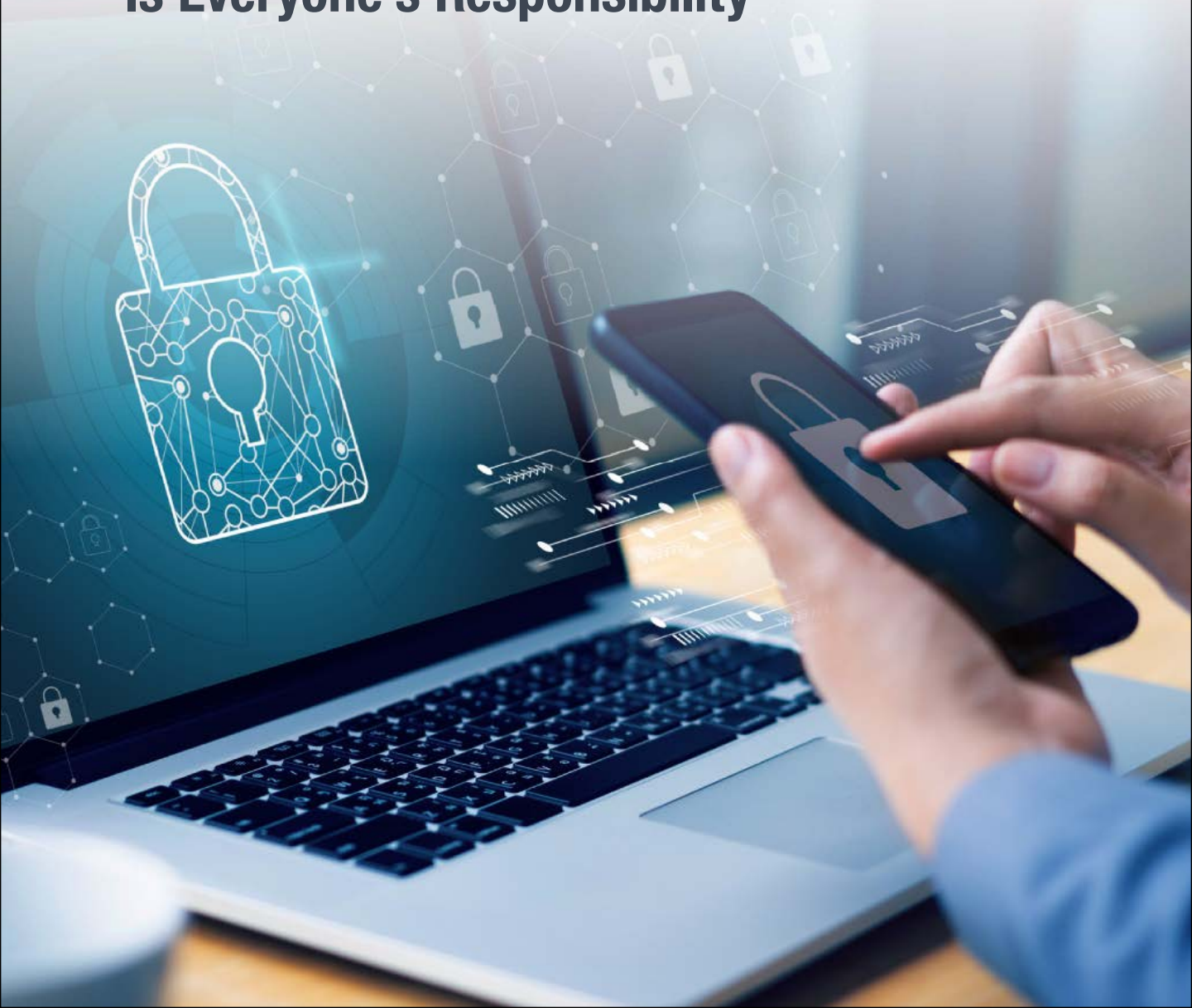


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September
2024

CYBERSECURITY

Is Everyone's Responsibility





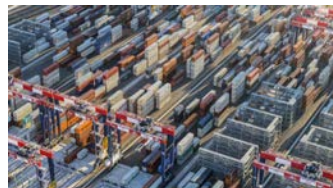
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Cybersecurity Is Everyone's Responsibility

October is Cybersecurity Awareness Month. Here are some tips and best practices for safeguarding yourself and your organization.

In today's interconnected world, cybersecurity is not just an IT concern, it is everyone's responsibility. October is Cybersecurity Awareness Month and serves as a crucial reminder of the severity of online threats and the importance of safeguarding ourselves and our organizations. The reality of cyberthreats is alarming:

- Cyberattacks are estimated to occur every 39 seconds, and for businesses, that frequency jumps to every 11 seconds.
- By 2031, cyberattacks are predicted to happen every two seconds.
- Nearly 60% of companies have experienced a ransomware attack this year alone.
- Data breaches from phishing attacks have cost companies nearly USD \$5 million on average.

These statistics, which are too numerous to fully list, are not just numbers. They represent very real threats that keep me and Smith's team of analysts up at night, knowing the potential impact on businesses and individuals.

Staying One Step Ahead of the Hackers

Cyberthreats and attacks are becoming more sophisticated, requiring companies to be vigilant and continually evaluate and update their security protocols. It's not just the skilled hackers we need to worry about—even novices can exploit powerful tools for phishing, social engineering and malware. It's why we all should play a role in keeping our networks safe.

As an ISO 27001-certified organization, Smith is committed to protecting our employees, customers and suppliers by imple-

menting the most up-to-date shields in an effort to reduce the risk of an attack. All Smith employees undergo comprehensive cybersecurity training for proper data hygiene and follow detailed processes for handling confidential information.

