



# Future-ready Supply Chain Capabilities

**What got you here won't get  
you there**

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**New technologies are changing the fundamentals of supply chain management. As the quality and quantity of the available data continues to improve, activities predicated on limited or sub-optimal information streams are fast becoming unfit for purpose. Tomorrow's successful organizations will need to develop entirely new capabilities, utilizing the most relevant data to manage their operations more efficiently and respond to opportunities and threats more effectively. To make this happen, supply chains should invest in disruptive capabilities to better understand customers, predict and shape demand, and influence the customer experience. In the future, supply chains will need to be much better at picking up customer signals, analyzing data, segmenting markets, calculating cost to serve and managing partners and knowledge. As such, new roles will emerge, such as supply chain architects, who will help drive the brand promise.**

# Are you prepared for an exciting digital future?

The demands on supply chains keep on rising. Customer expectations now border on infinite choice and instant delivery. Geopolitical trends and climate change can disrupt traditional supply sources. Falling margins put pressure on working capital and inventory levels. Digitization brings increased security risk.

In the face of such disruption, supply chain leaders are seeking greater flexibility to adapt swiftly to change. According to KPMG's research<sup>1</sup> the top drivers of investment are real-time visibility, end-to-end traceability, new fulfilment nodes, faster innovation and lower cost-to-serve.

Our discussions with supply chain executives highlight some key areas of performance, around which organizations can build a digital supply chain fit for the future.



<sup>1</sup> [KPMG Digital Supply Chain Executive Survey, 2018.](#)

Fortunately, a host of exciting technologies are already reshaping supply chains and operations:



**Sensors act as ‘reporters’, enabling tracking of movement and performance of products, transport vehicles and other assets.**



**Robotic process automation (RPA) software which automates repetitive tasks.**



**Autonomous vehicles and robots increase efficiency and reduce accidents in factories, warehouses and transportation.**



**3D printing enables enhanced product customization and assembly closer to the delivery point.**



**Data, analytics and insights predicts demand and drives smarter and more efficient logistics routes.**



**Smart contracts and blockchain can remove transactional friction and prove provenance.**

**Future supply chains will look very different – and so will the people that work in and around them. The capabilities that got organizations where they are today won’t be enough to compete in the dynamic, demand and customer driven future of tomorrow.**

# What does it take to be future ready?

Supply chain professionals have traditionally been very effective at supply chain planning, inventory management and order replenishment. In a future, customer-centric supply chain, these activities are table stakes.

Tomorrow's successful organizations will need to develop entirely new capabilities, utilizing the most relevant data to manage their operations more efficiently and respond to opportunities and threats more effectively. Current capabilities will need to be augmented with new, primarily digital-related capabilities to take advantage of next-generation technology.

## Tomorrow's market leaders will excel in five key capability areas:



### Modelling the 'voice of the customer'

Delivering a great, profitable customer experience is a key supply chain objective. To do so, everyone involved in the value chain should recognize their contribution to this experience. This means learning to understand the voice of the customer-by leveraging signals from IoT (via sensors that are built into products), which will provide rich data on how products are being used.

Supply chain teams should know about a product breaking down – and possibly even fix it – before the customer is aware of a problem. Equipped with such knowledge, supply chain professionals can play a meaningful role in front office, customer-facing activities, to anticipate and address customer needs – rather than simply reacting.

Supply chain teams can help ensure there is a purpose-built supply chain for the growing number of customer segments (which are organized around customer behavior), and leverage real-time insights to inform decision making.



**Everybody needs to truly understand their cost-to-serve at any point in time, to ensure they aren't shooting from the hip and can make better, more informed business decisions."**

**Carmelo Mariano**  
Partner, KPMG Advisory  
KPMG in Italy



### **Micro demand planning**

It's not just IoT sensors that will give tomorrow's retailers and manufacturers greater visibility of customer demand. Increasingly, customer insights and data come from outside of the organization - from partners, social media and other third parties.

Supply chain leaders need to find agile and efficient ways to analyze this data to improve the quality of the demand signal by market, channel and customer segment – and at more granular levels than previously done - such as individual retail outlets. Past data will never be sufficient for the needs of a future ready business.

