

Next stop, next-gen

Tap into new value with advanced supply chain capabilities

Authors



Max Blanchet

Senior Managing Director, Global Supply Chain & Operations Strategy Lead



Brad Pawlowski

in

Supply Chain & Operations Cloud First Lead, North America



Stephen Meyer

Principal Director – Supply Chain & Operations, Accenture Research

in

in

Contributors

Bobby James Ajaykrishnan Sivaramakrishnan Kris Timmermans Michel Van de Veegaete Robert Fuhrmann Patricia Cornet Kristine Renker Mark O. George Inge Oosterhuis Matías Pollman-Larsen Antonia Stoumpou Pascal Brosset Adheer Bahulkar

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Foreword

By Kris Timmermans Global Lead – Supply Chain & Operations

As a new economic and industrial context reveals myriad opportunities for companies, supply chain networks will require more mature capabilities to fully reap the benefits. But what does mature really mean? The evolution of navigational technology is a good way to think about it. People started to find their way by following the stars in the sky. Eventually, they developed paper maps, then replaced those with more accurate and convenient digital GPS systems and apps. Guided navigation, which considers factors like weather and traffic to model scenarios and suggest the best route, soon followed. Ultimately, navigation will reach high maturity in the form of self-driving cars. These will deliver people where they want to go while they read a book, watch a movie or get work done.

Capability maturity in the supply chain network unfolds in much the same way. It starts from very basic practices executed manually, and gradually moves to more sophisticated technologies that can absorb more of the work, while doing some of it better and faster.

As we move through this period of continuous disruption, the ability to adapt and improve capability maturity becomes even more critical. Particularly as the <u>explosive</u> <u>rise of generative AI</u> challenges companies to rethink their operations and what "value" means to their business, considering this technology's transformative potential. Traditional benchmarks, processes and ways of working are no longer enough and will only prevent companies from maintaining competitive advantage and capitalizing on new opportunities. Instead, C-suite leaders must prioritize and build a new set of capabilities, mapped directly to their key business goals and powered by a strong digital core. This includes integrated, dynamic solutions that are backed by secure cloud, data and AI tools and technologies. Next-generation capabilities span supply chain, operations and technology. They enable companies to continuously reinvent their networks to adapt more readily to changes as they happen and adopt new technologies seamlessly as they emerge.

It's a big challenge. Our new research found that most companies' supply chain network capabilities have a long way to go to reach next-generation maturity. Only a small fraction (10%) of companies, which we define as "leaders" in our study, have applied or are applying the most advanced, technologypowered capabilities needed to deliver multi-dimensional business value.

Importantly, these leaders are accelerating their investments in highly sophisticated capabilities — especially those further enabled by generative AI — to move beyond existing best practice. For example, our research finds that leaders are investing in next-generation capabilities at four times the rate of other companies. In doing so, they are poised to quickly pull ahead of all others. Given the business transformation speed facilitated by such capabilities, the gap will only widen, making it imperative for all companies to act today to avoid being left behind. Their first actions should be to put in place the key enablers of greater maturity, which are crucial to getting the absolute most from existing and new technologies. These enablers include a modern and connected IT landscape, advanced data platform, a localized sourcing and production footprint and organizational agility.

As our research shows, with more mature supply chain capabilities, companies will be better positioned to survive and thrive in today's new environment. They will be able to manage against and even predict what may come next. They will become more agile, resilient, sustainable and efficient through the promise of AI and other emerging technologies — which are at once a force of change and an answer to solving pressing challenges.

A new context supports a new performance frontier

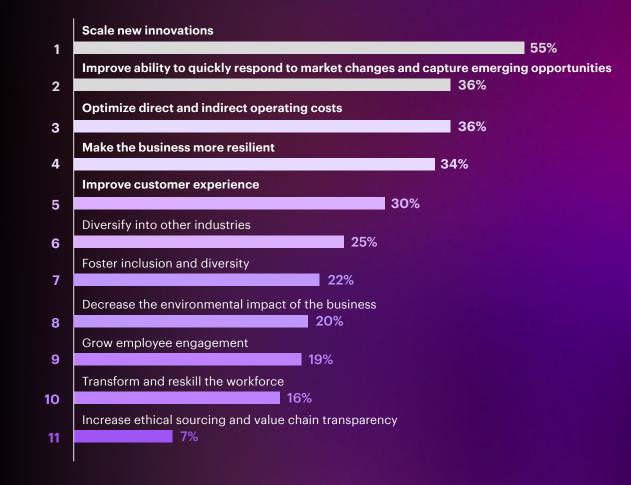
Our world today is rapidly evolving

We no longer live in a time of stable economic growth, frictionless globalization and a simple "low-cost versus high-cost country" calculus. Instead, we're in perma-crisis mode, marked by ongoing disruptions related to climate, geopolitics and infrastructure. We face significant changes in the competitiveness of various countries. And we see an accelerating regionalization of the economy, with more companies looking to bring their operations "closer to home."

As this new context takes shape, companies will have to cope with a more complex set of parameters. Previously, companies had fairly simple stakes to contend with mainly cost, quality and service — which they accomplished through efforts like global sourcing, low-cost sourcing, plant massification and total quality programs.

