



Future of supply chain

The road to everywhere

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KPMG International

home.kpmg/futureofsupplychain

About KPMG's 'future of'

Disruption has become a constant condition of doing business. The organizations that are more likely to thrive are those which not only adapt to continuous change, but become the drivers of change.



KPMG's 'future of' program distills KPMG professionals' insights on sustained organizational readiness across the front, middle and back office. It demonstrates our commitment to helping clients achieve tangible results by offering focused solutions that draw on the breadth of KPMG member firms' experience.

We are sharing our insights through a stream of 'future of' publications such as this one. Each will seek to assess the emerging developments we expect to shape business during the next three to five years as well as share perspectives on the capabilities KPMG believes will be necessary to respond effectively.

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The road to everywhere

Future of supply chain

In the future, supply chains won't be driven by products and processes, but by customer needs; they won't depend on capital-intensive fixed assets and linear flows, but on an ecosystem of modular capabilities, delivered through a network of trusted third-parties, that can be scaled and recombined as needed; operators will become managers; new skills will be required and new job roles created. Tomorrow's supply chains will be autonomous, self-healing, and self-optimizing.

Imagine, with a click of a mouse or a swipe of a touchscreen, your customer will set your production line in motion, realigning your supply chain in real time to deliver a personalized, frictionless experience. Imagine drawing on data, from smart devices in the field and third-parties, to segment your customers and develop separate micro supply chains to service their needs more effectively. Imagine responding to tariffs and regulatory change by seamlessly moving your entire operations from one geography to another — within weeks.

New technology is part of this, of course, but it's not the whole story. At a fundamental level, the way we think about supply chains is changing and this has dramatic implications for the future. Yesterday's supply chains assumed an 'inside-out' operating model: supply chain management was about focusing on the business' existing capabilities, increasing operational efficiency and competing by reducing cost. In contrast, tomorrow's supply chains will be characterized by an 'outside-in' approach, continuously adapting and evolving to meet changing customer demand. In the future, convenient, flexible and transparent fulfillment will be a source of competitive advantage, blurring traditional distinctions between marketing, sales, operations and manufacturing.

As businesses compete to deliver superior customer experiences, they'll become increasingly reliant on data. Tomorrow's successful organizations will utilize digital platforms, cameras and Internet of things (IoT) sensors to collect, integrate and interpret data from across the enterprise.

They'll harness advanced analytics to turn those data points into actionable insights, and leverage cognitive technologies and robotics automatically to execute some actions and support evidence-based human decision-making for others. Above all, tomorrow's supply chains will be connected, able

to adapt quickly in response to changes in the market. It is important for companies to have complete supply chain visibility and the ability to make rapid informed decisions to better respond to customer needs and manage performance.

A technology-enabled, data-powered and insight-driven approach to supply chain will require a range of new skills and capabilities. Tomorrow's successful businesses will invest in recruiting top talent, reskilling their workforces and partnering with knowledge providers.

They'll outsource skills and capabilities in which they don't excel and sell their strongest competencies and surplus capacities 'as-a-service.' If yesterday's supply chains were rigid and reactive, tomorrow's supply chains will be nimble and predictive.

Finally, astute businesses are embracing the digital platforms that enable visibility and collaboration across the value chain, educating and working with third-parties towards shared sustainability goals, and taking bold steps in empowering consumers with transparency to make informed buying decisions. Essentially, going forward, leading businesses are thinking in terms of stakeholder capitalism rather than shareholder capitalism.

While this paper gives an overview of KPMG member firms' approach to tomorrow's supply chain, there are more insights to share. If you'd like to discuss any aspect of our approach, please contact your local KPMG firm to learn more about how they can help you streamline your supply chain and revolutionize your business.



Peter Liddell
Global Head, Operations Center of Excellence, KPMG International, and Partner, Operations Advisory
KPMG Australia

Supply chains of the future



Where should you start?

1

Put the customer first

2

Utilize platforms effectively

3

Win the war for talent

4

Understand the importance of sustainability

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Leverage cross-functional data

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Exploit micro supply chains

1 Put the customer first

Today's customers don't just care about products. Increasingly, they're demanding seamless, transparent and rapid fulfillment as standard. In part, this shift is a natural consequence of the revolution in mobile technology and connectivity. Platform-based commerce offers customers unprecedented choice, not just in terms of the range of products available, but also in terms of the quality and price of comparable products. This gives them unparalleled convenience at the point of sale which fuels demand for similar convenience in fulfillment. But the race to deliver seamless fulfillment isn't simply about technology, it's also about changing business models. In today's crowded marketplace, customers are presented with multiple means of acquiring the same or very similar items and that puts organizations under intense pressure to differentiate their service offerings.