Leading organizations must be able to predict and shape demand and trends confidently via a dynamic, segmented-supply chain that can react to changing market conditions. In order to do this effectively, they must develop better data governance capabilities - collecting, integrating and leveraging data to generate a clearer, more granular picture of customer demand. Yesterday's businesses modelled demand at the regional or channel level; tomorrow's market leaders will have the capability to predict demand at individual outlets, reducing waste and boosting customer engagement.



### **Understanding the cost of complexity through supply chain analytics**

To be competitive, all future supply chains will need a robust supply chain analytics platform to understand the cost to serve customers. In the past, businesses tended to tolerate loss-making product or service lines because they didn't have access to the data streams and analytics capabilities that would enable them to calculate the cost of serving their customers.

More and more sophisticated data science capabilities are being developed all the time, and in the future organizations will be able to untangle complex masses of product line, supply chain and channel-to-market data to understand the true cost to serve for any one of their customers in real time. In the shorter term, decision-makers will be able to identify un-profitable or under-profitable service lines and opportunities to improve performance.

In the longer-term, they'll have the tools they need to be able to reposition products, review customer accounts, and optimize the way customers are serviced, improving their overall margin. With the right supply chain analytics capabilities, tomorrow's businesses will be able to model the costs of complexity incurred by new offerings, setting performance benchmarks that tell them where, when and how far to invest to make the most of market opportunities.



## Managing new kinds of partner networks

Today's successful businesses are moving away from traditional, asset-based supply chains to a managed services model where capital-intensive capabilities – such as manufacturing, warehousing, logistics and distribution – are outsourced to partners and contractors. In the future, however, it's not just physical processes that will be managed 'as-a-service'.

As effective supply chain management comes to depend more and more on cutting-edge analytics capabilities, organizations face a growing skills gap across their workforce, which training and development cannot fill quickly enough. Tomorrow's market leaders will partner with knowledge providers to give them access to the technical skills and expertise they need to build new digital solutions, iterate their platforms and enhance their capabilities as data streams become more and more complex.

Businesses will not only outsource the design, architecture and maintenance of their digital systems, they will also outsource the management of those systems, especially the planning cycles. As organizations' networks become more complicated, they need to develop new management capabilities to continue to operate effectively. In the future, if they are going to outsource functional expertise, businesses will need to be able to manage an extended workforce of full- and part-time employees, gig economy workers, service providers, alliance partners and so on, while maintaining data security and integrity and protecting intellectual property.



## Cognitive decision support and autonomy

Yesterday's supply chains were managed exclusively by people. In the future, a growing number of decisions will be automated, which both increases operational speed and responsivity and frees up supply chain professionals to focus on more complex, impactful decision-making.

Tomorrow's successful businesses will feed predictive analytics into machine learning algorithms, training computers to identify pattern anomalies across the supply chain and respond automatically with a suite of appropriate countermeasures. This translates to a future state where supply chains will be able to recognize the accumulation of surpluses and scale back production therefore reducing waste; or by using a combination of cameras and IoT sensors, they'll anticipate the potential disruption and self-correct, reducing costly outages and line downs.

Automated optimization will become the new norm and tomorrow's businesses will need to be able to build cognitive analytics into their supply chains if they want to stay ahead.

<sup>2</sup> [Gartner Predicts 2019 for Supply Chain Operations, Gartner, 17 December 2018.](#)



**By 2023, at least 50 percent of large global companies will be using AI, advanced analytics and IoT in supply chain operations.<sup>2</sup>**

# Key takeaways: investing in future-ready capabilities

The success of any future supply chain organization will hinge on identifying actionable insights, enabling an adaptable and flexible structure, innovating quickly, and executing with agility and precision.