Now, they must do far more, as is clear in companies' changing — and more complex — business priorities. As shown in Figure 1, executives participating in our global survey reported a wide range of priorities, with scaling-up innovation being the primary focus and agility, resiliency, cost-efficiency and customer centricity also high on executives' agendas.

Figure 1: C-suite business priorities

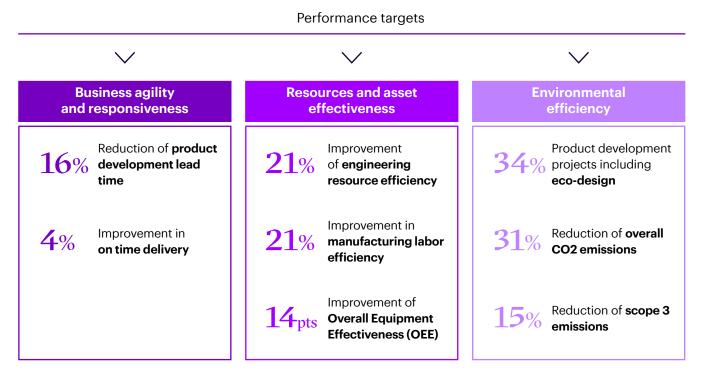


Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=1148).

Executives in our survey also have ambitious goals for their supply chain, which are critical to achieving these new business priorities (Figure 2). These include new performance targets across areas such as business agility and responsiveness, resource and asset effectiveness and environmental efficiency.

Collectively, these priorities and targets translate into a common overarching goal — stronger, more profitable growth. They point to C-suite leaders' desire to achieve a new performance frontier for the business, where a company's capabilities surpass current benchmarks to inform future industry standards.

Figure 2: Anticipated performance uplift that could be gained in the next 2 years



Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=1148)

Are companies ready for the next generation of supply chain capabilities?

Moving from past to what's next

To excel in this new world, companies urgently need far more mature capabilities across their supply chain networks and operations.

By "mature," we mean the extent to which companies have supply chain capabilities that use generative AI, advanced machine learning and other evolving technologies for autonomous decision-making, advanced simulations and continuous improvement. These capabilities enable companies to adapt more readily to changes as they happen and adopt other new technologies seamlessly as they emerge.

When considering supply chain and operations capabilities, we think about maturity in four distinct stages: **Past**, **Now**, **Near** and **Next**.

We applied this concept of evolving maturity, and its four stages, to 29 key capabilities across seven main supply chain domains (Figure 3). We used this framework to evaluate 1,000 companies in eight geographic regions. In this effort, we interviewed three executives at each company to understand just where their company stood on each capability. Combined, the capability scores create a maturity index, in which we plotted each company's overall maturity score on the "past-now-near-next" spectrum.

Past

Operating with legacy technology, limited data visibility and a high reliance on manual, humaninvolved tasks and decision-making.

Now

Using some digital tools to facilitate basic operational tasks and featuring partial digitalization in routine tasks.

Near

Scaling up digitization across operations, with contextualized, high-quality data integrated from various sources, eco-friendly practices and strong ecosystem relationships.

Next

Employing generative AI and advanced machine learning for autonomous decisionmaking, advanced simulations and continuous improvement through data analytics and AIdriven insights.

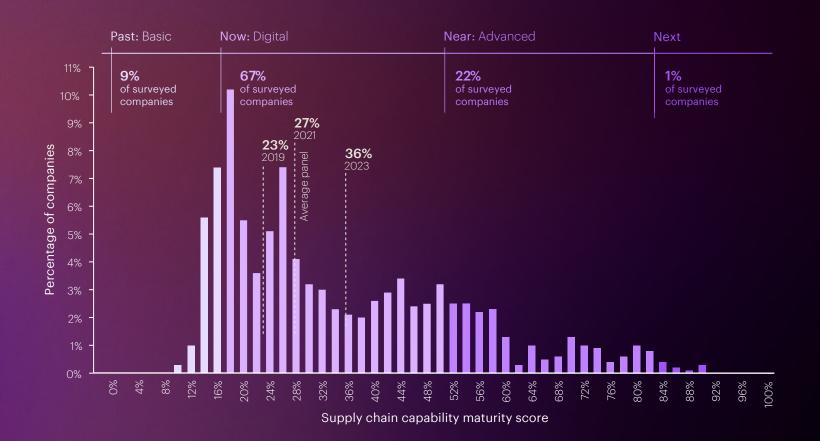
Figure 3: We assessed the maturity of 29 capabilities across seven supply chain domains

