncertainty

While the new guard in Congress may slow or stop the passage of major legislation, Edelman predicts that the current administration will "continue advancing its priorities through executive and regulatory actions, even as Congress seeks to challenge them, potentially creating competing signals for businesses on issues such as tariffs, immigration, labor, energy, and financial regulation."

If this happens, companies will have to navigate an increasingly complex policy environment where executive actions, regulatory decisions, and congressional negotiations may pull in different directions. "Companies will need to distinguish between political positioning and consequential policy changes, while navigating potentially conflicting federal and state requirements," Edelman warns, noting that this will be especially challenging for companies that depend on federal contracts, permitting, tax incentives or government funding.

Deeper AI Scrutiny

PwC sees artificial intelligence (AI) regulation as another area that's "likely to get a lot more attention." Expect hearings and inquiries focused on AI governance, transparency and risk management in response to growing concerns about the technology's impact across society and the economy. "This scrutiny will probably reach beyond just government agencies to businesses using AI, with higher expectations around accountability and human oversight, especially in sensitive sectors," PwC says.

"Lawmakers on both sides of the aisle want the United States to be the global leader in AI, but the parties have different approaches to regulation," PwC explains. "Since the administration controls regulatory agencies and the presidential veto, the president is likely to remain in the driver's seat. At the same time, business leaders should keep in mind the administration is aware of what appears to be growing public support for stricter regulation of AI, and current events will play a role in the debate next year."

Cleaner, More Affordable Energy

For companies planning major infrastructure projects, PwC says the broader economic backdrop will likely remain the same: power demand is rising, driven by AI, data centers, advanced manufacturing and electrification. "That's adding strain to the US power grid and contributing to rising utility bills in some areas," it explains. "Energy affordability featured heavily in this election cycle, and access to reliable power has become a key operational concern for companies pursuing major infrastructure projects."

With control of both chambers, Democrats will have greater ability to set hearing agendas, issue subpoenas, shape appropriations and influence who gets confirmed to key roles in the executive branch. "That could increase pressure on agencies and regulated sectors to focus more on clean energy, transmission, storage, grid modernization, and consumer cost protections while also creating more scrutiny for energy and infrastructure companies."

BACK TO TABLE OF CONTENTS

Supply Chain Adoption of Cloud IoT Solutions Accelerates Digital-First Logistics

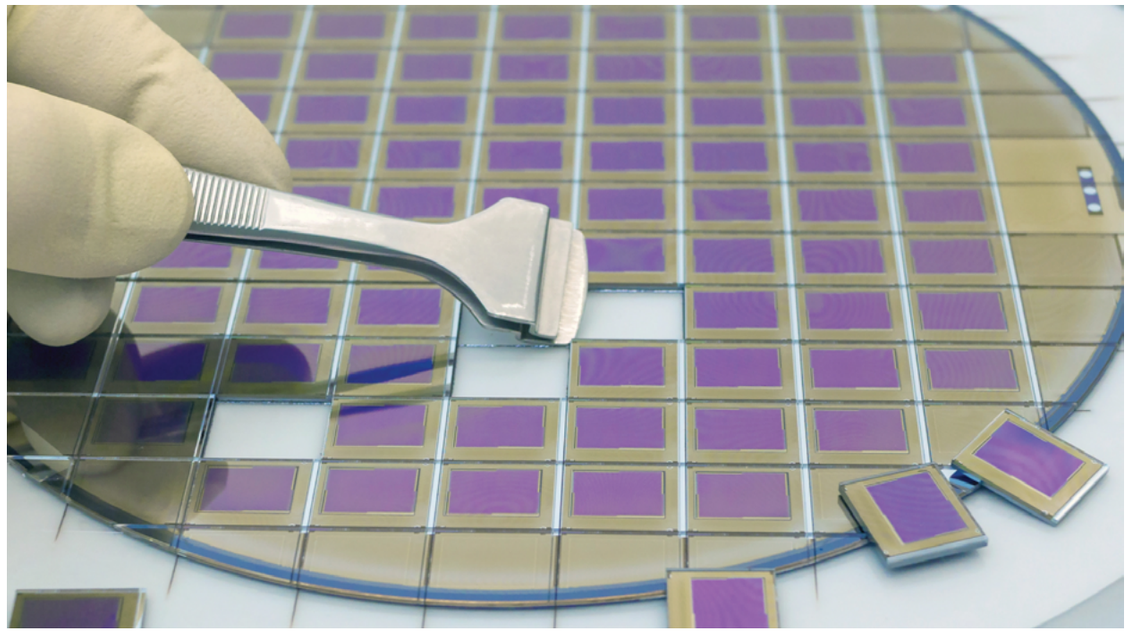
Supply chains are becoming information-rich networks as cloud IoT systems connect physical assets with cloud platforms. Benefits include integrated data sources that better inform procurement and logistics decisions.

Supply chain leaders are swapping spreadsheets and phone calls for live, always-on data streams. Warehouses flag low stock the moment it happens, while shipping containers report their own location and temperature mile after mile.