The rich promise of disruptive technology may seem like the immediate answer, however this promise can only be realized if supply chains have the appropriate resources to utilize these innovations. Before investing in specific technologies, organizations need to first carry out an audit of their targeted future capabilities and determine where significant gaps may exist. Some of the key areas for investment are:

- 1 A supply chain analytics platform** that helps to understand operational improvement, mine third party insights, and understand the voice of the customer via IoT signals from products in the field. The platform should feed demand planning and cost-to-serve analysis.
- 2 Supply chain architects** who are intimately aware of different parts of the business and have an in-depth understanding of data science, profitability, customer experience, marketing, analytics, cognitive learning and partner/knowledge management. These individuals will leverage their customer intimacy to constantly work with the front office on future offerings and supporting supply chain designs.
- 3 Portfolio of supply chain archetypes** aimed at different segments, and indeed micro-segments, driven by customers. Each would have its own customer promise that influences cost, channels and service levels, all based upon profitability analysis. Some of these may be short-lived to serve emerging trends



**Supply chain operations are under pressure to adopt new business models and technologies to excel in an increasingly complex and volatile world. Leaders must identify where to innovate and invest in new processes and technologies to help their companies remain relevant in their markets. Those investing and innovating will ensure their enterprises remain competitive in the future.”**

**Dwight Klappich**

Vice President Analyst  
Gartner<sup>3</sup>

<sup>3</sup> [Gartner Predicts 2019 for Supply Chain Operations, Gartner, 17 December 2018.](#)



# How can KPMG help?

KPMG recognizes that today's business leaders don't only need solutions, they need reliable partners. Whatever your sector, KPMG can add value at any point in your supply chain transformation journey. Our multidisciplinary teams 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 has 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 and adheres consistently to a systematic methodology that identifies and interrogates costs across the full length of the value chain. We 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 far more effectively than alternatives that focus on mitigating costs once they're cemented into your proposition.
- At KPMG, we're obsessed with value. Our teams use a variety of tools and methodologies to target and realize benefits and opportunities for ROI that can offset the costs incurred in transforming your supply chain. We 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.



## Our differentiators

**KPMG Powered Supply Chain** brings together industry-leading practices and processes, pre-configured, cloud-based technology applications and a next-generation delivery framework to help you jump start your supply chain transformation journey.

- Leverage customer-centric business models, pre-built KPI libraries, data models and reports to align your supply chain to your customer experience.
- Take advantage of best-practice process architectures, a catalogue of robust controls and market-leading service model design to be able to anticipate and quickly resolve supply continuity problems.
- Exploit industry insights and advanced data analytics to organize your logistics capabilities around actual demand rather than sales forecasts.
- Utilize KPMG’s Target Operating Model to drive sustainable transformation and enhance the value of your supply chain.
- The result is reduced implementation risk, clear, consistent return on investment with top-decile performance and a solid platform for continuing business evolution.
- Build an end-to-end, responsive supply chain function that operates as one virtual organization.
- Capture, integrate and interpret data to give your teams an accurate, real-time overview of systems, processes and flows.

**KPMG Connected Enterprise** is our customer-centric and enterprise-wide approach to digital transformation. It focuses every process, function and relationship of the organization on a single purpose, harnessing the power and potential of customers to fuel profitable and sustainable growth. The divisions between front, middle and back offices are collapsing. Future-focused businesses are shaping new operating models in which every part of the organization, from sales to the supply chain, is working with every other element to deliver against the customer promise.

**KPMG Ignition Centers** are our most innovative spaces. They facilitate new ways of working with one another and our clients, help us to compete for the new types of talent required by 21st Century Enterprises, and serve as the storefront for our most innovative solutions. With locations that span the United States and KPMG International member firms, we invite you to experience the future at one of our KPMG Ignition Centers.



## Analyst recognition

KPMG has been named a leading global service provider for Supply Chain Planning consulting services in a major new report: [The ALM Vanguard: Supply Chain Planning Consulting 2019 report](#). The report notes how “KPMG demonstrates consistent success in elevating and maturing client planning organizations into a truly integrated, high-functioning operation that is capable of delivering real positive results.”



## Additional market recognition

### ALM

- Vanguard Leader in Sourcing Strategy Consulting 2018
- Vanguard Leader in Procurement Operations Consulting 2018
- Vanguard Leader in Logistics Management Consulting 2017

### Gartner Market Guide for Supply Chain Strategy & Operations Consulting

- 2018, 2017, 2016



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