	Past	Now	Near	Next	
Agile design	Design performed following V-cycle approach	Concurrent design	Concurrent design to optimize performances	Lifecycle concurrent design to optimize performances	
	Innovation approach performed internally with technology experts	Open innovation	Agile usage-based innovation	Agile rupture innovation	
	"Best of breed" approach for design solutions	Requirements based design	Experience-based design	Generative-based design	
Smart Procurement	Heavy procurement processes consistently used Spend data collected through internal tools and dashboards Supplier relation focused on product, price and functionality Centralized Requisition to Pay (R2P) process policies. Digitization in development Raw materials, goods and services sourced from lowest landed price Manual estimation of good / service cost Minimal use of indexes ok price risk management strategies/tools	Standard source to contract Spend data and insights Supplier management Integrated R2P in development Supply bases closer to demand markets Standardized method and tools for costs estimation Indexed linked contracts	Self-service source to contract Internal data and insights Supplier 360 Networked R2P Supplier prioritization models Should cost modelling Commodity price risk management	Autonomous source to contract Internal and external data N-tier visibility Touchless R2P Automatic adapting sourcing strategy Predictive cost modelling Suite of commodity price risk management tools	
Flexible	Digital dashboard in place to provide information to workforce	Connected machine + worker	Augmented workforce with digital cockpit and tools	AI-enabled workforce	
manufacturing	Lean manufacturing in place	Digital and lean manufacturing	Remote manufacturing	Autonomous manufacturing	
and Autonomous	Pushed and batch production system	Pushed production system	Pulled and decoupled production system	Full pulled and flexible production system	
operations	Assets with fixed capacity and availability	Fixed assets	Flexible assets	Seamless make or buy	
Fast Logistic	Network is set up and optimized during new product introduction	Network optimization: cost reduction	Network optimization : service revenue	Dynamic network optimization	
	Warehouse operations are manually managed or rely on basic tools	Warehouse management and automation simulation	Dynamic warehousing	Cross-company logistics services	
	Rely on manual order allocation processes	Dynamic order allocation	Multi-channel fulfillment	Omni-channel fulfillment	
	Widespread manual planning and transportation scheduling tasks performed locally	Transport management system	Automated modern tools	Unified shared platform beyond enterprise	
Predictive Services	Products are sold with service contracts which fulfill additional revenue potential Aftermarket service field force in place to treat product failure or spare part Industrial plants rely on a traditional field force for service operations	Service as product add-on incl. service contracts Aftermarket services through connected devices Field force supported by remote diagnostics	Value-added services Proactive and predictive service (connected products) VR-enabled field force and remote-control center	Output-based business model: selling uptime Products designed for serviceability Self-service with remote help/control center	
Sustainability	Emission reduction action plan mainly focuses on Scope 1 and 2 reduction	Reactive sustainability on legacy footprint	Model based sustainability by design	Model based sustainability by lifecycle	
by Design	Product and parts returns are only for quality or other customer service issues	Circularity for cost – repair if cost effective	Circularity for margins – repair for re-sale	Circularity for purpose - reuse every component	
Integrated Supply Chain	Manual alert system of any disruption by email End-to-end (E2E) visibility by manually aggregating various sources Excel based and ad hoc simulation Demand forecasting based on sales history and market survey Supply planning done locally Sales and Operations Planning (S&OP) aligning to demand and supply	Disruptions alerts on n-tier supplier E2E supply chain visibility Use-case-driven digital twin Demand planning: statistical forecasting w/ platforms Supply planning enabled by platforms Sales and Operations Planning	Disruptions analysis on tier Nth supplier E2E supply chain visibility with recommendations Functional digital twin Demand sensing to optimize short term corrections Interconnected software platform for supply planning Integrated business planning (IBP)	Disruption solution to minimize impact Network E2E supply chain visibility with recommendation Lifecycle digital thread / data continuity The "near" + predictive tools allowing demand shaping Fully integrated platform for supply planning Insight-driven IBP supported by orchestration layer	

Source: Accenture Supply Chain & Operations capabilities global survey, 2023.

So where do companies stand today? As Figure 4 demonstrates, our index reveals supply chain maturity is lacking across the board. Many companies have either widely applied or are currently applying what we characterize as "past" capabilities – or most also have applied or are applying more modern, technology-enabled ("now") capabilities. As a result, the median maturity index score across our survey population is just 30% (while the average is 36%), with 100% denoting fully mature.

Figure 4: The Global Maturity Index



Source: Accenture Supply Chain and Operations capabilities global survey, 2023. Base: All Respondents (n=1000)

But for a small group of leaders – the 10% of companies with the highest cumulative maturity scores – there are big gains. Our analysis reveals a correlation between greater maturity and strong financial results. We found that while, on average, companies in our study posted a positive five-year revenue CAGR (2019 - 2023 inclusive), leaders have been more profitable. As shown in Figure 5, they're generating an average EBIT margin of 11.8%, compared with 9.6% among all other companies in our survey. And publicly traded leaders delivered better total return to shareholders (TRS) at 8.5%, compared with 7.4% for others.

These leaders aside, it's clear that most companies in our research lack the supply chain advancement they need to achieve their business goals.

Across all industries, average maturity is relatively similar, though we found the most mature industries to be utilities, high tech and metals and mining, while least mature are consumer goods and services (CGS), life sciences and chemicals. Within each industry, however, companies' maturity can vary greatly. This means that, within each industry, there are companies clearly more advanced in their supply chain capabilities, reaping the rewards as a result, and then there are also companies falling behind.