READ MORE

By AVERY LARKIN



AI is Testing the Limits of Chip Production

Semiconductor manufacturers are racing to meet AI demand while dealing with capacity shortages that began years ago.

What industry wouldn't love for a huge and eager customer segment with deep pockets to emerge seemingly overnight, ready to buy up all of its products, drive innovation of new options and soak up any extra stock that may have been lying around waiting for a buyer? It sounds like a dream come true on the surface, but as most leaders know, this level of demand also comes with some downsides.

Consider the great toilet paper shortage that happened during COVID and left large CPGs scrambling to refill their supply chains, or the Stanley Cup TikTok craze that left retailers short on stock. We're now seeing a similar thing happening in the semiconductor industry, but with even higher stakes and a considerably longer timeline. With more AI being developed, more data centers coming out of the ground and more of the technology being folded into everything from electronics to software to our kitchen refrigerators, the race is on to produce enough chips to satisfy the growing demand.

The problem is that there are only so many chips to go around, and the infrastructure behind them takes years to plan, build and get up and running. Add in the fact that the industry was already suffering a chip shortage even before generative AI made its grand debut and started being used by everyone, and it's easy to see why the constraints and even the prospects are keeping chipmakers and procurement teams up at night.

Before the AI Boom

Let's rewind the clock a moment, shall we? The semiconductor supply chain was already struggling with capacity constraints as far back as 2019. Those problems accelerated and turned into a full-blown crisis the following year. "COVID-19 struck," Fusion Worldwide's Brittany McCabe writes in *Supply Chain Connect.*

"Manufacturers in all industries scrambled to meet supply and demand in an unprecedented economic climate," she continues. "For chipmakers, production for almost half of the year was halted due to government shutdowns and COVID-19 restrictions. By the time production did resume, semiconductor companies had to adjust to increased pressure from various sectors."

Today, AI fuels much of the demand for advanced chips and memory. According to McKinsey, demand for dynamic random-access memory (DRAM) and high-bandwidth memory (HBM) has grown much faster than manufacturers can produce them. Since early 2023, DRAM prices have increased roughly sixfold, reversing 15 years of price declines and returning average selling prices to 2011 levels.

Different types of chips have come in and out of short supply over the years, but the overall picture is still constrained for some of the most sought-after components. The AI boom has added another layer of demand, and now companies like EMD Electronics are raising concerns about the industry's ability to keep up.

In a September 2026 survey of 200 semiconductor industry respondents, EMD found that the biggest obstacles to expanding manufacturing capacity go beyond building new plants. Finding enough qualified people is a major concern, with 75% of respondents identifying skilled workforce availability as the biggest barrier to accelerating domestic investment.

Citing Gartner's numbers, EMD says worldwide semiconductor revenue will reach $1.6 trillion in 2026, a 92% increase over 2025. That's exciting news for any company that builds, distributes or sells these components. It's also a double-edged sword, particularly for buyers that face some serious competition as they scour the market for the parts and components they need.

No Quick Fixes

McKinsey sees few viable short-term solutions to the memory shortage. "While companies can reengineer products to decrease DRAM/NAND requirements, this process is time consuming and does not provide immediate relief," it explains. "Other alternatives include delaying production or moving to a new technology generation."

Some of the longer-term solutions that companies are using now include:

- Investing in new fabs to increase DRAM and HBM manufacturing capacity.
- Exploring advanced packaging solutions (for instance, taller HBM stacks and 2.5D or 3D integration to increase memory density and bandwidth).
- Increasing the bit density per wafer for DRAM through next-generation technology.

"If these solutions prove successful, memory supply could begin to catch up with demand around 2027 and prices could begin to decline, following the cyclical pattern typically seen within the semiconductor industry," McKinsey adds. "Even then, memory ASPs [average selling prices] could remain higher than historical patterns would suggest."

☞ BACK TO TABLE OF CONTENTS

3 Ways AI Cost Optimization Transforms Legacy Procurement Workflows

AI cost optimization identifies hidden spending inefficiencies and improves supplier contract decisions, allowing procurement teams to shift from reacting to financial losses to protecting margins before costs accelerate.

Legacy procurement workflows can quietly erode profit margins. Fragmented spending data, unauthorized purchases and missed supplier contract opportunities create financial losses that often go unnoticed. Traditional procurement systems frequently uncover these expenses only after transactions occur, complicating how organizations recover lost capital.



☞ READ MORE

By AVERY LARKIN



The Next Chapter in Supply Chain Automation

Artificial intelligence is changing how companies plan their supply chains, though Gartner expects autonomous decisions to account for a small share of planning activity by 2030.

There's been a lot of talk about autonomous supply chains that can run themselves lately, but new research from Gartner suggests it could be years before most companies get there. The firm says that by 2030, just 5% of organizations implementing some form of supply chain planning automation will make at least 10% of their planning decisions autonomously.

Still, companies continue to invest heavily in technologies that promise to reduce manual planning tasks and give supply chain professionals more time to focus on higher-level decisions. In surveying 243 senior executives at organizations with annual revenues of at least $500 million, Gartner found that 83% had already spent $3 million or more on supply chain planning automation, including AI.