Successful businesses already offer next-day or same-day delivery, real-time shipment tracking and easy returns, all through a single, intuitive interface. It's a shift that's fundamentally changed the way organizations think about the supply chain. Supply chain management is no longer about reducing cost: it's about service differentiation, increasing market share, even driving revenues as a growing number of customers buy into value-added, premium fulfillment options.

The distinctions between traditional front, middle and back office functions are blurring as supply chain now reaches into marketing on the one hand and customer service on the other.

Today's market leaders no longer think of their supply chains as a linear series of inputs and flows. Instead, they're building interconnected, digitally-enabled and predictive networks with the customer at the center. At the heart of these successful business models is a reliance on digital platforms to connect them directly with their customers, boosting engagement and helping them win and retain customer loyalty in an increasingly fickle marketplace. Platform-enabled, customer-centric sales models allow organizations to control the customer experience end-to-end, leveraging a mix of digital technology, personal interactions and physical experiences to build utility, convenience and delight into their transactions in a way that creates customer expectation. Leading organizations, in other words, don't react to changing customer expectations; they determine the level of service that sets the standard for their competitors.



Design fit-for-purpose supply chains by customer segments and channels, as a market differentiator. Customer experience should be a core tenet of your supply chain operating model. ”

Jérôme Thirion

Partner

KPMG in Canada

Because of today's operational complexities, companies should establish more efficient supply chains to deliver their products and services to a diversified customer base while maximizing profits.

This challenge is putting more stress on the business to expand and customize their offerings, making it increasingly difficult to equate cost/activity to value creation. As the traditional business model becomes increasingly incapable of supporting customer expectations, this has put a strain on the current operating model ('one size fits all' approach) and subsequent profitability of their product lines.

Effective supply chain segmentation strategies such as including, designing, and operating distinctly different end-to-end value chains, optimized by a combination of factors (e.g. unique customer value, manufacturing and supply capabilities) can help to maximize net profitability across each segment. By segmenting end-to-end supply chains, companies can optimize profitability in fulfilling customer expectations. This can be done by defining segmentations and sub-segmentations within the supply chain based on customers behaviors in three primary areas of: 'what they buy', 'how they buy', and 'how they expect to be served'.

2 Utilize platforms effectively

It's not only customers enjoying unprecedented levels of choice and convenience as a result of emerging technologies. The rise of digital platforms has opened supply chains up to a world of new possibilities. Using slick digital interfaces, suppliers are now able to do business directly with retailers or customers. Even the elements of the supply chain itself — from planning through manufacturing and inventory to fulfillment — can now be purchased 'as-a-service' from third-party providers and managed through platforms. Finally, platforms enable manufacturers and logistics companies to become 'as-a-service' providers themselves, creating new revenue streams by monetizing surplus capacity.

Successful companies are increasingly turning to platforms to drive growth. Platform-based direct-to-customer (D2C) sales models shorten supply chains, effectively boosting margins by allowing businesses to retain value that would previously have been absorbed by partners and wholesalers. D2C also has important implications for inventory management. Yesterday's retailers managed stock reactively and inefficiently across

a network of brick-and-mortar outlets. Today's retailers use customer data accurately to predict patterns of demand, scaling supply to minimize surpluses.

Tomorrow's retailers will likely digitally integrate their 'as-a-service' partnerships so that their supply chains scale themselves automatically, using sophisticated predictive modelling to seize opportunities and respond to change immediately in an increasingly fast-moving marketplace.

Platforms make it significantly easier for successful companies to outsource sections of their supply chains to third-party 'as-a-service' providers or even provide capacity 'as-a-service' themselves.

Outsourcing gives businesses access to technical expertise and operational maturity without requiring investment in capital-intensive fixed assets. At the same time, it enables them to monitor — either through platforms or customized dashboards — the performance of both the outsourced function and the outsourcing relationship. It's a model that enables businesses to respond quickly to changes in volume, reducing costs by scaling their service provision. Market-leading retailers are already partnering with established 'as-a-service' last-mile logistics providers to enhance their customer service while keeping costs low. In the next five years, more companies will likely outsource middle office functions to optimize their supply chains end-to-end. By 2025, the World Economic Forum estimates that digital platforms could generate US\$60 trillion in revenue — roughly 30 percent of all global corporate revenue.