Figure 5: Financial performance - Leaders* vs Others



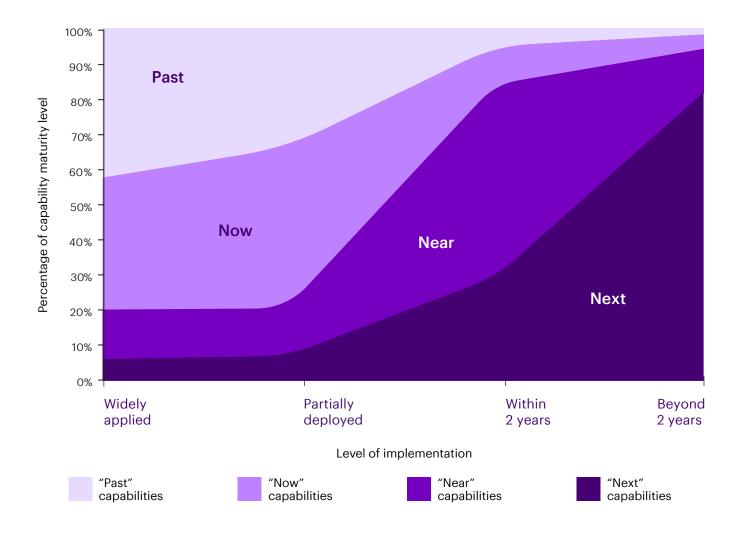
*Note: Leaders = Top 10 percentile companies

Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (Leaders (n=100), others (n=900)).

A common area where most companies lack maturity involves the struggle to implement AI. Only about one in 10 companies are engaged in large-scale AI and generative AI deployment, giving them a significant advantage over their competitors.

Our maturity index clearly illustrates the urgency for companies to take action to bolster key capabilities across their supply chain networks. The good news is companies understand this urgency and what they need to do to win. As shown in Figure 6, our survey reveals the global pace of transformation is ambitious, with companies expecting to reach "near" level in 80% of their capabilities within two years.

Figure 6: The pace of global transformation to build greater operations maturity



Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=3000)

The case for greater maturity

Why leaders are getting ahead

Why is capability maturity so important? Consider the 10% of companies in our survey we view as "leaders" based on overall maturity scores. These leaders that are investing heavily in increasingly sophisticated technologies (especially AI and generative AI) to build and leverage greater maturity across all 29 capabilities in our model. Their result is maturity scores two to three times greater than other companies. With more mature capabilities, leaders' supply chain networks can deliver more and various types of business value. They can move beyond traditional deliverables to, instead, focus on driving sustainability and resiliency and, in the process, achieve a new competitive advantage (Figure 7). In fact, leaders were nearly eight times more likely (60% versus 8%) than other companies to say their supply chain and manufacturing capabilities support their company's business priorities "very well"— regardless of how they define those specific priorities. Conversely, other companies with lower levels of maturity tend to be more narrowly focused on only cost and service.

Let's take a closer look at some additional examples of what mature capabilities look like.

Figure 7: How company leadership views the supply chain





Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (Leaders (n=119), others (n=1029)).

Next stop, next-gen | The case for greater maturity



Spotlight

Global food manufacturer sets out to reinvent their supply chain and double net income

A global food manufacturer, with 40 category-leading brands, is setting out to turbocharge its three-year growth and earnings strategy. To do so, the company will be focusing in large part on its supply chain, which it plans to reinvent end-to-end, across planning, procurement, manufacturing and distribution. The goal is to build out durable supply chain capabilities that will support growth and earnings in the near-term and sustain growth well into the future.

It's a considerable effort. And one key to its success will be aligning the supply chain's ability to be responsive to consumer and customer priorities in real time. To that end, it will be using generative AI to improve the orchestration and decision-making between supply chain and commercial. Specifically, improvements will be made in tactical areas of demand planning, as well as strategic areas of forecasting to inform product-portfolio decisions. The latter will potentially streamline the portfolio by as much as 30%. Ultimately, the plan calls for freeing up to 50% productivity in information tasks, bringing data and technology enablement (GCP, o9, ERP etc.), intelligent automation and supply chain as-a-service elements together for a future ready organization model. The program has been structured with the goal of doubling net income over the next three years and utilizing the value created to fully selffund the supply chain capability investments. Five critical supply chain capability domains show just how companies can create greater value: Agile design and industrialization, flexible and autonomous manufacturing, smart procurement, predictive services and end-to-end supply chain.

Agile design and industrialization

Today, product design is too often disconnected from the rest of the organization, operating in a silo with a very linear approach. With mature product design capabilities, a company employs concurrent engineering involving multiple stakeholders. This helps achieve design-to manufacturing, design-to sustainability and design-to recyclability. Advantages include significantly reduced waste, time, emissions and costs.

Mature product design also benefits from enhanced simulation capabilities. Model-based System Engineering, for example, replaces the time-consuming process of creating and testing physical prototypes. Simulation additionally reduces product development cycle time. It puts products in the hands of customers more quickly, thus boosting sales. And, with the use of generative design and design validation, a company can more effectively capture acquired insights. Fed back into product design, they inform product adaptations and enhancements to meet customers' evolving needs.

Overall, companies with mature capabilities can achieve faster industrialization. They can do this by automating numerous tasks, including process set-up, first article inspection, quality assurance and document filing. Doing so helps boost asset usage and throughput while reducing errors and quality defects.