When doing business with vendors, customers or even competitors, collaboration is key. If one company is compromised, everyone in the supply chain is affected. Don't be complacent. Always test and verify your security measures and detection systems. The tools that seem most effective today may be the most vulnerable tomorrow. There will never be an end-all-be-all solution to your cybersecurity problems. This is why it is important for businesses to diversify their use of cybersecurity companies that offer varied layers of protection.

The AI Conundrum

Another pressing concern is artificial intelligence (AI). While AI can make life easier by increasing efficiency and productivity, it is a double-edged sword. The same technology that streamlines our work processes can also make life easier for cybercriminals to craft more convincing phishing attempts.

We can't stop AI's evolution, nor do we want to. What we can do is embrace the technology's potential while establishing clear boundaries. Never input sensitive information into AI systems, as AI uses this data to enhance its capabilities. Additionally, always cross-check AI-generated information against trusted and verified sources.

Protecting Our Digital Assets with Best Practices

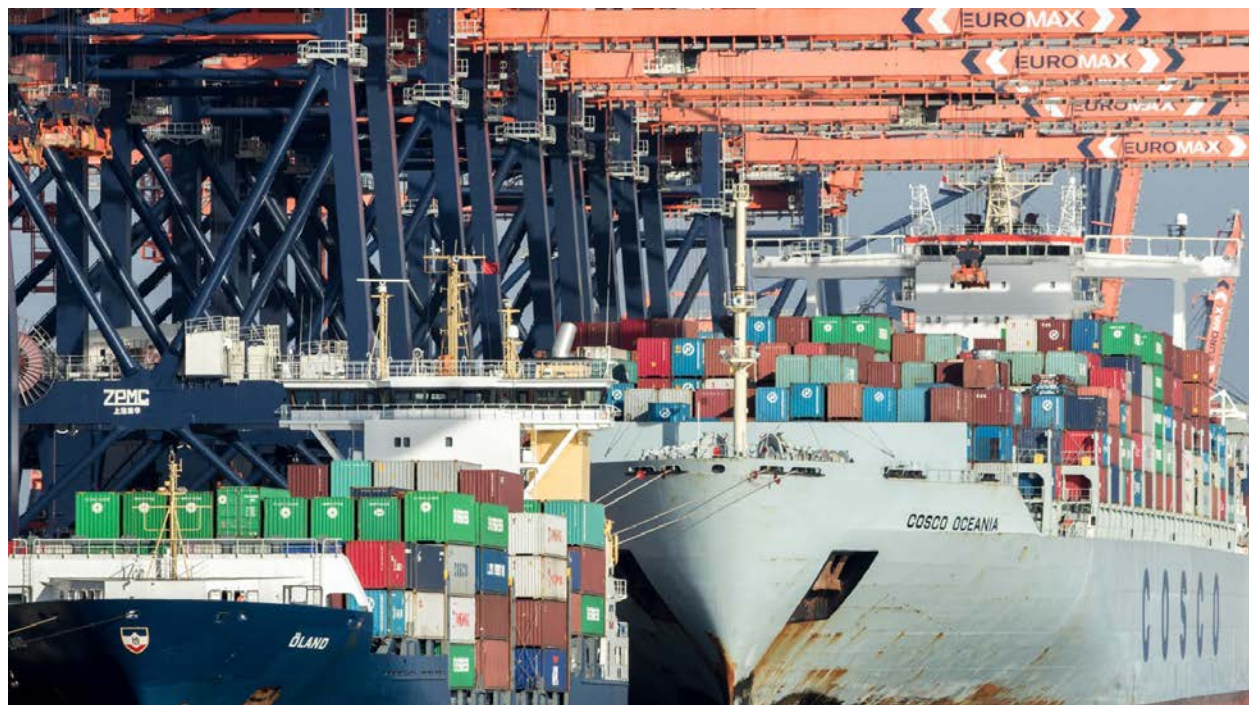
Cybersecurity Awareness Month provides a prime opportunity to highlight these issues, but protecting our digital assets must be a daily commitment. Here are some essential practices everyone should adopt:

- Create complex and unique passwords for each account.
- Enable multi-factor authentication whenever possible for an extra layer of security.
- Be cautious of unsolicited emails, phone calls and texts asking for personal information.
- Don't click on links or open attachments from unknown sources.
- Keep your software updated to be protected by the latest security patches.
- Monitor your emails and report suspicious ones to your security team immediately.

For a more extensive list of best practices, we encourage you to visit the [Cybersecurity and Infrastructure Security Agency](#) or [National Cybersecurity Alliance](#) websites.

In our digital age, cybersecurity is a shared mission. Each of us has a part to play. By staying informed, adopting best practices and remaining alert, we can all contribute to a safer online environment. In the world of cybersecurity, we are only as strong as our weakest link. We can't secure your data without your support.

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Hot Topics for Supply Chain Leaders

Here's a roundup of some of the top trends impacting supply chains in September.

Supply chains made headlines in September thanks to a looming port strike, new strategic investments and advancements in technology. One of the big pieces of news was FedEx's investment in artificial intelligence (AI) company Nimble—a move that was made to help the parcel carrier's supply chain business.

According to [Reuters](#), FedEx will leverage its new acquisition to “help scale up the delivery giant's fulfillment unit, which aids small and medium-sized businesses in fulfilling orders and managing inventory.”