Tomorrow's market leaders should work with third-party knowledge partners in order to access the technical skills and experience they need to build new digital solutions; iterate their platforms; enhance their capabilities as data streams become more and more complex; organize scheduling, evaluate performance, and maintain contractor relationships.

“Underutilized assets like shipping containers, vehicles, machinery, energy or storage space present untapped opportunities to sell ‘as-a-service’.”

Rob Barrett

Supply Chain Leader, KPMG in the US

3

Win the war for talent

Tomorrow's supply chains look to be intelligent, predictive and self-correcting. They'll collect data from an ever-increasing array of sensors, cameras and applications, using advanced machine learning algorithms to monitor and adjust automatically detected discrepancies between designed and actual performance. An exponential increase in the volume of available data is already putting pressure on market-leading organizations to recruit specialist analysts capable of turning that data into insights which can cut costs, diversify products and drive sales. And it's not just data scientists; tomorrow's businesses will need specialists in AI, blockchain, robotics and cyber, too. However successful organizations aren't just trying to snap up hot digital talent and then calling the problem solved. They're developing strategies and programs that continuously enhance their workforces, allowing them to adapt in an ever-changing landscape.

Businesses have been taking advantage of automation to achieve efficiencies across their supply chains for decades. But the pace of change is accelerating thanks to intelligent automation (IA). IA brings together artificial intelligence and robotics to automate processes that were previously too complex for machines. And new technologies are emerging all the time. Over the next five years, for instance, we'll see greater use of drones in manufacturing, warehousing and distribution facilities to perform maintenance, take inventory and move stock, to say nothing of applications in final-mile logistics. Advances in IoT wireless networking will change the cost, quality and range of IoT sensors, while silicon chip innovation will allow organizations to embed data analytics capabilities in low-cost IoT endpoints.

The spread of digitization and automation throughout the supply chain has already made some roles obsolete and created a growing demand for supply chain professionals with digital and analytics skills.

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Supply chain roles are changing dramatically. We're seeing a move toward hybrids; people with one foot in the traditional operations and logistics domain, and the other in technology. ”

Peter Liddell

Global Head, Operations Center of Excellence,
KPMG International, and Partner, Operations Advisory
KPMG Australia

However, every other part of the business is also going digital, the competition for the best talent is intense. To make matters worse, since technology is evolving faster than traditional forms of education and training, the number of those possessing the requisite digital skills remains relatively small. To keep pace with the speed at which supply chain models and technologies are evolving, organizations should identify the specific capabilities they will need in the future and focus their energies on establishing effective, sustainable talent pipelines.

Tomorrow's market leaders will combine different strategies and approaches to secure the talent they need. For instance, they will continuously review the way they structure their supply chain management capabilities to optimize functional skill sets, replacing traditional job descriptions with hybrid roles that combine supply chain expertise with a proficiency in data science, such as Scenario Analyst, Customer Journey Architect and Robotics Engineer. In addition to reconfiguring how roles and teams operate, tomorrow's successful organizations will leverage digital centers of excellence to train their workforces in new technological capabilities and how to apply them in real-world, business scenarios.

Finally, they will adapt to accommodate new ways of working, which may be at odds with traditional corporate culture. Tomorrow's technology professionals won't want to — and won't need to — work regular hours at out-of-town industrial centers. Instead, they'll expect to work flexible hours remotely utilizing digital tools to collaborate and manage tasks. Tomorrow's market leaders will evolve their structures and processes to offer permanent staff arrangements that suit their lifestyle preferences and commitments.

Upskilling redeploying and attracting permanent employees is only one piece of the puzzle. On one hand, successful organizations are applying the logic of 'as-a-service' sourcing to their workforces. In some cases, that means outsourcing operational tasks to gig economy workers, contract partners and even competitors. In others, it means digitizing employees' experience and expertise, building standard algorithmic processes — accessible via platforms — capable of augmenting decision-making.

On the other hand, organizations are increasingly looking to partner with third-party knowledge providers — such as business advisory consultancies, academic institutions and software companies — to help them acquire new skills and capabilities quickly and cost-effectively. Strategic partnerships allow organizations to leverage their partners' experience and expertise in the short term while engaging in the longer-term process of developing and embedding those same skills and capabilities internally.

4

Understand the importance of sustainability

The supply chain brings to life the ethical and sustainable vision of a business. Supply chains and procurement are only as resilient as their weakest link; therefore business continuity relies on us thinking about their impact on people and the planet.



What does this mean?

