

Supply chain networks in the age of generative AI:

Turning promise into performance



Foreword

The annual <u>Accenture Pulse of Change Index</u> found that technology rose to the top of the list of business disruptors in 2023, catapulted by advances in generative Al. The technology is unique in its ability to impact the entire value chain, reinventing every part of an organization and resetting the performance frontier.

Based on our <u>Technology Vision 2024</u>, 95 percent of executives agree that generative AI will compel their organization to modernize its technology architecture. The good news for supply chain leaders is this exciting revolution in machine learning is creating an array of possibilities for reinventing work in their domain too.

In this paper, we present a comprehensive and forward-thinking exploration of the opportunities across the end-to-end supply chain. We see applications in everything from sourcing and planning, through manufacturing and fulfillment, to aftersales and service. We also see significant value in cross-functional outcomes like supply chain sustainability, resilience, talent management, and customer-centricity.

Can organizations realize this value today? We believe they can. But it means approaching generative AI not merely as 'just another' technology implementation. It's an enterprise transformation, with implications for the way an organization thinks about its data, talent, and ways of working. Not to mention the critical importance of implementing generative AI responsibly and securely.

By embracing this broader change, supply chain leaders can fully capitalize on the age of generative Al. And drive innovation across supply chain networks that deliver better outcomes for business, for people, and for the planet.

It's an exciting journey. And it's one I look forward to supporting our clients on in the months and years ahead.



Kris TimmermansGlobal Lead – Supply Chain & Operations



Welcome to the age of generative Al

Accenture analysis suggests 43 percent of all working hours across the entire supply chain function will be impacted — with generative AI either automating activities (29 percent) or significantly augmenting the work of human employees (14 percent). Given the sheer scale of the global supply chain workforce, the potential cumulative value for businesses is massive.

Generative AI is booming. Since ChatGPT launched in late 2022 the technology has taken the world by storm. Across industries and business functions, companies are looking to explore the possibilities and capitalize on the transformative potential of the creative side of AI.

The sheer number of possible applications has captured the attention of business leaders. Our research found that 97 percent of senior executives agree that generative AI foundation models (also known as Large Language Models or LLMs) will be transformative for their company. And 100 percent anticipate changes to the workforce.²

Why is this good news for supply chain leaders? LLM capabilities are not limited to coding, content creation or marketing. They also hold immense promise across the end-to-end supply chain network. There's value to be gained in everything from new product development, procurement and planning, manufacturing and logistics, to after sales and services.

A transformation, not a temporary fix

There's broad consensus about generative Al's potential, and many organizations are actively experimenting. But our <u>Pulse of Change Quarterly survey</u> suggests only one in three has so far made a significant investment.

Why?

All C-suite leaders are grappling with fundamental questions. How much of the hype around generative Al is real? Can its promise be turned into scalable solutions? Which use cases can deliver real value today? And how do leaders get the data and the organization ready to capitalize on the opportunity?

Our view?

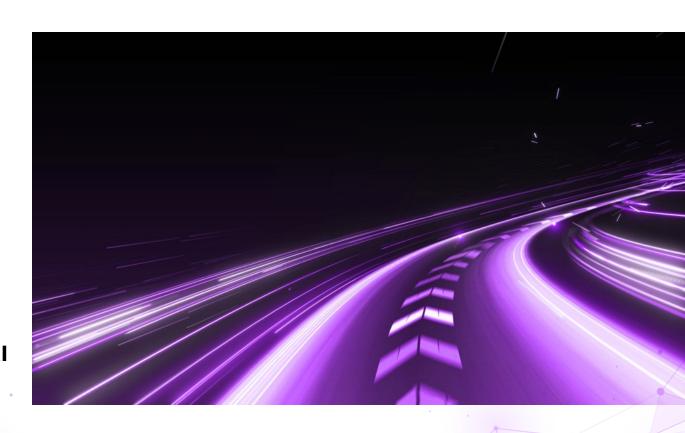
There's real value on the table across the end-to-end supply chain. But reaping the benefits requires a profound shift in the way an organization thinks about creating value and getting work done. It means approaching generative AI not merely as the latest in a long line of software implementations, but rather as an **enterprise transformation**, with a clear focus on end-to-end business capabilities and implications for areas like data, people, ways of working, processes and responsible adoption.

Success with generative AI means getting the data ready, getting people ready, and getting the enterprise ready

Generative AI excels in **language-related activities**, as we'll explore in the following sections of this paper. However, supply chain leaders must also recognize that, while it's incredibly powerful at what it does well, it's not suited to every task. In particular, supply chain activities that are more focused on numerical processing or require greater levels of complex reasoning will see less direct impact. It's why we also recommend viewing generative AI in its broader context — as part of a **continuum of automation capabilities** that include traditional process automation and classical machine learning models, as well as LLMs.

Fast-forward to the Al-powered supply chain

Generative AI-powered reinvention helps bridge the gap from the linear supply chains of the past to the truly interconnected, intelligent supply chain networks of the future. Building on previous advances in supply chain management artificial intelligence, **generative AI offers a range of new capabilities.**



What makes generative Al so powerful?