The publication says parcel delivery companies are “ramping up investments in automation” in an effort to cut down on costs and boost efficiency at a time when freight demand remains subdued. FedEx said the investment would help streamline its supply chain capabilities across North America, through Nimble's automated third-party logistics solutions.

“Our strategic alliance and financial investment with Nimble expand our footprint in the e-commerce space,” the company said, “helping to further scale our FedEx Fulfillment offering across North America.”

Port Strike Looms

All eyes are on U.S. ports right now as a coast-wide dockworker strike looms in the near future. [CBS](#) says thousands of dockworkers at every major East and Gulf coast port are girding to strike—a move that could close trade gateways that handle about half of all goods shipped in containers in and out of the U.S.

The International Longshoremen's Association (ILA), which represents 45,000 dockworkers, is threatening to strike at 36 U.S. ports if a new labor deal with the USMX isn't reached before the current contract expires at midnight on Sept. 30. A walkout would be the first East Coast dock strike since 1977. A potential walkout likely involves 25,000 workers, [CBS](#) reports.

“Negotiations between the union representing dockworkers and a shipping industry group representing terminal operators and ocean carriers have been stalled for months,” the news outlet says, “with both sides this week issuing conflicting statements about their willingness to bargain.”

Measuring the potential impacts of a strike on the nation's supply chains, [The New York Times](#) says some importers started ordering Christmas goods four months earlier than usual to get them through the ports before the labor contract between the operators of port terminals and the International Longshoremen's Association expired.

Many shipments have also been diverted to West Coast ports, [NYT](#) adds, where dockworkers belong to a different union that agreed to a new contract last year. Even with these proactive moves, it says a short strike could lead to significant disruptions.

“JPMorgan transportation analysts estimate that a strike could cost the economy \$5 billion a day, or about 6 percent of gross domestic product, expressed daily,” the publication reports. “For each day the ports are shut down, the analysts said, it would take roughly six days to clear the backlog.”

Combatting Supply Chain Threats

Also in September, the U.S. Department of Homeland Security (DHS), United Kingdom (U.K.)'s Department for Business and Trade of the United Kingdom of Great Britain and Northern Ireland, and Australia's Department of Industry, Science,

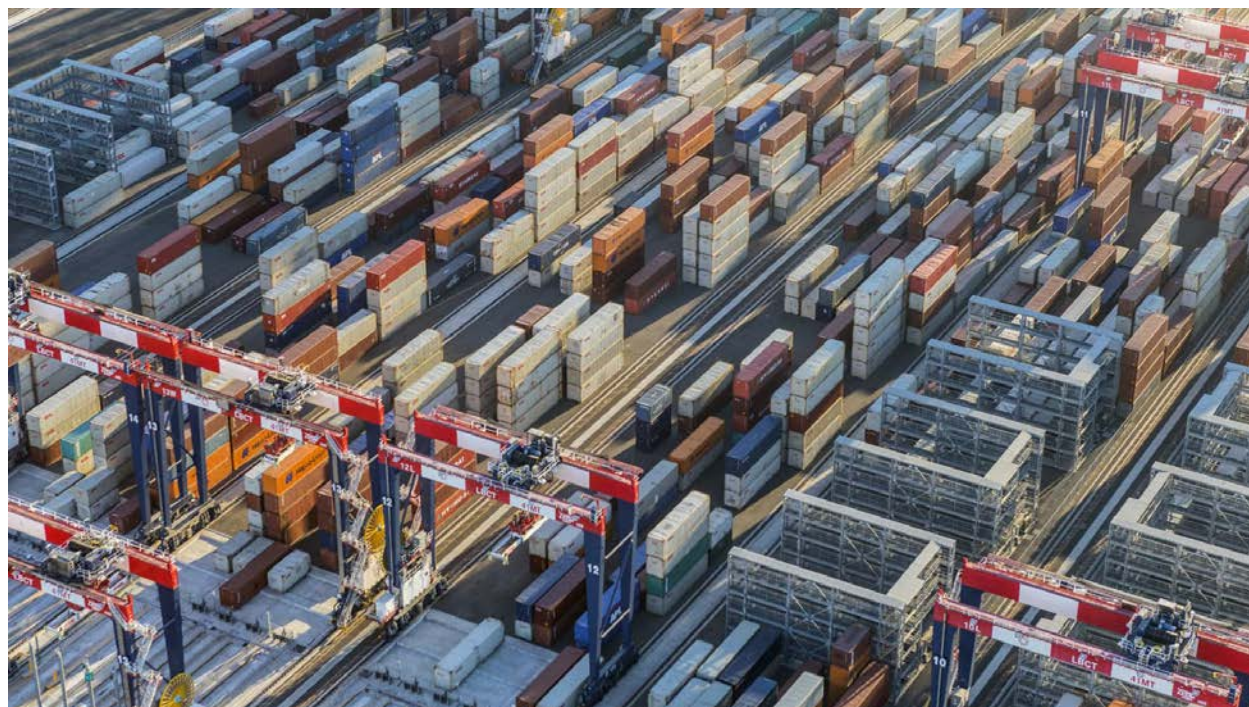
and Resources established the [United States-United Kingdom-Australia Supply Chain Resilience Cooperation Group](#) to enhance efforts to combat threats to critical supply chains.

According to DHS, the new group will develop an early warning pilot focused on the telecommunications sector. This sector is critical to the shared economic security of the three participating nations, it says, and the pilot program will identify and monitor potential disruptions to supply chains in the telecommunications sector.

“The resilience of our critical supply chains is a homeland security and economic security imperative,” said Secretary of Homeland Security Alejandro N. Mayorkas in a [press release](#). “Collaboration with international partners allows us to anticipate and mitigate disruptions before they occur.”