- Increasing pressure from customers, regulators, and investors makes sustainable supply chain management a strategic priority. The impact of the recent COVID-19 pandemic only increases the urgency.
- Ethical supply chains underpin resilience. Supply chain transparency and authentic support for third parties can keep your business relevant in a market of stakeholder capitalism, rather than shareholder capitalism.
- Cost optimizing and asset minimizing supply chains that have sourced and served in a predictable world are shown to be opaque, inflexible and vulnerable to global disruption.
- One of the keys to business continuity during disruption is a resilient, digitally-enabled supply chain. That is, a multimodal network that promotes collaboration with suppliers, enhances operational performance, and reinforces the responsible reputation of the business.
- It will be the regulators that set the standard by which all companies must comply, but it will be the business's ability to meet the values of the consumer, investor, and employee that will help them gain competitive advantage.

At its core, companies need to utilize data to understand supply chain material flows — a critical requirement to move from strategic intent to realizing a sustainable supply chain.

An ethical and connected network means embracing the digital platforms that enable visibility and collaboration, educating and supporting key third parties, and taking bold steps in empowering consumers to make informed buying decisions.



Tracking and traceability



Achieving transparency. Build real-time tracking and traceability over the movement of products and the ethical sourcing conditions of key suppliers that align with product and supplier segmentation.



Network ecosystems

Going beyond compliance and helping with the change by working collaboratively with private and public stakeholders in local sourcing regions towards shared sustainability goals — SDGs.

Integrated system technologies



Deploying a single digital platform that can provide assurance across the entire supply chain and a single version of the truth for enhanced, informed and data-driven decision making.



Culture shift

Creating a lasting change that is founded on a transformative culture that educates on and rewards good ethical and environmental performance both internally and with third parties.

Joining the dots internally



Ensuring that strategic priorities are interlinked to help create a future-fit supply chain that is agile, resilient and responsive to future disruptors.



Continuing the conversation

Embedding a robust governance framework that can help provide assurance through measuring and monitoring the performance of key suppliers and customers — KPIs, audits, due diligence.

Consumers want to see businesses commit to sustainability targets through action. Backing up claims by integrating assurance into procurement and sustainability strategy and disclosing facts that align to meaningful, verifiable and ongoing measures adds weight in the eyes of the consumer. Engaging independent assurance adds gravity to ESG reporting, enables leading practice to become integrated into operations, and also brings insight to those areas that companies think are unique and different to other supply chains.

Use a clear reporting structure and market disclosure process aligned to global reporting standards, and set KPIs to measure, track and optimize performance across the supply chain, and engage suppliers in the sustainability strategy. Use a balanced integrated accounting structure,

such as integrated accounting across the business capital category (i.e. natural capital, environmental, social etc.)

Businesses have demonstrated that ESG principles underpin rapid stabilization techniques. They have collaborated at scale and at pace to achieve social purpose. They have promoted the importance of people, health and well-being alongside operational logistics.

Authentic action is needed to help preserve finite resources, align strategic performance metrics to incoming ESG reporting frameworks, and optimize the supply chain to enable traceability, technological and product innovation, and collaborative networking. Resilience means taking care of people and the planet together.

5 Leverage cross-functional data

Supply chain automation and digitization doesn't just reduce costs and drive efficiencies, it generates vast and ever-increasing quantities of digital information. Many organizations already use predictive analytics and machine learning tools — overseen by teams of data scientists in so-called 'control towers' — to analyze, integrate and interpret this data in real time, enabling them to preempt rising costs, expose process bottle-necks and augment decision-making.

However, control towers aren't perfect. It's a model that's predicated on data totality, integrating inputs from across the supply chain in order to automate responsive process optimization. But as supply chains become more digitally sophisticated, control towers must cope with greater and more varied inputs, which can overwhelm decision-makers and slow down systems.

A cognitive decision tower lets you collaborate across functional boundaries, with analytics doing the heavy lifting and human experts providing the personal expertise to make good decisions. ”

Andrew Underwood
Partner
KPMG in the UK

Moreover, control towers are designed to look at the supply chain in isolation. Their purpose is to optimize processes against pre-determined KPIs, not to generate the kind of insight that would enable leaders to evaluate the strategic fitness of those KPIs or align them with metrics and business priorities drawn from other parts of the organization.

That's why tomorrow's successful organizations will likely invest in cognitive decision centers (CDCs), which represent a major improvement on traditional control towers. Unlike control towers, CDCs take a cross-functional view of the supply chain, from sales and marketing at one end to finance and procurement at the other.