Contextual understanding. Supply chain managers can use generative AI to make better decisions based on contextualized insights from unstructured data sources that were previously inaccessible. Examples include improving forecasting by scanning huge numbers of public online sources to identify the root causes of future demand. Or embedding generative AI into a Supply Chain Control Tower to enhance the way users interact with data, improving explainability and trust. Generative AI can also be combined with existing process automation to significantly streamline supply chain activities.

Conversational capabilities. Supply chain workers can use generative AI to gain access to tailored insights and automations based on chatbot interactions in everyday language. That might include asking a chatbot to help find a specific spare part and create a call-off or spot buy to a preferred supplier if it's not available. Other applications include auto-generating documents like purchase orders, training and upskilling manufacturing workers and maintenance troubleshooting.

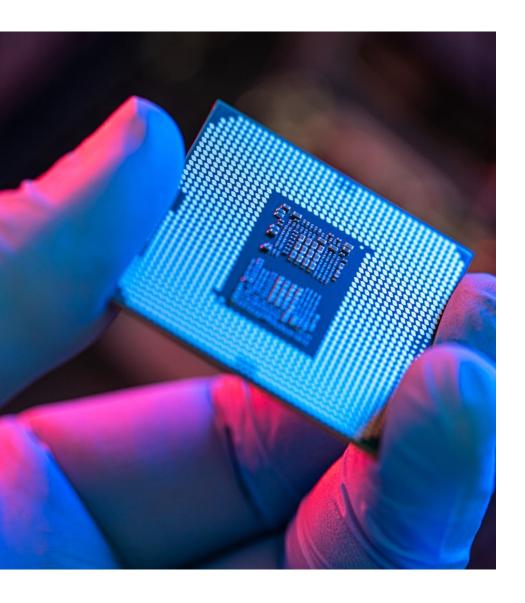
Content generation. Generative AI offers the promise of creating relevant, context-specific text, code, images or insights on demand and on an industrial scale. Today, applications in sourcing and procurement are the most robust, such as auto-generated vendor-specific insights (KPIs, market trends, demand forecasts) to support contract renewal negotiations with suppliers, as well as contextualized business operational performance metrics.

Together with existing AI, machine learning models and workplace platforms, these capabilities will allow companies to optimize and elevate supply chain operations, solve pressing supply chain challenges, and, ultimately, ensure supply chain networks have a more positive impact on business, people and the planet.

How generative Al creates impact across supply chain functional domains

For Chief Supply Chain Officers (CSCOs), generative Al's promise extends all the way across supply chain network operations, from designing and planning through to aftersales and service. Accenture's analysis indicates that, in total, a massive 58 percent of the 122 supply chain processes analyzed, can be reimagined.³



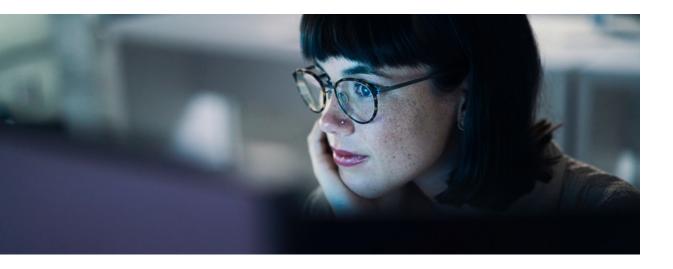


Design and engineer

In domains like model-based systems engineering, LLMs will increasingly **augment and accelerate the work of designers.** By tapping into historical data, generative AI solutions will quickly generate new designs and models, saving time and reducing repetitive effort, especially during design iterations.

Packaging design is a good example. The need to consider multiple factors — sustainability, ease of transport, durability, regulations, branding, and more — eats into time and limited resources. At the same time, documenting and retrieving packaging information becomes increasingly difficult with large product portfolios. Generative AI can serve up multiple design concepts (in 2D or 3D) as well as proposing suitable packaging copy and marketing based on summarized design information. Human co-workers can then review these concepts to ensure compliance with product and regulatory requirements.

The applications for biopharmaceutical companies are particularly powerful. Terray Therapeutics is using generative AI to revolutionize small-molecule drug discovery. Its COATI foundation model for chemistry translates chemical structures into numerical representations, allowing generative AI to design novel optimized molecules.⁴



Generative AI will democratize access to supply chain network insights, transforming the way people interact with planning tools and data

Plan

Many CSCOs have already implemented advanced analytics solutions to **augment and optimize supply chain planning activities.** However, the complexity of the insights these tools produce, and the need for specialist expertise in making them actionable, means they can often be challenging to use in practice.

Generative AI promises to **revolutionize access to insights**, not only in supply chain planning but also in areas like network design optimization. Through simple-to-use interfaces, employees can query optimization recommendations in everyday language and receive explanations they can easily understand and action. This opens up critical insights to a much larger number of supply chain workers, while also improving trust in data and accelerating speed to action for domain experts.

At the same time, generative AI can be used to bring a broader set of unstructured data sources (such as market reports, news results and social media) into forecasting calculations. It also supports more collaborative and streamlined ways of working across sales and operations planning — instantly summarizing meeting action points, comparing plans with actual outcomes, building dashboards of key metrics, even generating draft plans themselves. This will free up planners' valuable time for more strategic tasks.