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By SUPPLY CHAIN CONNECT STAFF



Supply Chains Dodge a Bullet...for Now

A dockworker strike that threatened to upend supply chains up and down the East Coast has been suspended until January.

No sooner had the month of October begun than East Coast dockworkers went on strike. Eleventh-hour negotiations between the International Longshoremen's Association (ILA) and the United States Maritime Alliance (USMX) revealed some promise for a possible settlement, but in the end ILA members hauled out their signs and began picketing at ports up and down the East Coast and on the Gulf Coast.

Then, the strike came to a temporary end three days later on Thursday night. According to [AP](#), the dockworkers and ports came reached a deal to suspend the strike until Jan. 15 to provide time to negotiate a new contract. The two sides reached a tentative agreement on wages. "Effective immediately, all

current job actions will cease and all work covered by the Master Contract will resume," the ILA and USMX said in a [joint statement](#).

Right up until the strike started, both sides appeared to be fairly far apart on some of the most important issues that they were negotiating. For example, [NPR](#) says the ILA was asking for \$5-an-hour wage increases every year for the length of the new ILA-USMX master contract (which will be put in place for six years). This would have equated to a 77% pay raise for members of the union, which also wants "absolute airtight language that there will be no automation or semi-automation" used at the ports.

As with any potential for supply chain disruption these days, the strike quickly began populating news headlines focused on which products might get harder to source as the strike rolled on. For example, last week [NPR](#) reported that the strike was impacting work at 14 different ports and reaches as far north as Boston and as far south as Miami, plus New Orleans and Houston.

"More than \$2 billion worth of goods typically flow through these ports daily, from chemicals and clothing to bourbon and bananas," [NPR](#) pointed out. "That includes more than half of all cargo containers coming into the U.S., or about a million containers a month." It also includes more than three-quarters of the containers carrying exports (or about 327,000 per month).

A Ripple Effect

In "[East Coast Port Strike: What Businesses Can Do To Mitigate Supply Chain Disruption](#)," SAP's Richard Howells wrote about the 45,000-person strike's potential supply chain impacts. Because it involved major ports like New York, New Jersey and Savannah, he points out, the interruption of import and export activities could have led to delays in shipping schedules, increased transportation costs, and a bottleneck of imported and exported goods.

"Historically, strikes have had a ripple effect, causing widespread economic impacts that extend far beyond the immediate region," Howells adds. "Industries such as retail, manufacturing, and agriculture could see inventory shortages and production delays due to the unavailability of critical components and raw materials. This disruption might force businesses to reassess and diversify their supply chains, seeking alternative routes and transportation modes to mitigate future risks."

Shippers and carriers did take some proactive steps to avoid negative impacts from the strike. For example, [NBC Los Angeles](#) said several importers have "fractionally shifted" some of their allocations to LA and Long Beach in order to circumvent the strike's impacts. As a whole, the work stoppage was expected to cost the U.S. economy between several hundred million and \$4.5 billion per day.

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Procurement Doesn't Have to be Complicated

New Gartner, Inc., report shows professionals how to harness the power of simplicity in procurement processes.

It's no secret that procurement is often viewed as a bureaucratic, complex process that requires a lot of people and systems to run efficiently and effectively. In reality, procurement can be streamlined and simplified while still driving value for organizations and supporting their overall success.

In its new report, *To Crack Procurement Complexity, Make Processes Simple by Design*, Gartner, Inc. offers up some valuable tips on how to think beyond cost management and leverage supplier capabilities when streamlining the procurement function. "Rapid global changes are making procurement processes increasingly complex, but the standard streamlining tactic of cutting out steps can worsen the problem for employees and teams," Gartner's Ryan Tandler writes.

Of course, simplification is often easier said than done, and CPOs have historically had to make tradeoffs between cost, quality and speed. That said, Tandler sees some real potential for improvement in the procurement function, where simplicity can be a powerful ally. Here are four ways procurement departments can harness the power of simplicity:

Avoid the "efficiency trap." As Tandler says, "overzealously cutting steps from a process, or creating one with too few of them, increases complexity." Like instructions for assembling furniture, each stage of a procurement process provides guidance for the person carrying out the task—and the more thorough the roadmap is, the better. This is particularly critical in highly-complex situations, where team members need more steps to guide them.

Get your staff involved. Give users a seat at the decision-makers' table in process improvement initiatives and you'll wind up with a truly integrated team that can "co-create" change. "Staff must have real input in the design, not just opportunities for feedback," Tandler writes. "If users can't execute a procurement process consistently and effectively, the value to other stakeholders will be inconsistent and inadequate."

Focus on "designed simplicity." Designed simplicity is about making things easier for people to use and to understand. And while mastering conventional process redesign increases transformation success by 5%, Tandler says you can bump that number up to 42% by using designed simplicity. "Procurement functions that take the conventional route are 26% more likely to encounter complexity in their transformations," he writes. "Those that follow designed simplicity principles, on the other hand, are 21% less likely to do so. In other words, when CPOs follow the conventional method, their transformations make complexity worse, whereas designed simplicity reduces it."

Check out the business use cases. If you're not convinced that designed simplicity helps improve procurement efficiency, consider this business use case highlighted in Gartner's report. It says Trinity Health's procurement leaders recognized the importance of users' perspectives in process improvement and began requiring all procurement employees to submit at least one process improvement idea each year.

"The organization trains staff using tools like the Kaizen process improvement system, and managers coach team members throughout the ideation process," Tandler writes. This ensures that only the best ideas ever reach decision-makers. Since making the shift, Trinity has generated over \$1 million in annual cost savings in its procure-to-pay process alone.