Typically, each of these functions is autonomous, and each is incentivized against targets defined in its own terms, without reference to the organization's wider strategic ambitions. Their priorities, moreover, seldom align. As each function strives to optimize against its respective KPIs, it inevitably negatively impacts the performance of the others.

Tomorrow's CDCs can use state-of-the-art artificial intelligence to capture and interpret cross-functional data, allowing decision-makers from across an organization to recognize points of conflict and simulate different trade-offs in the hunt for a best scenario. Put simply, CDCs are about optimizing enterprise-wide performance, not the performance of distinct business units.

Above all, CDCs are simulation tools; they can provide decision-makers with a testbed for business strategy. While control towers are fundamentally backward-looking, streamlining supply chain processes to hit predetermined targets, tomorrow's CDCs will help organizations understand the enterprise-wide impacts of different responses to the market and different strategic ambitions. This allows successful organizations to continuously make informed decisions about their functional priorities.

6

Exploit micro supply chains

Traditionally, supply chain management has been about reducing costs, either by outsourcing labor-intensive manual processes to emerging economies, embracing long-term contracts or pursuing economies of scale. While decades of optimization have enabled businesses to drive down unit costs across the supply chain, it's come at a price. Heavily-integrated global networks are fundamentally unresponsive to changes in technological potential, geopolitics or customer demand and that means that yesterday's market-leaders are in danger of losing out to nimble disruptors, capable of leveraging digital technologies to bring new products and services to market quickly.

But the rate at which the market is changing isn't the only challenge facing today's businesses. Customers are demanding greater choice, customizability and personalization than ever before. Heavily integrated supply chains, however, reliant on cost-savings at volume to generate value, can struggle to deliver variety profitably. As variety increases, diminishing economies of scale and rising indirect costs can lead to underperformance.

Even worse, in building out their supply chains to accommodate a wider variety of offerings and channels, organizations can end up over-catering to their least profitable segments and underserving their most valuable customers.

Forward-looking businesses recognize the need to balance the demand for variety against the costs associated with complexity, developing agile operations that can flex to adapt to the market and scale to meet the needs of different customer groups. As a result, they're investing increasingly in micro supply chains.



Tomorrow's customers expect infinite variety and instant delivery. But not all variety is profitable. Micro supply chains locate the balance between the cost of complexity found in a business and the value of variety associated with market demand. ,

Brian Higgins

Principal, Advisory
KPMG in the US

In order to meet growing customer demand for choice, tomorrow's successful organizations will separate out the operations associated with different business streams into self-contained, micro supply chains. Each chain can then be optimized to serve a specific customer segment more effectively without impacting how the organization serves other segments. Indeed, micro supply chains enable companies to customize products, policies, production systems, flows, organizations and systems choices to different segments of the market and specific customer affinities.

Micro supply chain models represent a far more profitable approach to delivering variety than yesterday's one-size-fits-all operating models because they allow businesses to run multiple standard work processes in parallel, significantly reducing the costs of complexity associated with accommodating multiple variations within a single standard process. But they're not only an effective means of enhancing customer-centricity and reducing complexity costs and cost to serve. Because they're aligned with specific customer segments, micro supply chains enable businesses to react faster to changes in specific corners of the market.

Micro supply chains often shift production and distribution from remote global manufacturing hubs to locations which are much closer to the end customer. They combine traditional mass production methods with small-batch modular techniques, ensuring items remain as generic as possible for as long as possible and exploiting recent advances in 3D printing technology to finish and personalize goods near the point of delivery. It's a model that relies on agile partnering and fluid, 'as-a-service' relationships instead of long-term contracts and capital-intensive fixed assets, and it's highly flexible.

The principal advantages of micro supply chains are reduced costs of complexity and cost to serve as well as unparalleled responsiveness and adaptability to changes in customer demand, but there are many other benefits, too. By shifting production closer to the end customer, organizations can offer faster fulfillment at a lower cost and with a smaller carbon footprint. Micro supply chains also mitigate the impact of reverse logistics, the annual cost of which in the U.S. alone is expected to reach US\$550 billion by 2020¹. Working within rather than across borders means micro supply chains are far less vulnerable to changes in regulation, interest and exchange rates, wage inflation or tariffs. The ability to manufacture in smaller batches keeps inventory costs and waste to a minimum.