More than half (51%) had invested between $3 million and $10 million. Despite those investments, the firms expect a gradual transition to more autonomous planning. Still, issues like data quality, technology capabilities and organizational readiness will have to be addressed before planning decisions can be managed by automated systems.

"Spending millions on supply chain planning automation can expand technical capabilities, but investment alone does not create AI readiness," said Gartner's Buse Aras in a press release. "Leaders must establish the necessary decision, talent and technology foundations before scaling AI-enabled planning. Otherwise, they risk funding technology that does not improve the planning decisions that matter most."

What's an Autonomous Supply Chain?

Autonomous supply chains use AI and predictive analytics to continuously monitor operations, anticipate disruptions and make decisions across inventory planning, carrier selection and last-mile delivery, all with minimal human intervention. That's a mouthful, but basically these systems take much of the heavy lifting out of day-to-day planning and leave the experts to handle exceptions, solve problems and tackle bigger-picture decisions.

It all sounds good in theory, but the reality is that we're not quite there yet. Sure, AI has made major inroads in supply chain planning over the last couple of years, but the day when companies can confidently hand off routine planning decisions to autonomous systems is still a ways off. In fact, Gartner is saying that only a small percentage of organizations will be making even 10% of their supply chain planning decisions autonomously by 2030.

In other words, even with all the progress and usage of AI that's happening in the business world right now, four years from now autonomous supply chain planning will still be largely in the experimental stage.

A Look Under the Hood

As the technology behind autonomous supply chains continues to advance, different systems work behind the scenes, making decisions and responding to changing conditions. GEP says these five core technologies work together to make that happen:

- **Agentic AI.** Software agents that can independently plan, make decisions and carry out multistep tasks across supply chain functions.
- **Predictive and prescriptive analytics.** Models that forecast demand, supply risks and potential disruptions, then recommend or initiate appropriate responses.
- **Digital twins.** Virtual replicas of physical supply chains that allow companies to simulate different scenarios and test decisions before implementing them.
- **IoT and real-time data platforms.** Sensors and connected systems that continuously collect and supply the data autonomous systems need to make decisions.
- **Orchestration.** The connective tissue that helps planning, procurement and logistics systems coordinate decisions across the end-to-end supply chain.

With these five players working together, companies get supply chains that respond to changing conditions with less human involvement. "Think of it this way," GEP says, "an autonomous supply chain is an AI-native way of running operations where the software itself notices changes in demand, supply, logistics and risk, and then makes and executes decisions without waiting on you to sign off on every single move."

What's Next?

Looking ahead, Gartner expects companies to adopt autonomous supply chain technologies at different rates depending on the types of decisions they want to automate. Routine activities like replenishment and order prioritization are better candidates for autonomous planning, while more complex decisions involving network design and inventory policies will continue to require human judgment.

The research also foreshadows changes ahead for supply chain planners themselves. As companies adopt more AI-supported and automated planning tools, Gartner predicts that planners will spend less time administering data and more time coordinating decisions across the supply chain.

To get more from their investments, Gartner recommends that companies start by evaluating the planning decisions they're considering for automation. "Classify priority decisions as strategic, tactical or operational," it says, "[then] define the desired business outcome and determine whether AI should support, augment or automate each decision based on its value, complexity, risk and need for human judgment."

☞ BACK TO TABLE OF CONTENTS

The Podcast Channel for Supply Chain Professionals

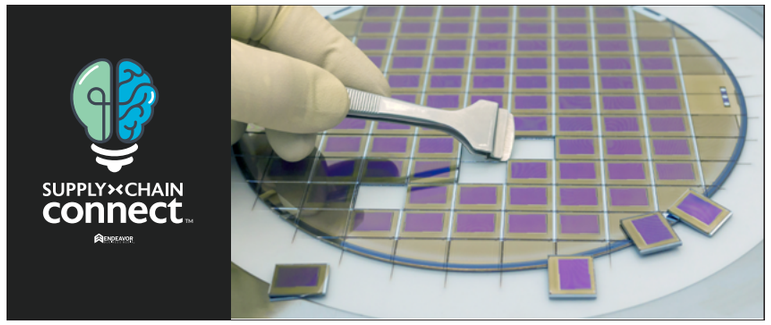
Supply Chain Connect provides supply chain and purchasing professionals with essential news, information and analysis about the technology and business trends that impact the global supply chain industry.



LISTEN NOW

Agility, Flexibility, and Intelligence: Adapting to the Rapid Shifts in the Compliance Landscape

Smith's Todd Snow and Mark Bollinger explain how changing trade rules affect semiconductor compliance and how procurement teams can prepare.



LISTEN NOW

Semiconductor and Memory Production at Their Limit

AI's soaring demand for chips and memory is pushing production to its limits as the industry struggles to build capacity fast enough to catch up.



LISTEN NOW

Downstream of Data Centers: How the AI Boom Is Affecting the Semiconductor Environment

In an interview with Supply Chain Connect, Smith CEO Nick Bedford discussed how massive AI and data center investments are reshaping the semiconductor market.