Source

Today, sourcing and procurement teams grapple with challenges stemming from inefficient, manual processes, diverse categories, and system integration issues. While teams often spend significant time on strategy alignment, sourcing, and data reconciliation, generative AI presents an opportunity to **streamline operations**, **bridge information gaps**, and improve access to a broader array of data sources, enabling faster insights and simplified processes.

It also opens up the possibility of **hyper-automation**, where different forms of automation — including existing machine learning algorithms and process automations as well as generative AI — are linked together as part of an increasingly autonomous system at scale. This promises to free teams for more valuable work and enhance overall efficiency.

Consider how retail giant Carrefour is using generative AI to enhance its internal purchasing processes. The company is developing a solution that will help employees complete everyday tasks more quickly, including drafting invitations to tender and analyzing quotes.⁵

Generative AI is here to stay. It's becoming one of the key tools in the enterprise digital core — with applications in procurement and beyond





Imagine if every business user had an **assistant buyer** powered by generative AI. When they needed to buy something, the assistant could guide them to the right buying channel, support any call off or spot buy, and, if needed, connect with a professional buyer to handle the purchase.

Text-heavy activities like **contract generation** also stand to gain significantly. A generative AI solution can be applied to large volumes of unstructured procurement information, such as historical contracts, procurement policies and product specifications, to identify common patterns and requirements. This allows it to instantly produce a first draft of a new contract, which teams can then review and enhance using their procurement expertise.

What about **RFP drafting?** Fine-tuned on historical RFI, RFP and RFQ information, generative AI can not only draft RFx documentation, but also review and compare the responses that are returned by suppliers. Upstream procurement activities like **supplier discovery** and **category management** also stand to gain from generative AI's ability to rapidly summarize a wide array of market intelligence insights.

Accenture has built a **smart sourcing and contracting tool** using generative AI. It helps sourcing managers with supplier negotiations by analyzing business requirements, historical contracts, and bidding patterns to suggest suitable sourcing strategies. The tool also suggests terms and conditions to help ensure best-in-class contracts result from negotiations.

Make

If companies can bring their IT data together with their operating and engineering data, generative AI will help them achieve a consistent level of **quality and operational excellence** in their manufacturing operations, particularly in areas such as asset maintenance and empowering the workforce with actionable predictive insights. It can also offer new insights into product design and quality control.

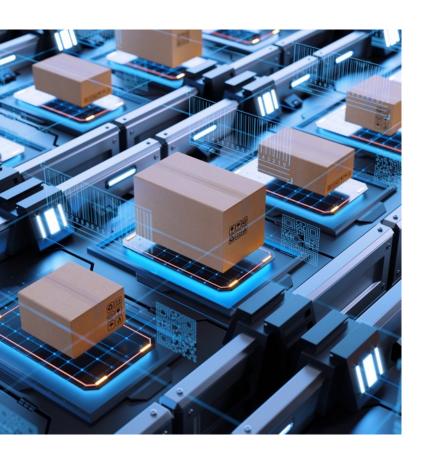
In **plant management**, for example, asset maintenance teams often grapple with complex processes and large volumes of asset-specific documentation. Generative AI can be used to digest all this information and summarize it into a series of logical steps as part of a work order. It means expert know-how is unlocked and democratized across the workforce — improving not only operational performance but also job satisfaction.

What about **maintenance planning?** Many companies in heavy industries are moving towards risk-based inspections (RBI) to unlock value. But planning for these inspections, plus preventive maintenance and operator care routines, is still a manual, human-intensive and repetitive process. It needs highly skilled field engineers to create planning documents, as well as subject matter experts to review them. However, generative AI can write precision maintenance job plans for equipment classes or specific equipment with high accuracy and completeness. That significantly reduces the time needed to create and review key planning documents.

As data availability and trust improves, generative AI will also be increasingly applied to the wealth of insights in **operational digital twins**, expediting diagnoses and root cause analyses. And the combination of classical and generative AI offers the promise of significantly streamlining access to predictive maintenance insights, real-time data analysis and failure diagnostics by making the information more consumable through easy-to-use Q&A interfaces.

Quality control and compliance, too, stand to gain. Even companies in heavily regulated industries like pharmaceuticals are exploring how generative AI can be applied to multiple data sources to identify irregularities in cold chain management and auto-populate compliance documentation for review by human experts. Generative AI can also draft technical publications with accurate content, significantly reducing authoring efforts. In aerospace, for instance, it can accelerate the production of legally mandated technical documentation such as work/assembly/repair instructions, user manuals, warranty information and instructions for use (IFUs).

Generative Al's immense promise in manufacturing reinforces the call for a holistic data strategy across information, operational and engineering technologies



Fulfill

Today, supply chain disruption is everywhere. It's forcing companies to transform supply chain operations for greater resiliency, relevancy, and responsibility. Leaders are focused on improving forecasting while implementing Transportation Management Systems (TMS), Warehouse Management Systems (WMS) and Warehouse Automation/Robotics to drive up agility and efficiency.