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Flexible, contract manufacturing enables companies to replace more of their traditional fixed cost base with variable costs, to adapt faster to changing demand. ”

Henry Brunekreef
Principal Director
KPMG Australia

¹ Costs of return deliveries in the United States from 2016 to 2020 (in billion U.S. dollars), Statista, 2019

Looking ahead



Understanding today's challenges so you're ready for tomorrow

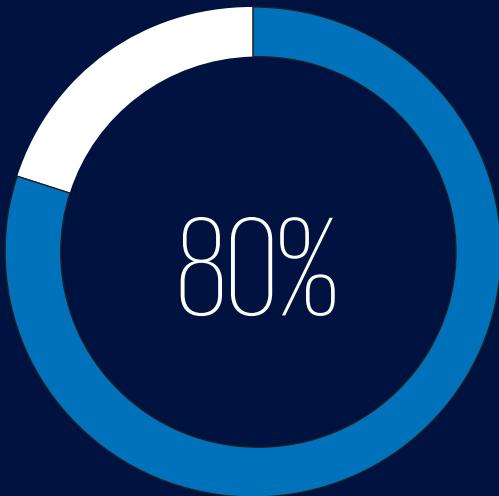
- 1 Embracing change
- 2 Overcoming digital overwhelm
- 3 Building management capability

Embracing change

Disruption is the new norm. As new technologies continue to emerge, the pressure on supply chain leaders to innovate is only going to get more intense.

Across multiple industries, agile challengers are exploiting new technologies to outcompete incumbents. Resistance to change, however, continues to be the biggest obstacle to investment in supply chain transformation among established businesses. It's easy to see why. The costs associated with replacing legacy technology systems or evolving business models can be high. Where supply chains are reliant on capital-intensive fixed assets and long-term contracts, leaders may be inclined to defer digitization and automation, especially if the model seems to be working. Success in the present can sometimes be the most tenacious obstacle to change.

Tomorrow's successful organizations will adopt an agile, flexible approach to business transformation. Impatient for quick returns on investment and not afraid to invest, they will focus their budgets on targeted, high-impact, modular strategies: cloud-enabling or outsourcing some parts of their supply chains as a priority; hybridizing some—but not all—supply chain management roles to incorporate greater data science capability; or migrating non-standard manufacturing to micro supply chains while retaining their mature global networks for the manufacture of standardized products and parts.



A responsive operations and supply chain is the single biggest digital transformation priority for organizations: 80 percent say it's a 'top' or 'high' priority.

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, July 2020

Overcoming digital overwhelm

Many supply chain leaders are aware of the need to urgently digitize their supply chains, but don't know where to start. The sheer variety of available solutions can seem at best confusing, and at worst completely overwhelming. Adding to the choice between software solutions, 'as-a-service' business model iterations, cloud-based technologies, robotics and more, organizations face pressure to not only emulate their competitors but to outperform them. While at the same time making the best possible use of their technology budgets in order to do so.

The most successful organizations aren't grasping after the next big thing. They're making decisions based on a clear understanding of their business strategies, identifying technology investments that enable them to do even better than what their competitors aren't doing. Smart businesses know that no matter how streamlined and digitally-enabled their operations are, if they make bad decisions, their performance will suffer.

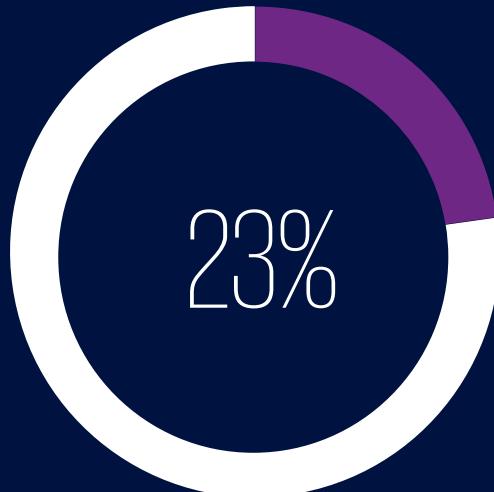


Organizations that look to evaluate their digital processes and leverage technology options which will remove friction from the supply chain and improve decision making capabilities will see vast performance improvements and sustainable ROI. ,

Rakesh Agarwal

Partner

KPMG in Singapore



of supply chain leaders expect to have a digital ecosystem by 2025, up from only 1 percent today.