LISTEN NOW

Knowledge Is Power: Leveraging Market Intelligence to Drive Your Procurement Strategy

In an interview with Supply Chain Connect, Lindsey Garland, Smith's Vice President of Global Account Management, discussed how procurement teams can effectively utilize market intelligence to navigate complex supply chain disruptions.

BACK TO TABLE OF CONTENTS

By AVERY LARKIN



Organizations Double Down on Supply Chain Sustainability

New evidence suggests that companies are making supply chain sustainability a priority despite geopolitical uncertainty and ongoing challenges with execution.

Organizations are taking supply chain sustainability very seriously this year despite shifts in how topics like environmental, social and governance (ESG) are talked about at the corporate level (especially in the U.S.). Peel back the layers a bit, however, and it's clear that companies around the globe are still very much committed to waste reduction, resource conservation and minimizing environmental impacts.

In fact, MIT's new *2026 State of Supply Chain Sustainability Report* recorded its highest level of support for sustainability in seven years, with 83% of respondents rating it as important or very important to long-term business success. "When corporate leaders discuss climate strategy, the message that still dominates is that, despite competing priorities and external pressures, sustainability matters," Mackenzie Berry writes in *MIT News*.

The report is based on input from 1,810 supply chain professionals in 91 countries. More than half (59%) of them said they've become more committed to sustainability following recent U.S. policy shifts that deprioritize environmental concerns. And while commitment to corporate sustainability is strong, many companies still struggle to put their sustainability plans into action.

Sustainability Stays the Course

This year's study looked at how geopolitics and governance test corporate sustainability; sustainability across the supply chain; AI's role in sustainability; and freight transportation and warehousing. These topics are especially relevant as companies navigate shifting government policies, use more AI and work to reduce supply chain emissions.

"Following recent U.S. climate-policy shifts, 59% report becoming more committed to sustainability," MIT says, "while only around 13% report becoming less committed. Yet 68% say tariff uncertainty has forced their organizations to delay, scale back, or compromise sustainability strategies."

Among the other key findings:

- **Geopolitical uncertainty interferes with sustainability plans.** Tariff uncertainty has forced 68% of organizations to delay, scale back or compromise their sustainability strategies. More than 80% of respondents across North America, Europe and Asia say geopolitical conflict undermines climate action.

- **Transportation decarbonization is difficult**. Despite widespread adoption of efficiency measures, MIT says 43% of fleets still operate mostly or entirely on diesel. Further emissions reductions require investments in cleaner vehicles and supporting infrastructure.

- **Warehouse automation produces mixed results.** Companies report strong economic returns from automation and robotics, but many AI adopters also report higher electricity consumption and waste. According to the survey, just 24% of warehouses use AI- or sensor-driven systems for real-time emissions monitoring.

- **Corporate oversight lags.** Just over half (51%) of companies with public sustainability goals have formal cross-functional teams, and only 33% have board-level oversight. Among companies with cross-functional teams, 57% frequently or always incorporate sustainability into daily decisions, com pared with 13% of companies that assign responsibility to a single department, according to the report.

- **AI can support sustainability goals.** Among adopters, 87% report positive results. Roughly 63% use AI to estimate emissions when supplier data is missing, while only 25% use it for future scenario planning. MIT says nearly one-third of more mature agentic AI users also report perceived increases in overall greenhouse gas emissions (GhGs).

That last finding is especially interesting at a time when environmental groups and communities are raising concerns about the rapid buildout of data centers and the amount of electricity and water that these facilities require.
"AI is becoming a real sustainability tool, with 47% of organizations using it while still weighing its environmental footprint and 37% believing that the benefits clearly outweigh the environmental costs," MIT says in the report. "For now, AI is strongest at making sustainability work more efficient and measurable; its strategic role is still emerging."

BACK TO TABLE OF CONTENTS



By BRIDGET MCCREA



PMI Expands in October for 10th Month in a Row

Despite ongoing constraints and disruptions, the U.S. manufacturing sector continues to plow full speed ahead toward 2027.

The nation's manufacturing sector has been in growth mode for 10 consecutive months, despite tariffs, labor constraints and geopolitical events. Led by industries like plastics and rubber products, electrical equipment and machinery, manufacturing continued to expand in October, according to the Institute for Supply Management's (ISM) latest Manufacturing PMI Report.

The index reached 55.5%, up from 54.5% in September (a reading above 50% indicates expansion, while a reading below 50% indicates contraction), with 12 manufacturing industries reporting growth and just three reporting contraction (printing and related support activities, paper products and nonmetallic mineral products).

"In October, U.S. manufacturing activity remained in expansion territory," said Susan Spence, chair of the ISM Manufacturing Business Survey Committee, in the report. "Of the five subindexes that make up the PMI, four (New Orders, Production, Supplier Deliveries and Inventories) grew faster than the previous month, while Employment growth slowed down by 0.3 percentage point."

A Mixed Bag

Spence said U.S. manufacturing activity remained in expansion territory last month, with new orders, production, supplier deliveries and inventories all growing faster than the previous month. But not all of the news was positive.