By layering generative AI onto the broader data maturity and automation agenda, companies can achieve significant gains in fulfillment. That includes enhancing **hyper-personalized customer experiences** and extracting new revenue opportunities from insights based on large volumes of omnichannel data. Fulfillment operators can also use generative AI to suggest ways to **optimize transportation management** and **improve forecasting** by considering a broader range of factors from unstructured information (such as weather forecasts and competitor activity).

Consider how an **LLM-powered import/export document generator** could transform shipping and export processes. Generative AI can be applied to a comprehensive collection of multi-modal unstructured information, including historical internal records and governmental regulations, across various formats, including PDFs and tablets. Shipping and export documents can then be automatically populated for human experts to review and verify, reducing opportunities for error while saving time and manual effort.

Service

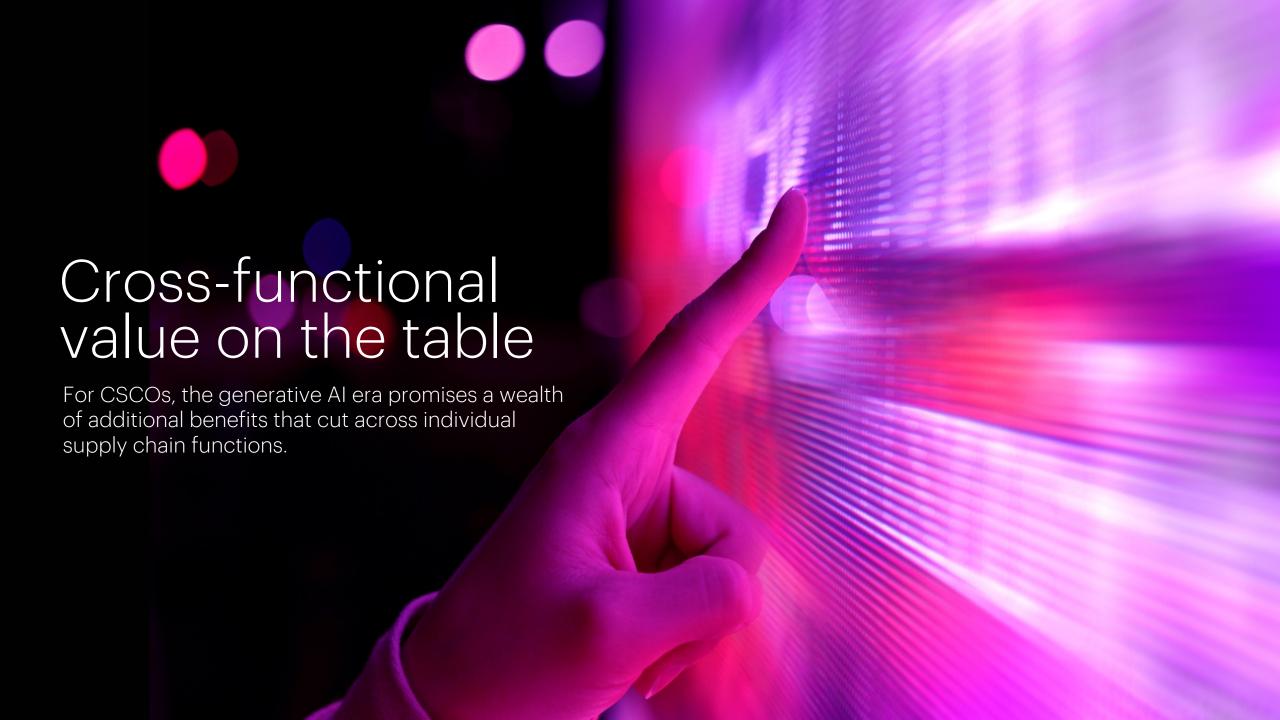
The goal of providing services rather than just products is becoming a reality for many companies. However, the service space is typically still highly fragmented, with assets and resources distributed regionally and globally. It's also heavily reliant on coordination with other parts of the supply network. Not only that but executing a service-oriented strategy requires a far more proactive approach to forecasting and responding to individual customer needs.

It's why generative AI can have a game-changing impact. Its ability **to scan vast amounts of information** across a broader range of data sources — including unstructured data that was previously difficult to process — offers the promise of deeper insights. From geographic locations to weather conditions and from customer lifestyles to individual usage patterns, these can be combined with classical AI techniques to enable truly one-to-one service experiences on a global scale.

An example? Look at how Accenture helped one major automotive company use generative AI to enhance customer support. By creating **an intelligent incident resolution copilot** to summarize incidents, detect known issues, recommend resolutions and compose customer responses, we're helping customer support agents access contextualized information and resolve incidents faster.

Generative AI will help companies transform millions of customer interactions into truly one-to-one service experiences







The combination of generative Al and human ingenuity is the key that unlocks next-level supply chain network sustainability

Sustainability

Companies are under pressure to increase their supply chain sustainability and report on their corporate responsibility commitments more accurately. However, with information dispersed across a multitude of sources and sustainability categories, teams are faced with an almost insurmountable challenge collecting and analyzing the data. The work is slow and requires intense manual effort from subject matter experts.

