

Surviving and Thriving

How Supply Chain Leaders minimize risk and maximize opportunities



Introduction

Creating a customer-centric organization in 2020 is a lesson in managing complexity while maintaining resilience. Businesses must be able to deliver high-quality products at warp speed while meeting sustainability targets, building relationships with suppliers and sub-suppliers, predicting demand for products and resources, mitigating risk, and rapidly adopting new technologies without disrupting business as usual. Supply chain functions are tasked with meeting all of these demands—even in the face of a global pandemic.

The coronavirus has turned a spotlight on the importance of lean and efficient supply chains, highlighting the need for flexibility and innovation to deliver in uncertain times. Our global survey of 1,000 executives from business functions spanning the supply chain was fielded before coronavirus took hold around the world, but the data sheds light on core principles of supply chain management that will help companies navigate the uncertainty ahead. (For more information on our methodology, see box on page 14.)

In this complex environment, the essentials of product value chain management (including R&D/design, manufacturing, supply chain, and asset management) are more critical than ever. We identified a small group of companies among our survey respondents that are successfully managing

their supply chains—we call them Supply Chain Leaders—and catalogued their best practices, allowing us to quantify the benefits of a well-run supply chain and a balanced approach to sometimes-competing objectives.

Our research shows that companies with stronger strategies for customer-centricity, visibility, sustainability, and the application of intelligent technologies are seeing results from their efforts in terms of supply chain effectiveness, resiliency, and overall financial performance. And while all supply chains are vulnerable to risks in a global economy, execution on clear strategic objectives—supported by the correct tools and tactics to mitigate risk and minimize complexity—will make such events more manageable.

Key terms

Product value chain refers to the business processes and functions involved in the entire supply chain, from initial product design through manufacturing, supply chain management and operations, and asset maintenance.

Intelligent technologies encompass tools like *artificial intelligence*, *machine learning*, and *predictive analytics* that can mimic human thought processes, automate tasks, and increasingly make complex decisions without human intervention. Other tools such as the Internet of Things (IoT), blockchain, augmented and virtual reality, or drones may be made more useful by the application of intelligent technologies.

Meet the Supply Chain Leaders

What is a Supply Chain Leader? These individuals work in organizations that prioritize their product value chains, ensuring that the supply chain and its related functions are fully integrated with organizational strategy. This elite group of respondents—approximately 12% of our 1,000-strong survey sample—have more resilient supply chains, higher levels of innovation, customer and employee satisfaction, and growth numbers than other respondents.

To identify the most capable companies in our survey sample, we applied four filters. Supply Chain Leaders:

- Base most of their product value chain decisions on customer needs
- Factor in sustainability issues from product design through delivery
- Capture and act on real-time information, often using AI or predictive analytics
- Deploy advanced technologies at scale across their organizations (see Fig. 1)

This combination of big-picture goals, attention to operational details, and technology deployment correlates with strong business results. While we cannot prove cause and effect, companies focusing on their supply chains report superior financial performance and a range of other positive outcomes (see Fig. 2).

It is not just these strong growth numbers that set Leaders apart. These organizations put the supply chain front and center in their organizations—86% of Leaders say their supply chains are a competitive differentiator, compared with 71% of others.

Fig. 1: What makes a Supply Chain Leader?