Thinking Beyond the Conventional Route

Looking ahead, expect designed simplicity—that simplification of systems and processes without sacrificing efficiency or functionality—to play an increasingly larger role in procurement departments across all industries. The heavy burden that's being placed on leaders and staff to get involved with initiatives that "transform" functions will likely be a major driving force behind these efforts.

"Procurement functions that take the conventional route are 26% more likely to encounter complexity in their transfor-

mations. Those that follow designed simplicity principles, on the other hand, are 21% less likely to do so," Tandler writes. "In other words, when CPOs follow the conventional method, their transformations make complexity worse, whereas designed simplicity reduces it."

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Rebooting the Nation's Clean Nuclear Energy Grid

The U.S. Departments of Energy and Agriculture allocate \$2.8 billion to restoring and restarting a nuclear generating station in Michigan.

The U.S. Department of Energy (DOE) and U.S. Department of Agriculture (USDA) are allocating \$2.8 billion to support reliable, affordable and clean power in the Midwest. The DOE announced the closing of a loan guarantee of up to \$1.52 billion under the Inflation Reduction Act's Energy Infrastructure Reinvestment program to Holtec Palisades, which will restore and resume service of an 800-MW nuclear generating station in Covert Township, Mich.

According to the DEO, this represents a first of a kind effort on its part to restart an American nuclear power plant—generating carbon pollution-free energy and saving and expanding

a union workforce in Michigan while helping strengthen America's nuclear energy sector and advance core climate and domestic energy goals.

Carbon-Free Energy Source

The USDA also announced more than \$1.3 billion in Empowering Rural America (New ERA) program awards for two rural electric cooperatives—Wolverine Power Cooperative and Hoosier Energy—to reduce the cost of electricity passed on to their members for clean power from Holtec Palisades and other clean energy sources.

“Nuclear power is America’s largest source of carbon-free electricity, supporting hundreds of thousands of direct and indirect jobs across the country and will play a critical role in tackling the climate crisis and protecting public health and the environment from its impacts,” said U.S. Secretary of Energy Jennifer M. Granholm, in an [announcement about the new investment](#).

“Under President Biden and Vice President Harris’ leadership, DOE and our partners across the federal government are working around the clock to ensure this vital source of clean electricity—and the vibrant workforce it supports—continues to power our nation for generations to come,” Granholm added.

The First of its Kind

The Palisades Nuclear Plant ceased operations in May 2022. It will be brought back online and upgraded to produce clean baseload power until at least 2051, subject to U.S. Nuclear Regulatory Commission (NRC) licensing approvals. The NRC also issued new guidance to ensure the restart is performed safely and to high standards.

Once completed, the project will be the first recommissioning of a retired nuclear power plant in U.S. history. Michigan Governor Gretchen Whitmer says reopening Palisades will keep energy costs low, shore up domestic energy production and secure Michigan’s competitiveness for future economic development.

Palisades will also hold the title of the “first successfully restarted nuclear power plant in American history” and will provide access to clean, reliable power for 800,000 homes. In addition, the plant restart will also help avoid about 4.47 million metric tons of greenhouse gas emissions (GHGs) annually for a total of 111 million metric tons of GHG emissions during the projected 25 years of operations—an amount roughly equivalent to the annual emissions of 882,000 homes.

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Conflict Minerals Reporting isn't Improving the Situation in the DRC

Fourteen years after Dodd Frank passed, violence and illicit trade in the Democratic Republic of Congo is still prevalent.

It's been 14 years since the U.S. passed the "Dodd Frank Act Section 1502" legislation requiring U.S.-listed organizations to perform due diligence on minerals sourced from the Democratic Republic of Congo (DRC) and neighboring countries. These minerals (tantalum, tin, tungsten and gold) are mined in an area of the world rife with armed conflict and illicit trade, and may find their way into cell phones, laptops and other electronics.

The trade of gold, tantalum, tin and tungsten helps finance violent conflict in the eastern region of the Democratic

Republic of the Congo. To reduce revenue to armed groups profiting from this trade, Congress directed the Securities and Exchange Commission to require companies using these conflict minerals to disclose their origins.

Despite government efforts to reduce the use of conflict minerals in electronics manufacturing, a new report from the U.S. Government Accountability Office (GAO) reveals that peace and security hasn't improved in the DRC as a result of the SEC disclosure rule.

"SEC's rule requiring the disclosures hasn't reduced violence," the GAO says in its report. "Armed groups continue to fight for control of gold mines in the country's eastern region. This is partly because gold is harder to trace and easier to smuggle than the other minerals."

Key Findings

The GAO's latest report found that:

- There's no evidence that the rule has decreased the occurrence or level of violence in the eastern DRC, where many mines and armed groups are located.
- The rule was associated with a spread of violence, particularly around informal, small-scale gold mining sites. "This may be partly because armed groups have increasingly fought for control of gold mines since gold is more portable and less traceable than the other three minerals," it says.
- The number of violent events in the adjoining countries did not change in response to the SEC rule.
- The number of companies filing conflict minerals disclosures in 2023 increased for the first time since 2014, but many companies continued to report being unable to determine their minerals' origins.
- In 2023, an estimated 63% of companies made preliminary determinations, based on their inquiries, about their conflict minerals' origins. "Of those that then performed due diligence," the GAO points out, "an estimated 62% reported being unable to determine the minerals' source."

The Upsides

Given the complexities associated with conflict minerals and the entrenched nature of conflict in eastern DRC, the SEC disclosure rule alone probably wasn't going to meaningfully reduce violence in the region.