It's no surprise, then, that 63 percent of CEOs say the lack of ESG data measurement across the value chain is a key challenge. But generative AI offers solutions. For example, we worked with one **global pharmaceutical company** to accelerate supply chain decarbonization efforts. The company's teams had spent years painstakingly compiling data on how many suppliers had science-based targets (SBTs). We built a generative AI solution capable of delivering near-instant insights by trawling through thousands of supplier websites. After one hour, the company had reliable intelligence confirming it had already exceeded its supplier SBT target.

Generative AI has many other use cases in sustainability, including generating prioritized **decarbonization roadmaps** for individual companies and enhancing <u>Scope 3</u> emissions reporting. Today, for example, accurately matching company spending to emissions is time-consuming and laborious work. Accenture developed a generative AI solution able to sift through millions of lines of spend data, across multiple languages, and automatically map each line item to relevant emissions factors, which procurement teams can then review. A process that once took days can now be completed in minutes.

Generative Al
is empowering
people to work in
smarter ways,
think more
strategically
and drive more
business value

Intelligent ways of working

One of generative AI's most revolutionary aspects is the way it lets people interact with unstructured data more easily and comprehensively. One way to think of it is as a "superpowered navigation system" for language-based activities, providing nearinstant access to consumable data insights that help people accomplish tasks faster and more effectively.

This will empower supply chain leaders and their **teams to reinvent the way work gets done.** For instance, generative Al's ability to shift unstructured data on a superhuman scale helps demand planning and supply chain resilience teams unlock insights into market trends and developments. Examples include the rapid analysis of market data to understand and predict pricing changes of raw materials, understand consumer reaction to promotional activity, and connect the dots between global disruption events and supplier lead times.

Accenture created a generative **AI powered market watcher tool** for commodities. It's designed to help business analysts at oil and gas companies as they make purchasing decisions. The tool ingests a broad range of both structured and unstructured data and outputs key metrics in numerical formats for further analysis, saving time and effort while also enriching model outputs with expanded data sources.



Resilience

When it comes to managing disruption in supply chains — which has cost businesses \$1.6 trillion in missed revenue opportunities over the last 2 years, according to recent research — one of the key challenges for CSCOs is knowing who their n-tier suppliers are and assessing if they're a potential source of risk and vulnerability. Understanding the full configuration of these supplier networks is a critical prerequisite for **increasing supply chain resilience.**

Generative AI can support these efforts by augmenting existing AI-powered solutions that analyze structured data (such as trading reports) with the analysis of much larger volumes of unstructured data (such as news sources, videos, chatting traffic, etc) to produce deeper insights into the supplier network.

Generative AI is opening up previously inaccessible insights into n-tier supplier networks for boosting supply chain resilience



Procurement teams can also use **generative AI chatbot interfaces** to make those insights more accessible, helping them collaborate with suppliers to understand where priority risks exist and make more effective sourcing decisions.

An example? Accenture built an **N-tier Supply Chain Navigator** powered by OpenAl GPT. It helps procurement managers analyze supplier network data by providing real-time insights, answering specific queries, and facilitating data-driven decision-making. Employees can quickly and easily query the tool to identify supply network vulnerabilities — such as suppliers with geographic ties to conflict areas or locations experiencing natural disasters.

Customer-centricity

Generative Al's ability to provide accurate, easy-to-use chatbot interfaces has many applications in building a more **customer-centric supply chain network.** Take product design, for example. Generative Al can analyze a broad range of unstructured customer feedback, such as online product reviews and social media sentiment, much faster. This can then be channeled back into product design workflows, allowing for rapid feedback loops between customer demand and product development.



Companies can use LLMs in conjunction with classical AI to transform service-related call center experiences. Examples include predicting customer intent and creating a tailored tone of voice — especially important when handling complaints. LLMs can also be used to summarize calls, generate action points, and draft customer responses, freeing up employees to focus on bringing human creativity and empathy to customer actions where they can add most value. What's more, each new customer interaction serves as additional context for AI models, improving the relevance and quality of outputs and thus customer retention.

Generative AI chatbots can also allow customers and employees to **explore complex technical product documentation** faster and more easily. For example, Accenture developed a generative AI solution for managing technical documentation, such as product manuals and guides. It not only allows companies to draft these documents faster, but also then query and summarize them in plain language, meaning readers can find and consume the information they need almost instantly.

Unlocking talent

For the first time in history, we're embracing a generation of **technology that** is "human by design". Generative Al's effectiveness hinges on human input to drive quality outputs — whether that's something straightforward, like drafting an email, or complex, like a financial forecast. These more human-centered processes will reinvent work across the entire value chain.

By synthesizing data, comprehending natural language, and converting unstructured data into actionable insights, generative AI is democratizing business process redesign, empowering everyone — from frontline workers to lab scientists to design professionals — to reshape their own workflows and **make language-based work faster and easier.** Generative AI is also being used to produce tailored learning materials, to help onboard and upskill new team members.