Source: Gartner®, "Future of Supply Chain 2021"

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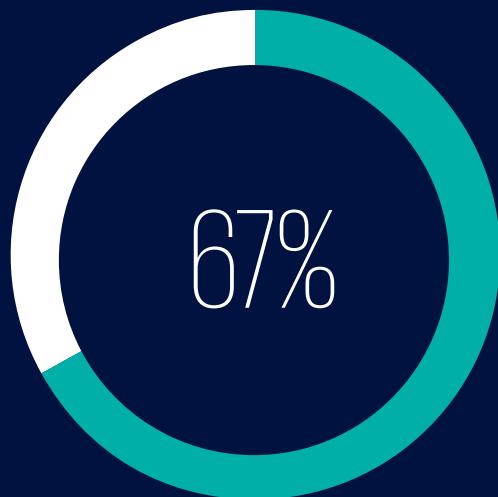
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Building management capability

Tomorrow's supply chains will be more fluid and collaborative, comprising myriad 'as-a-service' partnerships across functions and workforces, decentralized micro supply chains and even parallel supply networks segmented for different customers and markets. Gone are the days of linear flows and long pipelines; if supply chains are becoming shorter end-to-end, they're nonetheless becoming broader, more diverse and more complex.

Many organizations think they lack the capability — in terms of systems, digital skills and experience — to manage this many independently moving parts efficiently. The inability to collaborate effectively, in particular, whether that's within organizations or across the partner ecosystem, poses a significant threat to successful transformation.

Today's market-leaders, however, are already working with optimization specialists to design solutions that will not only improve supply chain visibility, but can also facilitate collaboration and augment cross-functional decision-making, enabling them to manage more complex networks more efficiently.



of organizations say they've accelerated their digital transformation strategy since COVID-19.

Source: A commissioned study conducted by Forrester Consulting on behalf of KPMG, July 2020

Getting there



While the specifics of every client challenge are different, there are nonetheless six broad steps that can help businesses enhance their supply chains, whatever their industry and whatever stage they're at along their transformation journey.

- 1 Clarify your strategy
- 2 Understand the cost of complexity vs. the value of variety
- 3 Leverage data to improve core competencies and improve supply visibility and transparency
- 4 Lead with performance, not technology
- 5 Upskill your workforce
- 6 Embrace new partnerships

1

Clarify your strategy

In preparing for tomorrow's digital economy, today's organizations are faced with a myriad of investment choices. Indeed, there are often so many routes to improving performance across the value chain that businesses don't know where to start. Our recommendation is always to start with a clear articulation of your business strategy: What are your value propositions? Who are your customers? How are your offerings differentiated? With strategic priorities in mind, you can assess the need to augment decision-making, improve operational performance, enhance your capabilities or even reconfigure your business model. With a clear view of your performance ambition, you can also identify the KPIs against which you'll measure success and ROI.

2

Understand the cost of complexity vs. the value of variety

While there's value in meeting growing customer demand for choice, offering too wide a range of the wrong products and services isn't profitable. To succeed in the future, you will need to address both halves of the equation: what are the most valuable choices you can offer your customers; and what are their associated complexity costs and how might these be reduced? The first step is always to understand the market: What do your customers expect in terms of cost, functionality and speed of fulfillment? What are your competitors offering? What's the least variety you can offer while remaining credible and relevant? What combinations of products, services and channels are your customers responding best to? The second step is to build these insights into a differentiated target delivery model you can optimize against, providing better value at lower costs. Bear in mind that optimizing variety and complexity comprises two distinct processes that you'll need to keep balanced. You should split out and align different business streams with different customer needs to give greater operational flexibility without compromising standard work processes. You should also review and redesign your operations within those business streams to maximize efficiency and reduce cost to serve.

3

Leverage data to improve core competencies and improve supply visibility and transparency

The first step toward enhancing your decision-making with cognitive technologies or machine learning algorithms, is to consolidate the data your organization produces and can already access. It's likely that your business intelligence is served by dozens of different data streams, but are you able to leverage the data in a meaningful way to improve existing capabilities? Are you able to use IoT to predict product failures? Can you leverage supplier advanced shipping notices to anticipate supply continuity issues? As an intermediate step in your transformation journey, you can build or buy an analytics platform to help you manage and organize your data sources in order to enhance your existing processes and decision making. Improving your supply visibility and transparency, aided by data and innovative technologies, can also help you predict supply chain risks through data driven insights. This in turn helps manage events and risks, enhance/remodel network flows, and empower business planning processes. Longer-term, the data will be machine ready to usher in more advanced cognitive techniques.

4

Lead with performance, not technology

Today's business leaders need to forget the hype surrounding the latest technological trends and focus on their present capabilities and the needs of the customers they serve. The purpose of technology is to improve performance and augment decision-making. Successful organizations start by identifying their performance ambition, looking at opportunities to remove friction in a process or to improve decision-making and then identifying solutions and capabilities to drive improved performance, factoring in the change-management and upskilling costs associated with implementing these new capabilities.