Spotlight Snam transforms to fuel change

Snam, an Italian energy infrastructure company with operations throughout Europe, needed an agile, adaptable organization to meet growing demand from customers switching from natural gas to low-carbon fuels. Leaders sought new technology to optimize operations, improve the sustainability of its networks and better anticipate – and meet – future energy needs. To that end, they identified a new architecture, based on Microsoft Azure, building a modern data platform on the cloud as a foundation. They also introduced artificial intelligence (AI) and machine learning (ML) tools to bolster system management. In the two years since Snam embarked on its digital transformation, roughly 30% of the necessary new infrastructure has been put in place. This lays the foundation for end-toend digital operations. The transformation enabled new ways of working to help Snam remove structural silos and create new protocols for gathering data to refine future operations, helping to make the company more efficient and cost-effective.



Flexible and autonomous manufacturing

Historically, manufacturing faced a choice: either be highly responsive to customer demands or be highly efficient — both weren't possible at the same time. High capability maturity decouples manufacturing processes from human workforces and their costs, which makes manufacturing more geographically independent. It also allows production to occur closer to the point of customer need —achieving greater customer responsiveness at the right cost.

Leading companies, for instance, are augmenting workers with AI and industrial metaverse-based copilots that can help inform decisions across key activities. These include production, maintenance, set-up and safety. In other cases, they're achieving autonomous manufacturing. Here, plants perform tasks on their own, supervised by a remote control center that handles steering, coaching and implementing effective strategies. In production, highly flexible processes and networks use a fully demand-driven model to achieve short changeover times, while greater automation optimizes asset usage. The ability to seamlessly balance products, components or semi-finished goods from one plant to another, or from internal production to external purchase, across the network further enhances flexibility and responsiveness. This means ultimately having the right products in the right place at the right price for customers.



Spotlight Dow's factories of the future

Dow, a leading materials science company, was looking to move away from its paper-based, manual processes in manufacturing and maintenance. The company sought a more digitally advanced, worker-centric solution to overcome complexities and scale technology across multiple sites.

employees across multiple plants, Dow built a cloudbased, user-friendly solution that allows operators and technicians to access data automatically, send maintenance alerts, attach photos, and tag equipment serial numbers from the field. This eliminated the need for manual data gathering and transfer, reduced maintenance execution time and ensured accurate data readings. Within the first year, the new approach was running in 32 plants at Dow's largest manufacturing site. By the following year, it had been deployed at seven sites and over 80 plants globally. The program has resulted in higher production output and reduced operational costs, while improving

With this in mind, Dow developed a Digital Manufacturing

Acceleration (DMA) program. Based on input from

employees' experiences.

Smart procurement

While companies have made significant strides in implementing more digital procurement in recent years, too many procurement organizations are still behind. This is due to a lack of market, supplier and spend intelligence, as well as manual and time-consuming processes. Mature smart procurement capabilities make these issues a thing of the past.

For example, leading companies are deploying analytics capabilities that use both internal and external data and insights to understand the market more fully. And they're using advanced statistical analytics to model future cost scenarios to forecast the cost of products, goods and services. Technology also enables procurement to anticipate supply chain disruptions more accurately across all risk dimensions and the evolution of markets (and automatically adapt the sourcing strategy in response). It helps companies gain visibility into tier-one suppliers and beyond to the "n-tier" supplier network. In these companies, technology is transforming key procurement processes in notable ways. For instance, a sophisticated portal, augmented with AI, enables business buyers to conduct source-tocontract transactions without the procurement team's involvement. In requisition-to-pay, purchases execute themselves with predetermined conditions, through decision automation that replaces manual tasks for faster purchases.

Spotlight AI-powered procurement to boost efficiency

A global healthcare and pharmaceuticals company is executing a major project to overhaul its procurement processes, initially focusing on accounts processing, time and expense management, and procurement services in six delivery locations.

A key element of this effort is the use of an intelligent platform that draws on AI tools and advanced analytics to help leaders, managers and workers identify areas ripe for automation and other opportunities to boost operational efficiency.

As it gains ground in these areas, the company will also use the platform to develop additional AI- and generative-AI-driven use cases in other areas of procurement, such as contract compliance and supplier discovery, to continue to squeeze more time and costs from core procurement activities.



Predictive services

Technology is driving a complete transformation of how companies handle services related to their products. With mature service capabilities, companies can sell and support a more profitable service subscription model with a full focus on uptime and output and minimal or no actual physical product sales. This is a major leap forward from today's focus on selling products with various sets of "add-ons" and service contracts.

Companies that still sell products outright are designing them for serviceability, providing advanced functionalities such as predictive maintenance, over-the-air product or service upgrades and the ability to reduce or minimize the need for service events (such as through feedback loops from service to R&D for nextgeneration products).

In addition, remote diagnostic support and virtual reality (VR) capabilities can enable customer self-service without the need for help from on-site field technicians. This enhances the customer experience, accelerates problem resolution and reduces field service costs.