However, the SEC disclosure rule has had benefits. "Experts and industry stakeholders told us that the rule has encouraged responsible sourcing efforts and helped make companies aware that their supply chains can affect conditions on the ground," the GAO points out in *Peace and Security in the Congo Has Not Improved with Conflict Minerals Disclosure Rule*. "The rule has also raised international awareness about the risks of minerals benefitting armed groups and contributing to conflict in the DRC."

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5 Ways Artificial Intelligence Supports the Global Supply Chain

Here's how AI is already being used to make the supply chain smarter, more efficient and more predictive.

As artificial intelligence (AI) continues to make its way into a wide variety of business functions, the supply chain has become a focal point for technology that helps organizations run their complex, intertwined global networks.

“Virtually every supplier of supply chain solutions is eager to explain the ongoing investments they are making in artificial intelligence,” ARC Advisory Group’s Steve Banker writes in *Forbes*. “Any device that can perceive its environment and can take actions that maximize its chance of success at some goal is engaged in some form of artificial intelligence. AI is not a new technology in the supply chain realm; it has been used in some cases for decades.”

Here are some of the ways that AI is being used to make the world’s supply chains smarter, more efficient and more predictive:

1. Optimization of supply planning, factory scheduling, supply chain design and transportation planning. Optimization is all about creating plans that help organizations achieve service levels and other goals at the lowest cost. When AI is used to optimize plans and schedules, for example, companies can do a better job of meeting demand without over-producing or dealing with under-stocked situations.

2. Machine learning that assesses outputs, observes their accuracy and then adjusts accordingly. “Demand planning

engines have natural feedback loops that allow the forecast engine to learn,” Banker writes. “The forecast can be compared to what was actually shipped or sold.” Demand planning applications based on ML can also enhance forecasting by incorporating competitor pricing data, store traffic and weather data.

3. Natural language processing (NLP) that selects commodity classification for use in imports and exports and in real-time supply chain risk solutions. “Using the right product classification allows companies to pay the correct tariffs,” Banker points out. “Paying the right tariffs is necessary to avoid government fines and calculate the true landed cost of products.” By combining NLP and advanced systems, organizations can automate and improve that classification process.

4. More accurate predicting of customer behaviors, requirements and experiences. In “The Role of AI predictive analytics in supply chain management,” Manoj Kumar says knowing customer behavior helps companies better understand those buyers and their needs. This is yet another area where AI is helping organizations improve and enhance their supply chain operations. “Businesses can optimize their marketing and sales efforts by using AI-powered predictive analytics to anticipate their customers’ behavior,” Kumar points out. Companies can then use customized services and recommendations to improve the customer experience and keep those buyers coming back for more.

5. Identify and address disruption before it happens. Artificial intelligence may not technically be a “crystal ball,” but it does help organizations recognize and manage potential disruptions and complex situations before those issues actually emerge. Take the recent Red Sea attack that impacted the shipping industry, for instance. The situation drove route times and shipping costs up and impacted about 15% of global shipping traffic. “Currently, AI demand predictions allow businesses to adjust shipment volume until situations such as the Red Sea attack improve,” Rick LaGore writes in *“How Will AI and Automation Affect the Future of Supply Chains?”* “AI can analyze the market, identifying opportunities to shift modes, and offer solutions based upon how markets have reacted to similar issues previously.”

More to Come

Based on this short list of business use cases, AI is clearly revolutionizing supply chain management, enhancing operations and optimizing the planning process. It can also help predict customer behaviors, address looming disruptions and help

organizations create more agile, anti-fragile global supply and distribution networks. As AI continues to advance, expect its impact on supply chains to expand exponentially and drive even more innovation and transformation in the future.

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Beyond the Hype: The Practical Benefits of Blockchain in Procurement

The blockchain buzz may have calmed down in recent years, but the technology—along with smart contracts—continues to show promise in the procurement space.

As artificial intelligence (AI) continues to make its way into a wide variety of business functions, the supply chain has become a focal point for technology that helps organizations run their complex, intertwined global networks.

It's been a few years since the loud buzz around blockchain quieted down, but that doesn't mean interest and development of this advanced technology has faded. In fact, the global blockchain procurement market is on track to expand at a

compound annual growth rate (CAGR) of nearly 88% over the next six years, Grandview Research reports.

“Data traceability and transparency, trust and accountability, decentralization, and immutability are driving the market growth,” the firm points out. “Blockchain has brought a paradigm shift in procurement, supplier management and supply chain with the innate ability to transform all sorts of digital transactions.”

What is Blockchain?

By definition, blockchain is a group of processes that join forces to provide instant, shared and transparent information stored on an immutable ledger that's only accessible to authorized members. The blockchain provides a trusted and reliable platform for procurement, ensuring that transactions are fair, efficient and secure.

Here's how it works:

- An authorized participant inputs a transaction.
- The technology authenticates it.
- The transaction is recorded as a block of data.
- The block is sent to every computer node in the network.
- The authorized nodes corroborate transactions and add the “block” to the blockchain.
- The transaction is finalized based on an “update” that's distributed across the network.

In “How to use blockchain and smart contracts in procurement,” Marcel Deer discusses the prevalence of highly manual, scattered, inefficient and complex procurement processes. He says blockchain can address all of these issues by making those processes faster, more organized and more affordable.

For example, buyers use a lot of contracts, agreements and documents like purchase orders, invoices and delivery notes. “Many of these documents might be paper-based, and processes can be manual or involve multiple software systems,” Deer writes. This leads to errors, delays and other issues that can make the procurement process highly inefficient.