"In October, general sentiment got worse for a third month in a row, with 34% of the comments positive and 66% negative (a 1-to-2 ratio of positive to negative sentiment)," she said. "Among negative comments, pricing volatility was mentioned in 62% [of them], longer lead times 41%, tariffs 25% and the Iran war 21%; most comments mentioned multiple factors."

Here's what happened across the other manufacturing indexes:

- **New Orders.** The index reached 55.5%, up 0.2 percentage point from September and marking its 10th consecutive month of expansion.
- **Production.** The index climbed 2.3 percentage points to 59%, its highest reading since November 2021.
- **Employment.** The index registered 52.4%, down slightly from September's 52.7%, but remained in expansion territory.
- **Supplier Deliveries.** The index reached 59.1%, up from 59% in September, indicating slower deliveries for the 11th consecutive month.
- **Inventories.** The index returned to expansion territory at 51.4%, up 2.8 percentage points from September.
- **Backlog of Orders.** The index slipped 1.8 percentage points to 54.6%, but remained in expansion territory.
- **Prices.** The index registered 75.2%, down from 77.9% in September, marking the 25th consecutive month of rising raw material prices.
- **New Export Orders.** The index reached 51.2%, up from 50.9% in September.
- **Imports.** The index rose 1.9 percentage points to 52.9%, up from 51% in September.

Not All Companies are Convinced

The overall manufacturing sector may be 10 months into an expansion, but individual survey respondents had plenty to say about conditions in their own businesses and the markets they serve.

"Global demand for capital scientific instrumentation assets has slowed due to continued uncertainty in the Middle East, Eastern Europe and China," says one maker of computer and electronic products. "Anticipation over the midterm elections and impact to funding for scientific research and the National Institutes of Health also is impacting customers' purchasing behavior, making them focus on optimizing existing technology and tools."

Another manufacturer of fabricated metal products says economic policies coming out of Washington continue to weigh on business conditions. "Customers are unwilling to make commitments to anything other than the shortest term due to the vast uncertainty," it says. "Canadian tariffs continue to damage small U.S. businesses selling into that important market."

And a transportation equipment producer commented on how customers continue to be in a wait-and-see mode. "There is no momentum to purchase, as our customers' customers aren't in urgent need of equipment," it says. "[They] continue to be gobsmacked by the high price of equipment when they ask for quotes. Typically, we see a fourth-quarter bump as customers use up end-of-year budgets. This year, that bump does not exist."

BACK TO TABLE OF CONTENTS

Moving Beyond Risk: Agility as a Growth Lever - Wired to Procure

This video covers the four main disciplines of agile procurement: measuring launch enablement, building flexibility, removing quote-to-order friction, and choosing NPI-focused partners like Mouser. Better agility helps teams design smarter, launch faster, and grow revenue.



WATCH NOW

By AVERY LARKIN



Supply Chain Workforce is Unprepared for AI

Seven key takeaways from a new ASCM and DSCI report on supply chain AI adoption and workforce readiness.

By Gartner's last count, supply chain executives were allocating about 67% of their digital investment budgets to artificial intelligence (AI). In return, they expect to improve decision-making, increase productivity and reduce operating costs by prioritizing AI across their supply chain operations.

Looking out further, Gartner forecasts that annual spending on supply chain management software with agentic AI capabilities will reach $53 billion by 2030. But it's not all rainbows and unicorns for the companies selling these solutions or the ones that are implementing them. In the same survey, Gartner found that 55% of chief supply chain officers *couldn't determine the returns on their AI investments*.

That's a major worry point for companies committing substantial budgets to technologies they're counting on to deliver measurable business benefits, but there's another catch: According to a new Association for Supply Chain Management (ASCM) report, supply chain employees aren't prepared to use AI effectively.

The People Paradox in Supply Chain AI Integration report from ASCM and the Digital Supply Chain Institute (DSCI) found that even though 91% of organizations plan to use AI to augment human workers, 83% of them say their employees are unprepared to use AI effectively.

"AI adoption in supply chain is more about people than it is technology," said ASCM CEO Abe Eshkenazi. "The organizations making real progress treat workforce readiness as part of the technology investment, not an afterthought. They learn by doing, bringing managers into the process early, and building trust one function at a time."

7 Key Trends to Watch

Companies are interested in AI, but putting the technology into practice isn't always easy. According to ASCM, four problems are holding them back: employees who aren't ready to use AI, concerns about letting the technology make decisions on its own, cybersecurity risks and questions about whether the investment is paying off.

The numbers are encouraging, but there's plenty of room for improvement. More than half of respondents (55%) describe their AI deployments as "somewhat successful." Over the next two years, they expect the biggest benefits from faster decisions and shorter planning cycles (46%), lower supply chain costs (42%) and more process automation (40%).

What does all this mean for supply chain operations? Here are seven survey findings that tell the story:

1. **Employees aren't ready for AI.** Most respondents (83%) say their employees aren't prepared to use AI effectively, and just 14% say their organizations are fully prepared. Only 7% expect AI to directly replace workers, while 51% expect employees to take on more decision-making responsibilities.