Spotlight Advanced control tower capabilities spark growth for Imperial Logistics

South Africa-based Imperial Logistics sought to enhance the company's capabilities to differentiate Imperial's solutions, expand its market and gain new sources of revenue. <u>At the core of this effort</u> is the use of AI to create new software-as-a-service solutions tailored to individual clients (for example, to improve a client's ability to plan and manage the relationship between supply chain and stores through enhanced predictive analytics and more responsive disruption management). Imperial also is using data-driven AI tools to streamline and accelerate the client onboarding process. Within six months of deploying its new model, Imperial won several significant deals – including one with a major grocery retailer, the biggest single contract in Imperial's history. By deploying intelligent automation and blockchain capabilities in managing the retailer's fleet of 2,000 trucks, Imperial will help the retailer minimize mistakes and routine tasks, increase transparency, reduce driver hours and ultimately shrink the retailer's fleet. The retailer expects these and other activities to reduce costs by 20% after five years.

End-to-end supply chain

Perhaps the biggest impact mature capabilities can have is helping companies orchestrate operations across the end-to-end supply chain, rather than within individual silos. For example, a cross-network control tower can help companies quickly understand the potential disruptions across n-tier suppliers and propose (or execute) corrective actions to minimize their impact. Additionally, a digital twin can use interconnected data across functions to help inform the best end-to-end network design and most efficient operations throughout the product lifecycle.

Technology also can dramatically improve planning accuracy and efficiency by bringing together sales, financial and supply chain plans instantaneously so realtime deviations from the plan can be accounted for. As maturity increases, a company can use AI-based tools to get internal and external data that spans the product lifecycle to generate and continuously refresh the latest forecasts. This allows the company to more accurately predict and meet customer needs (which means greater revenue). It also helps more effectively allocate and use manufacturing, packaging and logistics resources, resulting in higher efficiency and lower costs.

Spotlight Microsoft's control tower orchestrates physical goods movement across the supply chain network

Microsoft's Cloud services more than one billion customers by leveraging a complex supply chain that tracks the movement of physical goods across hundreds of nodes and more than 30 markets. The <u>company implemented</u> a supply chain control tower across two critical domains to reliably pinpoint the location of critical inventory across its network of partners and suppliers. The foundation of the solution is a digital twin data model that serves as the single source of truth for the movement of physical goods across the Azure supply chain. Serving more than 500 decision-makers across multiple organizations and geographies, this solution has helped Microsoft ensure cloud capacity can meet demand and disruptions are mitigated quickly. To date, the Microsoft Cloud supply chain has seen marked improvements in employee efficiency, saving hundreds of hours in prepping data and chasing posthoc analysis. The team also expects to see significant dollars saved in reduced shipment expedites, along with increased expected cloud revenue through more efficient inventory management and distribution.

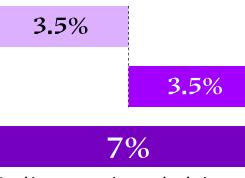
Four key enablers of higher maturity

Moving towards value

The leaders in our study, and the previous examples of capability maturity in action, highlight how adopting and scaling more mature capabilities leads to greater value. And this value comes from investments that are transforming how they design and make products, rather than what they make. Other companies in our study hope to emulate the leaders by increasing their investments in automation and digitalization to boost maturity (Figure 8).

Figure 8: Investments in supply chain automation and digitalization

Investment in supply chain resilience [% company revenues]

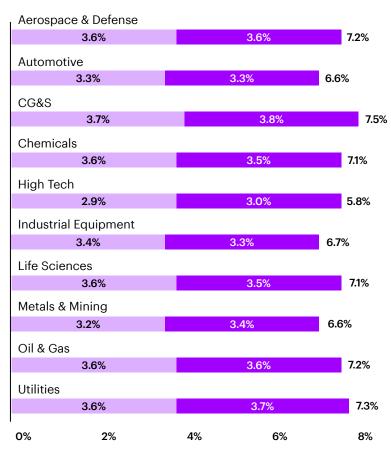


Total investment in supply chain resilience

Industrial automation of plant sites and warehouses investment

Supply chain and manufacturing digitization investment

Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=1148, for each industry 'n' will vary) Investment in supply chain resilience by industry [as % of revenues]

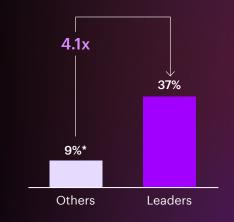


As leaders ambitiously invest in next-generation capabilities – at four times the rate of other companies – we see an increasing polarization (Figure 9). It's the virtuous cycle of leaders pulling away from the pack versus the vicious circle of those who are falling behind and continuing to lag.

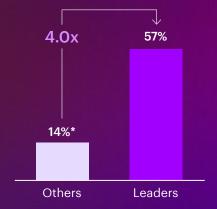
The question is, how does leadership across supply chain networks and operations make sure their investments translate into an actual increase in maturity — and business value?