The Benefits of Blockchain in Procurement

Adding blockchain to procurement starts with finding the most beneficial entry point and then putting the right technology in place to support it. Once that happens, companies can start realizing benefits like:

Automation that eliminates manual delays and inefficient paperwork. For example, procurement managers will no longer have to “check” a delivery notice and release an invoice for payment. Instead, a smart contract (a computer program that automates procurement contracts) can perform these tasks.

Streamlined contract management. Companies can use digital contracts to automatically execute and enforce the terms of an agreement once predefined conditions are met, without the need for intermediaries. “Smart contracts offer immutable records and transparency, significantly reducing the chances of fraud or disputes,” Wis Amarasinghe writes in “Unlocking New Potential in Supply Chain Efficiency with Blockchain and Smart Contracts.”

Better and faster dispute resolution. “If there is a disagreement,” Deer writes, “a supplier or a company can quickly check blockchain records for the status of a shipment or payment.”

Tamper-proof transaction records. This is a particularly important benefit for procurement professionals, who often face challenges in tracking the authenticity and origin of goods. “With blockchain, every transaction from the source to the final delivery can be recorded in an immutable ledger,” Amarasinghe points out, “providing complete visibility and accountability throughout the supply chain.”

Here's a Good Starting Point

Companies that are just getting their procurement blockchain and/or smart contract initiatives can start by conducting a blockchain pilot project focused on tracing high-value or critical goods. “Platforms such as VeChain or IBM Blockchain offer tailored solutions for supply chain traceability,” Amarasinghe recommends, “[and help] procurement teams ensure that goods are ethically sourced and suppliers adhere to contractual obligations.”

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October Supply Chain News Roundup

As an eventful October comes to an end, here's the supply chain news that made headlines over the last month.

Multiple hurricanes, catastrophic flooding, an averted port strike and a severe shortage of intravenous (IV) fluids were just some of the major events that made supply chain headlines in October. With hurricanes Helene and Milton both inflicting damage in Florida and up the Eastern Seaboard, the weather's wrath had both an immediate and longer-term impact on global supply chains.

At the University of South Florida (USF) in Tampa, Assistant Professor Seckin Ozkul is now analyzing the impacts of Hurricanes Milton and Helene in the university's Supply

Chain Innovation Lab. The team is creating models that reflect the effects of multiple large hurricanes hitting the same region in a short time span.

"The back-to-back impact of Hurricanes Helene and Milton presented new challenges, particularly with fuel shortages, which were exacerbated by the closure of Port Tampa Bay and the increased demand from evacuations," Ozkul said in a university publication. "The goal is to support government agencies in making informed decisions to minimize disruptions and optimize evacuation plans during future storms."

Ozkul hopes the models are ready before the 2025 hurricane season. That way, officials will be able to use them to help improve disaster preparedness, particularly for fuel distribution, by rerouting supplies to ensure the availability of critical resources.

The move ended a strike that had threatened to interrupt East Coast and Gulf Coast ports and U.S. supply of fruits, automobiles and other goods.

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Typical Peak Season Ahead?

Supply chain seasonality has been somewhat "topsy-turvy" since the global pandemic took hold in early 2020, but at least one transportation and logistics company says a more predictable freight environment may be in sight.

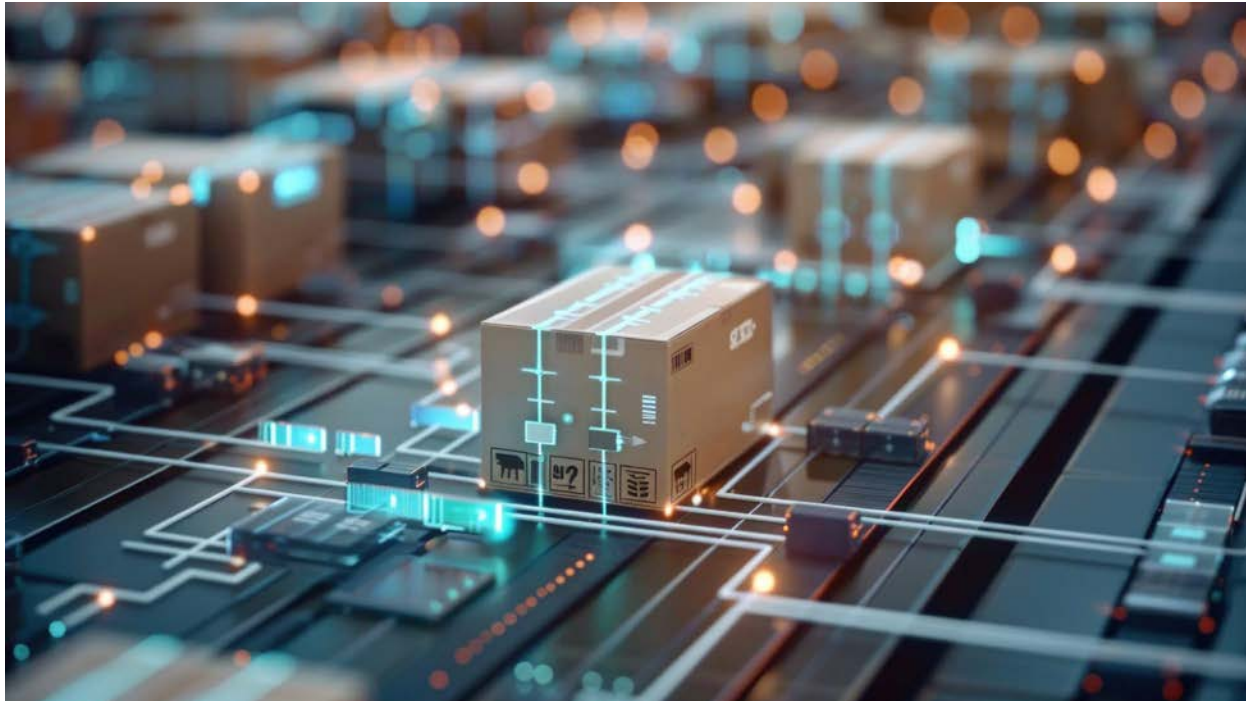
"While in general, capacity remains readily available in the market on the highway side of the business, some customers are beginning to use more mini bids to fill some out-of-cycle capacity needs," said J.B. Hunt's Spencer Frazier in a recent conference call, *FleetOwner* reports. "Additionally, there is interest in having more collaborative long-term planning discussions around business strategies. Historically, both of these engagements have been indicative that supply and demand are becoming more in balance."