2. **AI adoption remains limited.** Across 13 supply chain functions, AI adoption averages 1.94 on a five-point scale, where 1 means no use and 5 means fully autonomous execution. Demand planning ranks highest at 2.28, followed by supply and inventory planning at 2.12.

3. **Executives are driving AI initiatives.** Most C-suite respondents (82%) actively lead, implement or expand AI initiatives, compared with just 12% at the director level. Half of directors, 51% of managers and 70% of staff know about these initiatives but aren't actively involved.

4. **Workforce readiness makes a difference.** Among organizations with AI-ready employees, 17% have deployed AI across an average of six supply chain functions, with a 71% project success rate.

5. **Skills and financial returns remain major obstacles.** A lack of workforce skills and resources (33%) and an uncertain business case or return on investment (33%) share the top spot among barriers to AI adoption. Poor data quality follows at 25%.

6. **Cybersecurity remains a concern**. Nearly all respondents (92%) are concerned about cybersecurity risks involving AI-enabled suppliers and trading partners. Yet organizations have implemented an average of just 2.3 out of six standard security practices.

7. **Companies want to understand AI's decisions:** Most respondents (91%) want to know how AI models generate predictions and recommendations, while 43% are concerned about algorithmic bias in supplier selection or inventory allocation.

More Roadwork Ahead

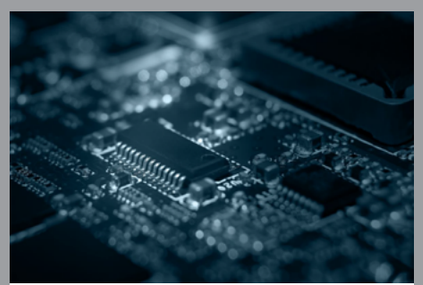
So, there's clearly more work to be done at the AI-supply chain intersection before companies can recoup their investments and start seeing the promised benefits. "Leaders have accepted AI in principle. What most organizations haven't built yet is the capacity to execute it in practice," said DSCI's Marko Kovacevic. "With tariff shifts, demand shocks and geopolitical disruption, the advantage will go to companies that can sense and re-plan the fastest. That makes AI readiness a management challenge first and a technology challenge second."

BACK TO TABLE OF CONTENTS

One Missing Component Can Stop Your Entire Build

Find the gaps that inventory totals can hide. Review your complete BOM, evaluate buffer strategies and identify components that could put production at risk.

Is your inventory covering the parts that matter most? Download Rand's Critical Component Inventory Planning Guide to review your complete BOM, assess buffer strategies and identify supply gaps. Includes a readiness checklist and worksheet, plus an introduction to how RandIQ™ predictive analysis and Rand's broader supply chain solutions can support your next steps.



rand.

FEATURED CONTENT

LEARN MORE

By AVERY LARKIN



6 Ways to Build a More Efficient Supply Chain

Here are six supply chain management practices focused on better forecasting, stronger supplier relationships and fewer operational disruptions.

There's no shortage of advice on how to run a better supply chain these days. From managing supplier relationships and controlling inventory to improving warehouse productivity, the challenge is deciding where to focus time, money and resources to get the best results. Here's a roundup of six supply chain best practices that companies and their chief supply chain officers (CSCOs) can use to improve efficiency, fix operational challenges and cut costs.

1. Build out a strong team. According to NetSuite, just 38% of supply chain leaders feel that their current teams can compete effectively in the current market. This calls for an internal effort to build out more knowledgeable, skilled supply chain management teams. To get there, companies can use specialized staffing companies with expertise in supply chain recruitment. They can also forge relationships with universities to establish a pipeline of students in supply chain, logistics and project management programs. Offering internships, opening up new entry-level positions and providing ongoing professional development can all help companies cultivate the next generation of supply chain pros.

2. Get everyone working from the same playbook. In many cases, each function of the supply chain operates like a distinct entity, separated by business units, varying priorities, disparities in time and resources, siloed systems and procedures, and even geography. "That often leads to information gaps, slow communication, errors and inconsistent processes," NetSuite says. To fix the problem, try creating a specific job role that coordinates activities and communication between the related business units. That way, each supply chain group can put the standardized processes into practice and then adjust as needed.

3. Closely align with your best suppliers. Look for suppliers that share your company's values and principles beyond the basics (i.e., expertise, pricing and timeliness in vetting supply partners). "Things like environmental sustainability and social responsibility are essential points of agreement," says NetSuite, "as scandals like labor law violations can have a damaging impact on the companies they serve."

4. Connect Sales Forecasts With Operational Capacity. In *How Can I Improve My Supply Chain Planning Process?,* APQC encourages companies to bring sales, marketing, operations and finance into the forecasting process to improve coordination and support purchasing and production decisions. One way to do this is through sales and operations planning (S&OP), a process that helps balance customer demand with production capacity, inventory and available resources.

"Their combined input can help the organization reconcile market demand with available supply, capacity, inventory, and financial objectives," APQC explains. By comparing sales forecasts with available capacity, companies can identify shortages earlier, adjust purchasing and production schedules and avoid carrying more inventory than they need. Regular S&OP meetings also give departments an opportunity to review changes in demand and decide on the right response.