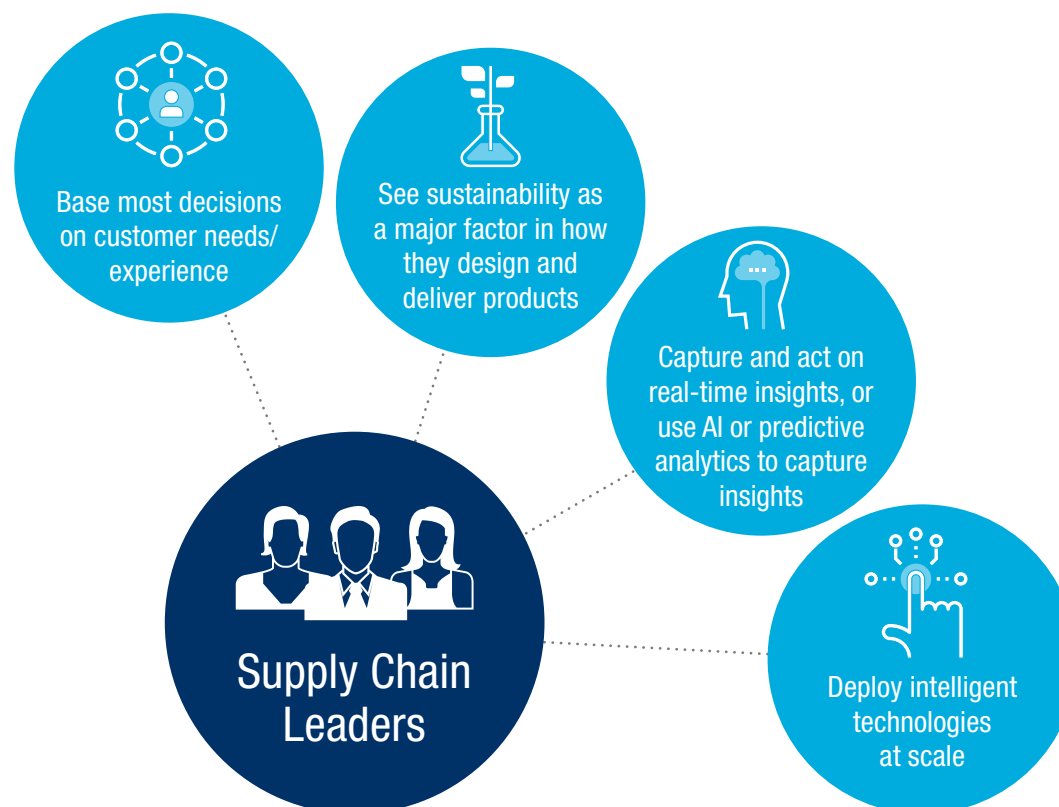
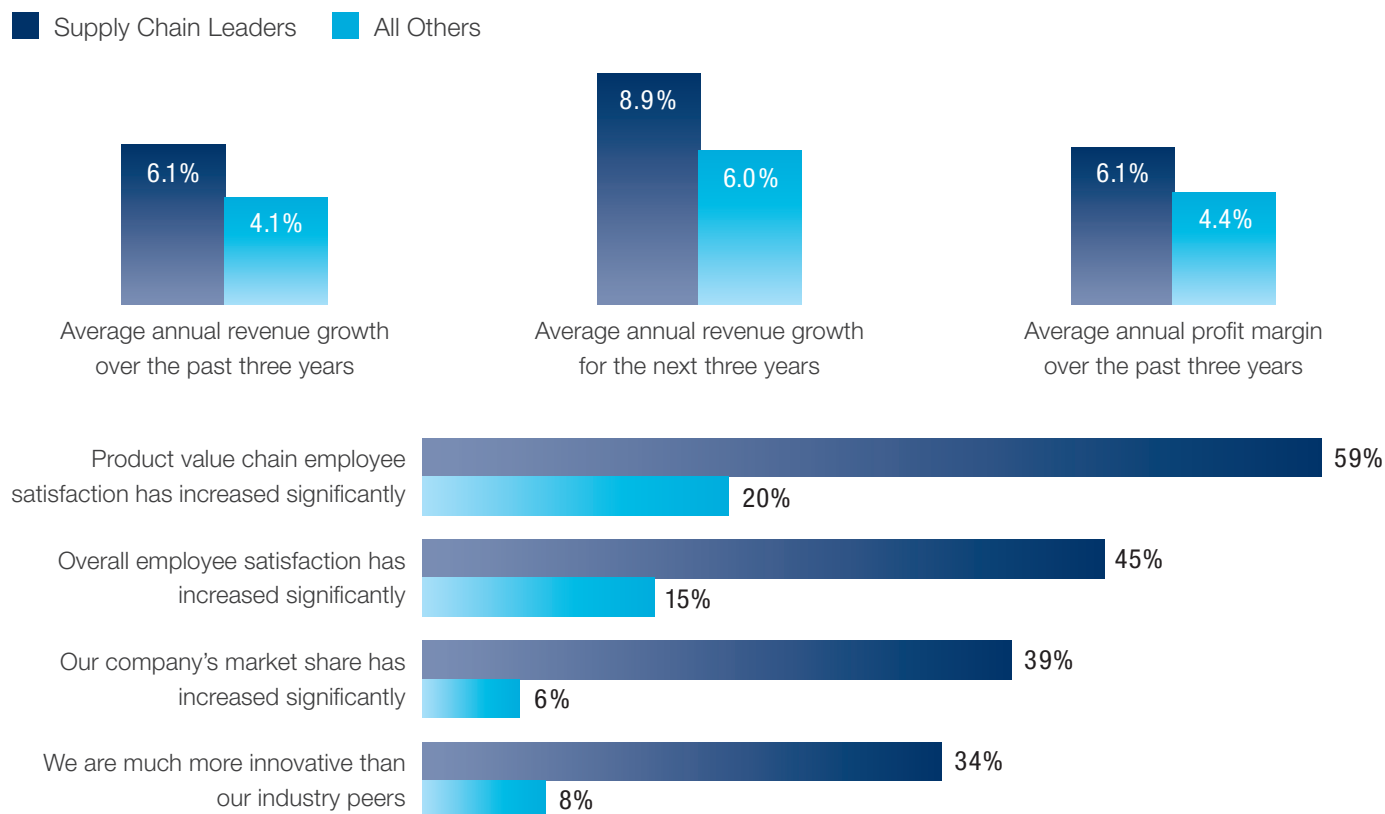