FleetOwner says J.B. Hunt's report and executives' commentary jibe with the latest set of truckload volume and rate data. For example, DAT's Truckload Volume Index for September showed year-over-year increases for van, reefer and flatbed freight. DAT's Ken Adamo said those numbers showed that "we're firmly into a new freight cycle" and that more traditional seasonality trends should provide a lift to carriers in the coming months.

Port Strike Averted

October was also the month when U.S. port workers and operators reached a deal to immediately end the looming East Coast strike. According to *CNBC*, the International Longshoremen's Association (ILA) and the United States Maritime Alliance agreed to a tentative deal on wages.

ILA wages will increase 61.5% over six years under the tentative agreement, although port automation remains a key issue over which the union and port ownership group remain divided. The two sides also extended their existing contract through Jan. 15, 2025 to provide time to negotiate a new contract.



Top Electronics Distribution Trends to Watch

Here are some of the key trends shaping the current electronics distribution market.

The electronic components distribution market is smack in the middle of a growth spurt, according to [Market Research Intellect](#), which pegs the market at \$2.85 billion and expects it to reach \$6.63 billion by 2031. During that seven-year span the market will post a compound annual growth rate (CAGR) of nearly 13%.

That double-digit growth is being driven by the consumer electronics, automotive, telecommunications and industrial automation markets, all of which rely on electronic components to run their increasingly sophisticated products. Other market drivers include rapid advancements in technology,

particularly in areas like the Internet of Things, 5G and artificial intelligence (AI)—growth that’s fueled the need for more complex and specialized components.

Additionally, the research firm credits the rise of electric vehicles (EVs) and renewable energy systems with creating new opportunities for component distribution. “With the expansion of global supply chains and a focus on miniaturization and higher performance,” it says, “the market is poised for further growth as manufacturers and distributors adapt to evolving customer needs and technological innovations.”

Cautious but Optimistic

At least in the short term, the Electronic Components Industry Association (ECIA) has been reporting a “tempered momentum” among the electronic component manufacturers, independent manufacturer representatives and authorized distributors that the organization represents. According to ECIA’s September survey, the overall positive market sentiment lasted for two months (July and August) before the overall average fell to 98.8, a drop of nearly 10 points.

“While the September results are only slightly below the threshold of 100, the main message is that the momentum that appeared to be building has been lost,” said ECIA Chief Analyst Dale Ford in the report. “The market is still struggling to gain its footing to support consistent month-to-month growth.”

ECIA is optimistic about the future, however, as the “continued introduction and market adoption of exciting innovative technologies should motivate both corporate and consumer demand for next-generation products over the long term.”

Tracking the Top Tech Trends

As companies across all industry sectors continue to modernize their technology and invest in more digitization, electronics distributors are making similar moves with the goal of improving efficiencies, reducing manual tasks and streamlining their operations. In “How 5 Distributor Technology Trends are Moving,” Jeremy Centner states that distributors are investing in solutions that:

- **Break down data silos.** Cloud-based modern enterprise resource planning (ERP) systems can drive visibility across departments, breaking down these silos to unlock valuable insights.
- **Provide greater financial visibility.** Financial dashboards centralize and help CFOs and other C-suite leaders make sense of data across the organization, allowing for a 360-deg., real-time view of operations.
- **Support better supplier communication and collaboration.** “One of the key challenges distributors face has always been supplier communication — or the lack thereof,” Centner writes.

- **Address cybersecurity concerns.** “...distributors must prioritize cybersecurity in 2024 – no matter their size,” Center advises. “Companies also face risk due to potential vulnerabilities through their supply chain partners.”

A More Efficient, Intelligent Future Lies Ahead

Electronics distributors are also putting their best foot forward on the AI front, where they’re using the advanced technology for supply chain management, advanced data analysis and other functions. In “How AI is Transforming Electronic Components Supply Chains,” Jack Pollard writes about how AI is impacting the daily work of component procurement engineers and designers, enabling them to more effectively respond to the rapidly changing market demands.

“AI’s advanced algorithms can process and analyze vast amounts of data, including historical purchase data, market trends, technological developments, and consumer behavior,” Pollard notes. “This data analysis not only helps predict the demand for specific components but also provides insights into future technological trends, allowing engineers to adapt to new technologies and market changes in advance.”

As AI continues to make its way into the electronic components supply chain, engineers and designers will be able to better enhance efficiency, accuracy and innovation. “As AI continues to advance,” Pollard concludes, “professionals in the electronic components industry will be better equipped to handle rapidly changing technological demands, pushing the entire industry towards a more efficient and intelligent future.”

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