5. Stay on the alert for more risk and disruption. If corporations have learned anything in recent years, it's that supply chain disruptions can come from anywhere: tariffs, climate change, pandemics, geopolitical tension, terrorism, regulatory changes, shipping incidents, cyberattacks, sanctions… you name it. "Because the dangers are so great and varied, companies continue to pursue new supply chain risk management strategies," Thomson Reuters says, "particularly in the areas of trade compliance, import and export screening, supplier evaluation and post-entry audits."

6. Look beyond Tier 1 when assessing risk. Companies know a lot about their Tier 1 suppliers, but that visibility drops off as you move down into the Tier 2 and 3 levels. This isn't a new problem by any means, but it's one that deserves more attention in today's uncertain business environment. That's because the greatest risk exposure lies in sub-tiers (or, your supplier's suppliers). Thomson Reuters tells companies to ask themselves these questions:

- How well do you know your business partners?
- Are the suppliers reputable and reliable?
- Do they reflect well on the company?
- Does their location or mode of operation represent any risks to the supply chain?
- Do your business partners have sub-tier suppliers that could pose a risk to your business?
- If so, are those risks acceptable? Tolerable? Unavoidable? Mitigable?

"Asking these questions is important because many consumers do not distinguish between a brand and its suppliers," the company adds. "So, for example, if you discover that a company's third-tier supplier is using child labor or somehow violating U.S. sanctions, the negative publicity can do considerable damage to your brand, not to mention exposing your company to potential violations resulting in fines and penalties."

BACK TO TABLE OF CONTENTS



By BRIDGET MCCREA



Bipartisan Energy Bill Gets One Step Closer to Passage

After years of discussion and debate, a bipartisan energy bill passes the Senate and heads to the House for next steps.

Last week, the U.S. Senate passed a sweeping bipartisan bill that would speed up federal permitting for major energy and infrastructure projects nationwide. Lawmakers approved the Bipartisan American Affordability and Jobs Act (BAAJA) in a 62-33 vote, advancing legislation that supporters say will help lower electricity costs and accelerate construction of new energy facilities.

According to *Reuters*, the bill would shorten federal environmental reviews, speed up approvals for power plants and transmission lines and limit certain legal challenges that delay construction. It also addresses growing concerns about the electricity demands of artificial intelligence (AI) data centers by requiring large facilities to cover more of the infrastructure costs associated with their operations.

Senator Shelley Moore Capito (R-WV) helped negotiate the legislation and called the Senate vote a "major step toward addressing affordability concerns." The bill drew support from both parties, although opponents raised concerns about its impact on environmental protections. The legislation now heads to the House of Representatives.

What's in the Energy Bill?

According to the Bipartisan Policy Center, the nearly 500-page bill addresses everything from environmental reviews and electricity transmission to renewable energy development and data center costs. The legislation's core mission is to speed up construction of major energy projects. For example, Senator Martin Heinrich (D-NM) says the SunZia transmission project in New Mexico took nearly two decades to complete even though construction lasted just two years. "That's how badly our permitting system is holding America back," Heinrich said, in a statement.

Some of the bill's key provisions include:

- **Faster federal permitting.** The bill would require agencies to meet specific deadlines for reviewing applications and issuing decisions. It would also reduce overlapping reviews and allow agencies to reuse environmental studies from similar projects.
- **Limits on legal challenges.** Opponents would have 150 days to challenge certain federal approvals, and courts would face restrictions on their ability to halt projects over environmental review violations.
- **Expanded electricity transmission.** The bill would accelerate approvals for new transmission lines and encourage utilities to upgrade existing infrastructure to carry more electricity.
- **New requirements for data centers.** Large data centers would cover more of the electricity infrastructure costs associated with their operations, helping protect other customers from higher bills.
- **Support for renewable energy development.** The legislation would speed up geothermal permitting, expand opportunities for hydropower development and make it easier to connect new electricity generation projects to the grid.
- **Updated nuclear energy requirements.** The bill would change certain licensing and hearing procedures for nuclear facilities while maintaining separate permitting deadlines for nuclear projects.
- **A modernized permitting process.** Federal agencies would use a new digital system for environmental reviews and authorizations, replacing outdated processes with a centralized online portal.

What's Next?

Supporters expect the legislation to accelerate construction of energy projects, expand electricity supplies and lower costs for consumers. On the other side of the aisle, Reuters says critics have raised concerns that the legislation would weaken environmental protections and make it harder to challenge federal permitting decisions.

"[BAAJA] will get more affordable energy onto the grid faster, make data centers pay their fair share of electricity and grid costs, and create more than 100,000 good-paying American jobs," Heinrich said, "all while maintaining important environmental protections and strengthening tribal consultation (i.e., consulting with Native American tribes on issues impacting tribal land and resources)."

The bigger question now is whether the House will pass the bill before the current Congress ends in January 2027. The incoming House will have a Democratic majority, which adds uncertainty to the bill's prospects. Stay tuned.

☞ BACK TO TABLE OF CONTENTS

Survey Says: U.S. Manufacturing Solidly in Expansion Mode

Manufacturing activity in the U.S. expands for the ninth consecutive month in September.