However, nearly half of organizations that are leaders in reinvention recognize that processes across the value chain will require significant changes in order to realize the opportunity for generative AI to accelerate economic value, increase productivity and drive business growth, while also fostering more creative and meaningful work for people.⁷



CSCOs also see key challenges in sourcing and retaining skilled talent. For example, 32 percent see talent scarcity, due to skill gaps or unawareness, as a major barrier in utilizing generative Al. And 36 percent believe workers will not fully embrace generative Al due to a lack of technological understanding.⁸ However, most workers (82 percent) believe they do grasp the technology. And 94 percent are confident they can develop the needed skills.⁹

Generative AI will help the supply chain workforce summarize insights at scale and assimilate information ever faster



Get the data 'gen Al' ready

Given the large amounts of data needed to customize and optimize LLMs, a **mature enterprise data strategy** is a critical prerequisite for a generative Al transformation. Those with strong supply chain data capabilities have an important head start over their peers.

However, many companies are still wrestling with the challenge of increasing their data and digital maturity across their supply chain networks. Now, they'll need to take this further by extending their data lifecycle management to include large volumes of **unstructured mixed-modality data** (meeting transcripts, technical documents, video, audio, images, and more), as well as **prompt engineering pipelines** and new "ModelOps" ways of working.

The good news? Generative AI can itself be applied to an organization's data pipelines to accelerate digital maturity. Companies can use it to **automatically synthesize and extract knowledge** from their supply chain data, including dramatically simplifying and maximizing the use of unstructured data. This creates a circular pathway that uses LLMs to mine and process supply chain data, which can then be supplied to supply chain use cases, including those supported by generative AI itself.

Companies are understandably cautious about supplying external generative AI solutions with business-critical manufacturing, purchasing and other supply chain information. Strict **data retention and privacy policies** and trustworthy security guardrails are therefore vital. CSCOs will need to weigh up the relative risks and rewards of using their proprietary data to enhance LLM outputs in each use case. Working with partners who can guarantee data security and provide sandboxed generative AI solutions is one way of safeguarding data in supply chain implementations.



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Build trust and minimize risk with responsible Al

From potentially biased and harmful outcomes, to question marks over accuracy, "supply chain cannot hallucinate" and user trust, to security and data vulnerabilities, generative Al represents a unique shift in the business risk landscape. That's why it's essential to take a responsible approach to supply chain implementations from the very start. Employees, customers and supply chain partners all need to trust that any Al implementation is fair, secure and reliable.

Accenture believes strongly in leading by example when it comes to responsibility. It's why we've been pioneering our **responsible AI framework** for the best part of a decade. Updated for generative AI and built on four key pillars — principles and governance; risk, policy and control; technology; and people, culture and training — our framework has been scaled to over 700,000 people in our organization worldwide.

Focus on people and processes

While generative AI is not about replacing people or jobs, it will have an increasingly central role in day-to-day work. Accenture analysis indicates that, in seven of 15 supply chain network occupations — including purchasing managers and buyers, production, planning and expediting clerks, industrial production managers, logisticians, and others — more than half of all working hours will be impacted by the technology through varying degrees of automation and augmentation.

It's incumbent on both supply chain leaders and their workforces to understand and plan for this reinvention of work on two dimensions: which tasks can be automated or augmented, and which people need to be upskilled to make use of generative AI. By analyzing these factors, companies can map out the different levels of impact on their people and develop the right upskilling programs.

of working hours in 7 out of 15 50+% supply chain occupations are set to be impacted by generative AI 10



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Work time distribution by occupation and potential LLMs impact Ordered by their employment levels in the US in 2022

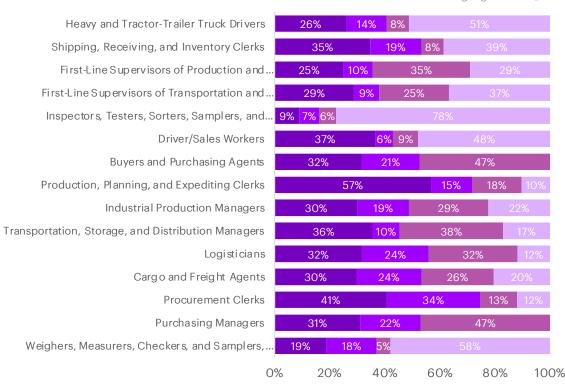
Generative AI will transform work in supply chain specific occupations

Our analysis finds that the roles for production, planning and expediting clerk and procurement clerk have the highest potential impact from generative AI — 72 percent and 75 percent of their time respectively. This significant potential for transformation, however, does not necessarily equate to job losses. Rather, it indicates that a considerable portion of their work could be augmented by generative AI technologies. For instance, 34 percent of procurement clerks tasks could be augmented by generative AI — this includes tasks such as evaluating the quality and accuracy of data and determining the value or price of goods and services. Embracing generative AI would allow these professionals to reallocate their time to more value-added activities, enhancing overall efficiency and productivity in their role.