Key to greater maturity are four enablers, which form the infrastructure necessary to implement and scale up the next-generation capabilities companies need. These enablers aren't new, but what is new is their increasing urgency. Companies can no longer treat these as "nice to have," and they can't replace these enablers with the latest and greatest new tools. In fact, they are crucial to the ability to fully realize the promise of new technologies, like generative AI, and serve as the foundation for continuously scaling capability maturity across operations

Figure 9: Leaders are investing in capabilities at a much greater rate



Share of companies who plan more than 5% of annual revenue to invest in Industrial Automation



Share of companies who use more than 5% of annual revenue to invest in Supply Chain and Manufacturing Digitization

* Note: The number represent the percentage of Leaders and Others from the overall group in the study.

Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (Leaders (n=119), others (n=1029)

Enabler #1 Modernize and connect the IT landscape

Today, many companies still use fragmented, legacy and often home-grown tools to manage their supply chain. As illustrated in Figure 10, nearly 6 in 10 executives said their supply chain's technology foundation involves a combination of numerous legacy tools, multiple enterprise resource planning solutions and general-purpose productivity tools such as spreadsheets and database management systems.

Such tools are contrary to capability maturity. Instead, companies need to strengthen their digital core by optimizing enterprise platforms, creating data foundations and implementing cloud-native platforms and applications. Backed by this foundation powered by cloud, data and AI, supply chain networks can leverage an interconnected suite of tools to integrate all major supply chain processes, from planning to execution. Leaders are nearly 2x more likely than other companies to have these architected and interconnected tools (Figure 10). This modern technology foundation is critical to being able to consistently manage and link vast amounts of rich data to drive insights and automation across the supply chain. Figure 10: How modern and unified are companies' foundation tools?



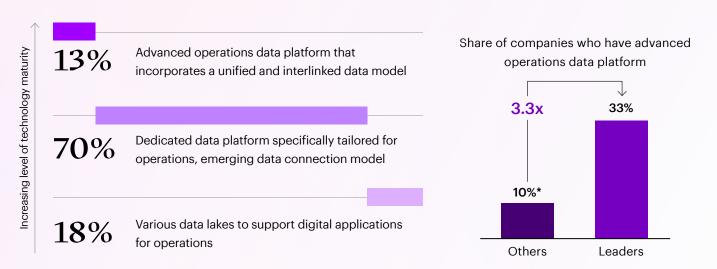
* Note: The number represent the percentage of Leaders and Others from the overall group in the study. Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=1148 (Leaders (n=119), others(n=1029)

Enabler #2 Implement an advanced data platform

Data quality continues to be a problem for most companies. Wrong, missing or out-of-date data, coupled with conversion issues due to multiple systems with different formats, prevent companies from taking advantage of powerful solutions to truly integrate the supply chain — across domains, with other corporate functions and with customers and suppliers.

The solution is an advanced operations data platform that incorporates a unified and interlinked data model to help turn data into meaningful and contextualized insights. Such a modern, cloud-based platform helps companies overcome common barriers to value: data accessibility, trustworthiness, readiness and timeliness. It's what companies need to connect disparate parts of the supply chain network. And it's essential for AI to augment and reinvent operational workflows, activate more informed and engaging customer and employee experiences, and fuel the next wave of product and market growth. Our analysis shows leaders are 3.3x more likely than other companies to have implemented an advanced operations data platform incorporating a unified and interlinked data model (Figure 11). Only 13% of all survey respondents have successfully implemented such platforms.

Figure 11: How is data managed and used?



* Note: The number represent the percentage of Leaders and Others from the overall group in the study.

Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=1148 (Leaders (n=119), others(n=1029)

Enabler #3 Localize the sourcing and production footprint

According to a <u>previous Accenture survey</u>, past disruptions have spurred many businesses to begin addressing the vulnerabilities in their highly globalized supply and production networks. 72% of these companies plan to pursue multi-sourcing strategies in the next three years — up from 42% using that approach today.

By 2026, regional sourcing is also expected to grow (from 38% to 65%), as is product manufacturing across multiple plants (from 41% to 78%).

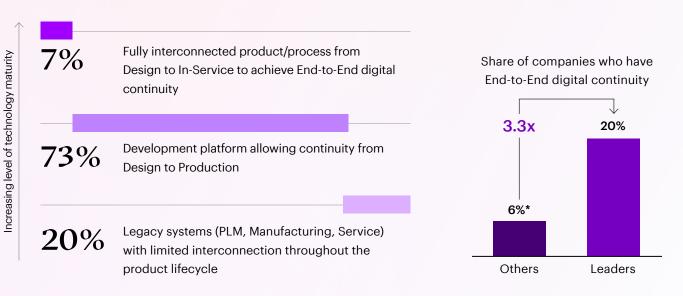
Supporting these new, flexible approaches — and mitigating the increased complexity that goes with them — requires more advanced capabilities. Certainly more than those needed to manage a global footprint with massified plants and supply base. When making major changes to localize networks and boost resiliency, companies should evaluate and enhance the digital maturity of their capabilities to proactively streamline operations, improve resource allocation and adjust productivity levels for greater value.

Enabler #4 Move toward an agile organization

Organizations often have too many applications, in too many silos, that are too poorly connected to support their businesses — and temporary solutions aren't the answer. Instead, companies must create an "organization platform" that fosters a high degree of agility across the enterprise. Such a platform incorporates the technology infrastructure and tools that integrate relevant data to support a cross-functional team and key delivery processes.