Economic warning signs, inflation and rising interest rates be darned, the U.S. manufacturing sector is on a roll and showing no signs of slowing down. In fact, economic activity in the sector expanded for the ninth consecutive month in September, according to the latest ISM Manufacturing PMI Report. The Manufacturing PMI registered 54.5% last month (a reading higher than 50% indicates expansion) as the overall economy expanded for the 23rd month in a row.

☞ READ MORE

By AVERY LARKIN



Supply Chain Cybersecurity Takes Center Stage

As cybercriminals find new ways to exploit third-party vulnerabilities, companies are strengthening their supply chain cybersecurity and protecting their operations.

All eyes are on supply chain cybersecurity right now as new cyberattacks expose vulnerabilities among businesses and their technology providers. Supply chain partners can unwittingly become entry points for cybercriminals who exploit weaknesses in third-party systems to gain access to companies that have locked down their own networks.

According to *Verizon's 2026 Data Breach Investigations Report*, third parties played a role in 48% of breaches, a 60% increase over the previous year. The report also found that:

- 31% of breaches began when attackers exploited soft ware vulnerabilities.
- 48% of breaches involved ransomware attacks.
- Mobile social engineering attacks generated 40% higher click rates than traditional email phishing attacks.

"As organizations increase their reliance on third parties for services and software, their exposure [also] increases," Verizon says in its report. "And breaches with third-party involvement have increased by 60% from last year's dataset, reaching 48% of total breaches."

Third-Party Security Gaps Add Supply Chain Risk

Verizon also looked at how quickly third-party organizations, including the types of technology providers that supply chains rely on, fixed security weaknesses in their cloud accounts (aka, "remediation"). It says that just 23% of those organizations fully addressed missing or improperly secured multifactor authentication (MFA), which requires users to verify their identities through an additional security step.

Organizations resolved half of the individual MFA security issues within a month, but other security problems took much longer to fix. For example, organizations needed nearly eight months to resolve half of the weak-password and improperly configured access-permission issues researchers identified.

For supply chain operators, these delays give hackers more time to exploit weaknesses in the systems their vendors use and gain access to sensitive business data.

4 Ways to Manage Third-Party Cybersecurity Risks

Supply chain cyberattacks are making news headlines. In one example, hackers exploited a vulnerability in software provider Optimizely's platform, exposing visitors to websites belonging to 178 organizations, including CNN, Zoom and IKEA, to malicious code. Another criminal group compromised ConnectWise Cloud Backup, gaining access to more than 2,250 downstream Microsoft 365 tenants. These incidents prove how easy it is for hackers to exploit one technology provider to reach multiple targets.

The good news is that technology is also giving companies better tools to defend against cyberattacks. From identifying suspicious activity to protecting third-party connections, businesses have more options for securing their supply chains. Here are four ways to strengthen your company's defenses.

1) **Know your critical systems.** It all starts here: Identify the technology platforms that support your supply chain operations and find out which outside providers have access to them. Get all the details, including which systems support your orders, tendering, shipment visibility and invoicing; what happens if one of those systems becomes unavailable; and what alternative process you can use. "If the answer is simply a list of certifications and security standards, ask again," Michael Irwin writes in "5 Critical Questions to Uncover Hidden Supply Chain Cyber Risks."

2) **Vet partners and subcontractors carefully.** Your providers have their own Nth-party risks (e.g., they rely on carriers, technology platforms, cloud infrastructure, data services and software vendors). "Your providers should be able to explain which dependencies are critical, how they establish cybersecurity expectations for key partners, and how they would communicate with you if an incident further down the chain could affect your operation," Irwin writes.

3) **Prepare for faster cyberattacks.** Hackers are using AI to gain access to systems in a matter of hours, leaving companies with less time to respond. *Logistics Viewpoints* says your best defense is to identify connections you can shut down immediately if hackers compromise them. "In an environment where attacks can progress within hours, organizations cannot afford to reconstruct critical system dependencies for the first time during an active incident," it adds.

4) **Keep close tabs on your own AI systems.** As you add AI agents to procurement, transportation planning and warehouse operations, limit their access to the systems and information they need for specific tasks. Track their activities and establish when employees must step in to approve actions. "These systems must also operate under explicit identities, narrowly defined permissions, auditable actions, and established escalation requirements," *Logistics Viewpoints* adds. (In other words, know which AI tools are using your systems, what information they can access and when someone needs to step in.)

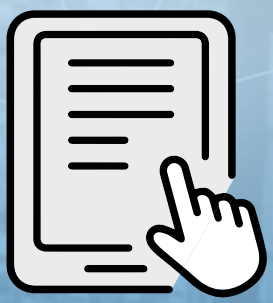
☞ BACK TO TABLE OF CONTENTS

SUPPLY CHAIN connect™

DISTRIBUTION OUTLOOK

The 2027 issue will publish in mid-December.

This Annual Report will provide forecasts, perspectives and analysis through interviews from a wide variety of distributors.



eBook

2026
Distribution Outlook

DOWNLOAD NOW