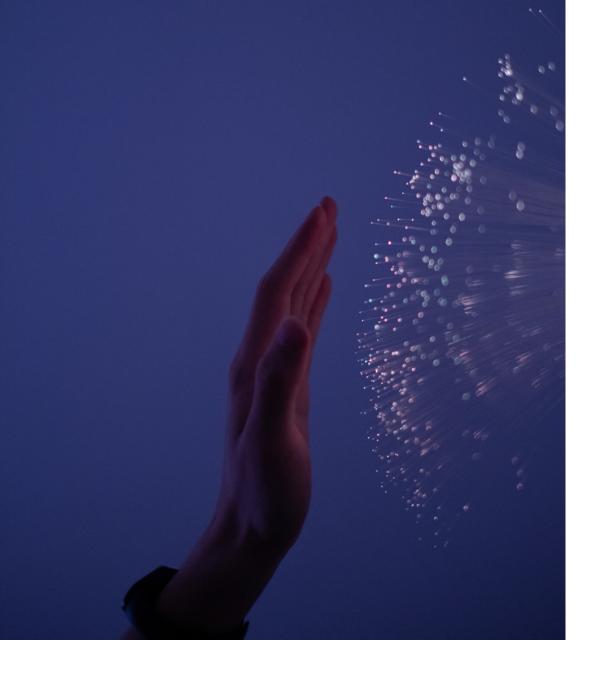


Lower potential for automation or augmentation

Non-language tasks



Note: Estimates are based on Human+Machine identification of work tasks exposure to impact of generative AI. Source: Accenture Research based on US BLS May 2023 and O*Net.



To reinvent work in a way that **drives innovation and enriches the employee experience**, companies will not only need to upskill their people in core generative AI skills, but also develop other dimensions such as working with purpose, strengthening trust and supporting emotional, physical and financial health. Accenture research has found that companies that lead in driving reinvention are also around twice as likely to be prioritizing the soft skills that are increasingly important to ensuring generative AI adoption and value.¹¹

Generative AI can itself be used to **identify reinvention priorities for both people and processes.** For example, applied to a range of unstructured internal and external information, it can help supply chain planners suggest trends, summarize requirements, understand cross-functional dependencies, capture the employee voice, and identify people's pain points, sentiment and workplace challenges.

Generative AI will help us ideate new ways of operating that are truly innovative — and don't simply recreate what we've done in the past

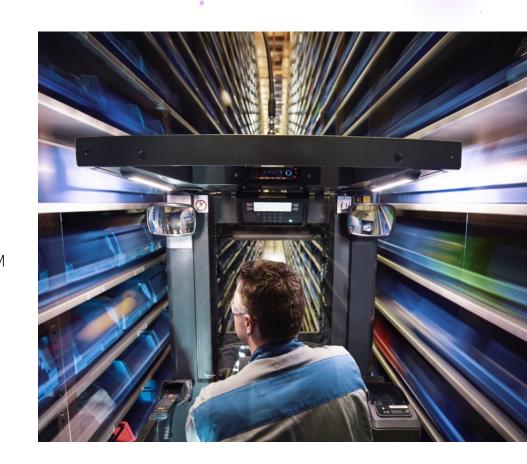
Supply chain networks in the age of generative AI 2

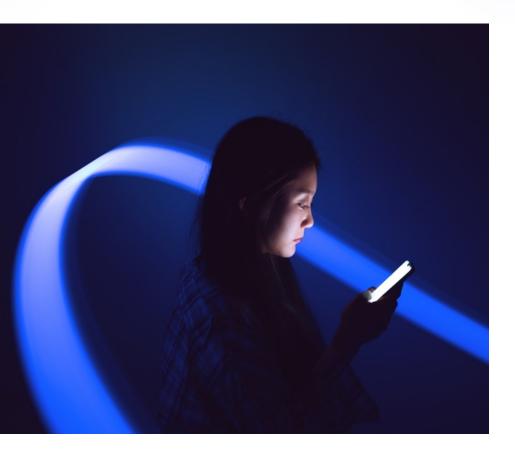
Leverage the ecosystem

More than ever, generative AI requires companies to **build partnerships with the broader technology ecosystem.** With every cloud hyperscaler and numerous supply chain platform vendors offering, or developing, their own generative AI solutions, C-suite leaders face an overwhelming number of options. These decisions are intimately tied to the broader enterprise architecture, reinforcing the need for agility and flexibility in the digital core.

Whether they're using an LLM 'out of the box' or fine-tuning it with their own enterprise data, companies need to understand the relative benefits and implementation complexities of each LLM solution for each different use case. CSCOs have several "no regrets" opportunities that can be realized from ready-made generative AI tools, such as those built into everyday workplace applications like Microsoft Excel.

For example, we're working with Microsoft to help organizations adopt and scale the disruptive power of **generative AI in the supply chain**.¹² That includes extending Accenture's logistics control tower solution to recognize unstructured data in news alerts, helping operators predict delays and mitigate disruption.





We've also reimagined our **SynOps for Supply Chain platform** on AWS¹³ to help organizations improve supply chain resilience and customer-centricity. It includes a Supply Chain Digital Assistant that uses generative AI to enhance planning, identify supply chain risks, and augment logistics control towers. Similarly, Google's key generative AI offerings include intelligent contract visibility and management for procurement organizations and a supply chain copilot for planners supporting custom insights and root cause analysis.