5

Upskill your workforce

Whatever the technological maturity of your business, the success of your future supply chain strategy depends on your people. It can take time to recruit new talent and upskill your workforce, which underlines the importance of starting now. An important step is to establish supply chain centers of excellence (CoEs) to curate best practice and consolidate lessons learned. Not only can your supply chain CoEs function as a specialist resource, providing guidance and insight on demand, they can create and facilitate training that accelerates learning and development across your organization. CoEs are also innovative spaces, providing a home for new digital talent — from informatics experts to actuarial scientists — while enabling your organization to explore the kind of hybrid specialisms you will need in the future.

6

Embrace new partnerships

In the future, no single organization will have the full suite of digital capabilities under one roof. Tomorrow's successful organizations will outsource not only capabilities but also hard-to-recruit skill sets; they'll cultivate an agile ecosystem of partners from small-scale regional manufacturers and fourth- and fifth-party logistics companies to gig economy technology professionals and universities. By focusing on your business strategy, customer needs and current capabilities, you can begin to build a roadmap for the services you will need to outsource and consider different partnership models and performance management strategies.

How can KPMG help?

KPMG recognizes that today's business leaders don't only need solutions, they need reliable advisors. Whatever your sector, KPMG professionals can add value in your supply chain transformation journey.



Multi-disciplinary teams from across the global network of member firms combine deep industry expertise with an agile approach to help you unlock existing value within the enterprise and enhance your capabilities to achieve sustainable growth in the future. KPMG can bring to bear a suite of frameworks, methodologies and tools to help you review, design and optimize your supply chain function.

- **Drawing on a wealth of insight and experience**, KPMG specialists have developed a sophisticated, purpose-built digital analytics platform that your teams can leverage to pinpoint opportunities and cost-drivers faster and more effectively than before.
- **KPMG has designed a series of proprietary operating model and technology accelerators** that can turbo-charge your supply chain function and accelerate return on investment from transformation efforts.
- **KPMG has devised a systematic methodology that identifies and investigates costs across the value chain.** Member firm professionals work diagnostically, top to bottom, from the costs associated with your product portfolio through every process in the design, manufacture and distribution of individual products. It's an approach that enables us to attack costs at their source, retaining value that focuses on mitigating costs once they're cemented into your proposition.
- **At KPMG, we focus on value.** Our teams use a variety of tools and methodologies to target and realize benefits and opportunities for return on investment (ROI) that can offset the costs incurred in transforming your supply chain. Member firm professionals can create a transformation roadmap that means you don't have to wait to see the value in upgrading your supply chain function.
- **KPMG can provide the frameworks and analytics capabilities that enable you to distinguish between 'value eroding' and 'value contributing' complexity.** We'll help you develop an adaptable operating model with a bias for standard work that strikes an optimum balance between product variety and process complexity.

Supply chain management plays a more important role than ever in connecting the front, middle and back office in a modern enterprise. In the future, however, supply chains will not be driven by products and processes, but by customer needs. They will not depend on capital-intensive fixed assets, but on a nimble network of trusted third-parties. Your supply chain function needs to be ready.

KPMG Powered Enterprise | Supply Chain is designed to support your transformation needs and designed to address challenges such as:

- Is my supply chain initiative focused on customer experience metrics?
- Does my end-to-end supply chain function as one virtual organization?
- Can I see my total demand and supply picture at any point in time?
- How quickly can I identify and respond to a potential supply continuity issue?
- Are product movements driven by actual demand or by forecasted demand?

Choose to embrace change.

KPMG Powered Enterprise | Supply Chain helps you to better meet the challenges of customer centricity and responsiveness to change, while maximizing data driven insights and efficiency gains both now, and in the future.

With KPMG Powered Enterprise | Supply Chain you can benefit from:

- a jump start to your digital supply chain transformation
- immediate access to leading practices, processes and supply chain service delivery models
- technology enabled efficiencies and insight
- a guided process with an array of supply chain assets and accelerators
- a positive customer experience
- reduced implementation risks and increased speed to value.

Imagine your supply chain function with:

- real-time, customer driven production lines and supply chains
- effective utilization of platforms
- cross-functional data turned into insights
- the ability to exploit micro supply chains to respond to change
- a winning approach to the war for talent
- a readiness to invest in future-ready capabilities.

To find out more about Powered Enterprise | Supply Chain and the impact it can have on your business visit: home.kpmg/poweredSC

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