Fig. 2: Supply Chain Leaders report better financial performance and employee satisfaction

That may be because a large majority (81%) of Leaders say their supply chain executives are increasingly involved in setting overall company strategy, compared with just over two-thirds of other respondents.

Perhaps most importantly, the traits that make a Supply Chain Leader—a focus on the customer, a commitment to sustainability—are influencing other functions as well. Three-quarters of Supply Chain Leaders say the culture of their supply chain function influences other parts of the organization.

At GSK, the British-based global healthcare company, the pharmaceuticals supply chain is in the process of shifting to a supply-chain-management-oriented organization, a move driven by “a recognition that to really get where we wanted to get in the next few years, we needed to get a bit more balance between being excellent at manufacturing and supply chain management,” says Gareth Richardson, VP of Supply Chain Services. This focus on the supply chain, he says, means calibrating strategic goals, deploying technology, and being a champion for all these initiatives within the company.

An aerial photograph of a large container ship sailing on a deep blue ocean. The ship is viewed from a high angle, showing its long hull and the colorful stacks of shipping containers on its deck. The ship is moving towards the bottom left of the frame, leaving a white wake behind it.

Focusing on supply chain resiliency

The spread of the coronavirus has laid bare supply chain vulnerabilities and their impact on the world economy. As a result, the importance of supply chain resiliency has never been clearer. While resiliency was not a main focus of our research program, we are able to see that our Leader group exhibits some best practices in this area.

Our survey—fielded in early 2020, as COVID-19 was only beginning its march around the globe—finds that 39% of our respondents have experienced a negative risk event at some point in their supply chains over the past three years. A similar proportion—40%—say their exposure to supply chain risks has increased over the same period of time. By contrast, only a quarter of our Supply Chain Leaders report suffering a negative risk event, and 31% say their risk exposure has increased. What does this mean for this group—and those on the journey to become Supply Chain Leaders?