More domain-specific solutions, such as those to support **asset management and capital project design**, will likely require greater levels of in-house customization. The good news for CSCOs is that the technology is evolving rapidly, with new generative AI models and services continuously entering the market. Examples include Open AI's Assistants API designed to make it easier for developers to build their own assistive AI apps.¹⁴

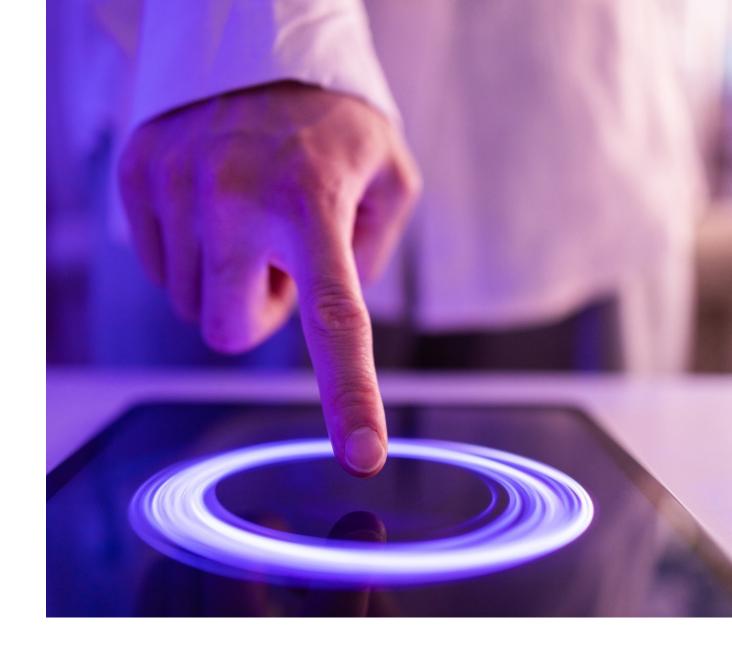
Across supply chain operations, companies should also be considering how **generative AI will impact managed services partners**, especially in areas like procurement. Increasingly, LLMs will become standard tools in the toolbox across all kinds of managed services, offering significant gains in productivity and user experience. Help-desk functionality is a great example, where LLM-powered chatbots can dramatically enhance response times by fielding, routing and even resolving ever greater numbers of first-level user queries.

Don't delay, dive in.

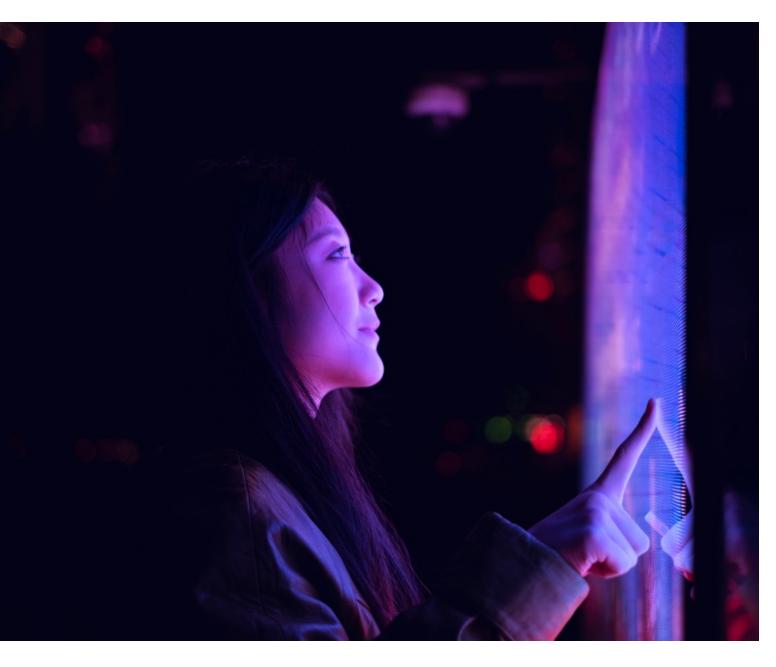
Generative AI in supply chain is still largely uncharted territory that presents a huge amount of untapped potential. The challenge for supply chain leaders is to move beyond experimentation and start identifying and scaling up the most impactful use cases. By applying value-driven analytics, supply chain leaders can fully understand how people are working today and identify where and how generative AI can deliver both business value and better employee experiences.

Learning from peers in the broader ecosystem is critically important. Experienced partners understand not only the rapidly evolving technology but also the unique requirements of supply chain operations. They can help **turn promising ideas into scalable solutions** that can deliver higher performance in day-to-day work.

Generative AI in supply chain is still uncharted territory — it's ripe for CSCOs to explore



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Turn Al's promise into higher performance

The combination of generative and traditional AI is opening up a **new world of possibility for supply chain networks.** It's promising to accelerate time to insight and power the data-led decision making that drives greater supply chain sustainability, resilience, cost transformation and customer-centricity.

Realizing the value at scale calls for generative AI to be fully integrated into a strong digital core as part of a deliberate strategy of reinvention — spanning data, people, workflows, IT architectures, and responsible adoption.

Supply chain leaders that recognize this can act quickly to capitalize on generative Al's rapid acceleration — and turn its immense promise into tomorrow's new performance frontiers.

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Authors



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Maria leads a team of supply chain strategists and innovators driving sustainable growth for companies. She is passionate about integrating data and technology to improve customer experiences and build resilient, responsible, and transparent supply networks.



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