A good example of such a platform is a global managed services operation that executes all financial, IT and HR administrative processes. Another is product-related, supporting market-sensing, customer experience, product design and development and product portfolio management. An end-to-end organization platform for operations creates digital continuity — across the enterprise and with business partners — and fully connects products and processes from design to service. This is something leaders in our study are 3.3x more likely than other companies to have (Figure 12). Also key to organizational agility is a highly skilled, techenabled workforce. Generative AI is democratizing process redesign, giving everyone — from assembly workers to customer service agents to lab scientists — the power to reshape their workflows. Doing so presents an opportunity to create a more agile, adaptive and productive workforce, aided by new efficiencies. But to scale this groundbreaking technology so work improves and becomes more meaningful, company leaders must guide a vision for how to <u>reinvent work</u>, <u>reshape the workforce and prepare workers</u> for a generative AI world. This creates an engaged workforce, which is a key driver of an organization's success.

Figure 12: To what extent have companies achieved end-to-end digital continuity?



* Note: The number represent the percentage of Leaders and Others from the overall group in the study.

Source: Accenture Supply Chain & Operations capabilities global survey, 2023. Base: All Respondents (n=1148 (Leaders (n=119), others(n=1029)

Accelerating transformation to keep pace

For companies that have previously downplayed the importance of these enablers, the time for action is now. Without these steps, companies will fail to reach new performance levels — and will only fall further behind companies that have this infrastructure in place.

An added wrinkle is the fact that next-generation capabilities substantially lower the barriers to entry in every industry sector. This will favor new and agile industrial start-ups, bringing even more competition for legacy companies that are slow to change. The overriding message from our research is clear: Investing in building highly mature, next-generation supply chain network capabilities isn't an option. This isn't about just incrementally boosting efficiency or productivity or maximizing current operations. It's about fundamentally reinventing supply chain networks with new technologies and new ways of working that underpin the next-generation capabilities needed to continuously reach new levels of business performance. It's what every company must do to simply stay in the game where more agile companies and aggressive, digital-driven startups are hungrier and better poised to take the lead.

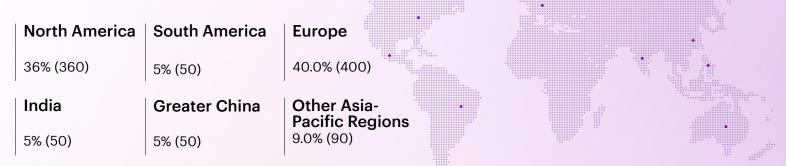
About the research

Supply chain key capabilities' framework

Accenture applied the concept of evolving maturity, and its four stages (Past, Now, Near & Next), to 29 key capabilities across seven supply chain themes (Agile design, Smart Procurement, Flexible Manufacturing and Autonomous operations, Fast Logistics, Predictive Services, Sustainability by design and Integrated supply chain) to assess how mature companies are across their supply chain networks and operations.

We surveyed a global panel of ~3,000 senior executives covering 1,000 companies spanning North America, South America, Europe, and Asia Pacific, across 10 industry sectors. This survey generated around 134,000 data points providing an objective understanding of each company's standing on various capabilities. Based on these responses, we developed a maturity model that combines both the level of maturity and the level of implementation (widely applied, partially deployed, deployment within 2 years, and deployment beyond 2 years) to generate a composite supply chain maturity score. Company operational headquarter location

[% and number of companies]



Sectors

[Panel: At least 70 companies/sector]

of companies

107	73	85	110	82	105	106	81	138	113
Oil & Gas Upstream and Downstream		Chemicals	High-Tech	Metal & mining	Automotive	Industrial Equipment	Life Sciences	Consumer Goods & Services	Utilities

See below an example of the four different levels of maturity applied in our study:

Past

Operating with legacy technology, limited data visibility and a high reliance on manual, human-involved tasks and decision-making. Now

Using some digital tools to facilitate basic operational tasks and featuring partial digitalization in routine tasks.

Near

Scaling up digitization across operations, with contextualized, high-quality data integrated from various sources, eco-friendly practices and strong ecosystem relationships.

Next

Employing generative AI and advanced machine learning for autonomous decision-making, advanced simulations and continuous improvement through data analytics and AI-driven insights.

About Accenture

Accenture is a leading global professional services company that helps the world's leading businesses, governments and other organizations build their digital core, optimize their operations, accelerate revenue growth and enhance citizen services—creating tangible value at speed and scale. We are a talent and innovation led company with 743,000 people serving clients in more than 120 countries. Technology is at the core of change today, and we are one of the world's leaders in helping drive that change, with strong ecosystem relationships. We combine our strength in technology with unmatched industry experience, functional expertise and global delivery capability. We are uniquely able to deliver tangible outcomes because of our broad range of services, solutions and assets across Strategy & Consulting, Technology, Operations, Industry X and Accenture Song. These capabilities, together with our culture of shared success and commitment to creating 360° value, enable us to help our clients succeed and build trusted, lasting relationships. We measure our success by the 360° value we create for our clients, each other, our shareholders, partners and communities.

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