Our leader group stands out in a few distinct ways: 76% agree that their employees are agile

and can react to unforeseen events (compared to 52% of others). They also are significantly more likely to report high levels of collaboration with their risk management and compliance functions—75% vs. 63%.

Additionally, Leaders have significantly higher levels of visibility into their supply chains and have successfully broken down silos within their organizations. These factors—agile employees, seamless collaboration with risk management and other functions, and a flatter organizational structure—appear to help make supply chains more resilient.

While no supply chain can ever be fully prepared for and protected from global shocks of the magnitude created by the novel coronavirus, a highly collaborative company culture and good visibility into all aspects of the supply chain, including suppliers and sub-suppliers, can build resilience and agility to lessen the impact of risk events.

Creating the customer-centric organization

Customer satisfaction is a top strategic goal for many organizations surveyed, around the world and across industries—33% of all respondents say increasing customer satisfaction is a top-three strategic goal for their overall businesses, essentially even with “increasing productivity” (34%) among our answer choices.

Supply Chain Leaders may have a more nuanced view of what satisfies customers than other respondents. Meeting customer demands requires everything from designing or personalizing products based on customer feedback to manufacturing products in a more sustainable manner, to delivering products sooner and maintaining them after sale. When asked to select the most important factors in achieving customer satisfaction, non-Leaders gravitated to the usual suspects—product and service quality, price, speed of the purchasing experience.

Those things remain very important to Leaders, of course, but they are significantly more likely to pick responses including support through the product lifecycle (28%, vs. 15% of others) and ethical product sourcing (32% vs. 21%). This shows that Supply Chain Leaders are going above and beyond conventional approaches, making the crucial connection between sustainability and customer-centricity, and continuing to engage with customers after the product has been sold and delivered.

Fig. 3: Supply Chain Leaders’ customer-centricity pays off



Innovation is key to maintaining customer satisfaction at North American consumer goods giant Unilever, according to Ana Lopez, VP of Manufacturing North America. “Innovation is what will fuel your future,” Ms. Lopez says. “At the end of the day, there is no way you could be innovative without being very close to your customers and what they want. And sometimes they don’t even know what they want. But you have to be sensitive to what areas are on top and how you can better respond to those needs.”

Customer focus at Leader organizations seems likely to push them to lead in other areas as well. Two-thirds say that customer demands are guiding most of their sustainability initiatives, compared to just over half of all other respondents. This concentration on the customer has paid off in many areas related to customer satisfaction, from product quality to customer service (see Fig. 3).

Based on those results, it is clear that Supply Chain Leaders are in tune with customer needs, and they are delivering on most aspects of the customer experience. What’s more, Leaders are significantly more likely to say that meeting customer demand has actually grown easier over the past three years—nearly two-thirds (62%) agree, compared to half of other respondents.

This may be because Leaders have kept up with overall consumer trends—81% report that their customers expect more customized products than they did three years ago, and three-quarters say their customers are increasingly concerned about buying sustainably sourced, ethically designed products (vs. 58% of others). But delivering a customer-centric experience is not just a matter of setting company strategy or being generally aware of higher demand for certain kinds of products—companies need to be able to know what the customer wants, and act on those insights as soon as possible.



The importance of real-time data

Supply Chain Leaders can capture real-time data insights and act on them immediately (49%) and use AI and predictive analytics to capture insights (51%), while only 41% of our overall survey population can capture and act upon such insights. This allows Supply Chain Leaders to react in real time to changing conditions—from widescale disruptions to individual customer complaints.

The benefits of real-time insights include increased resilience, greater customer-centricity, increased operational efficiency, superior visibility into the entire supply chain, and seamless collaboration with other functions, partners, and suppliers. Supply Chain Leaders are consistently better able to reap these rewards, even though their supply chains tend to be far more complex than others. More than half of Leaders say their manufacturing processes are highly complex (vs. 40% of others), and nearly as many say their geographic footprint is very complicated (48% vs. 21%). Additionally, Leaders are more likely than others to say they have highly complex design processes, quality control, and sustainability metrics. This is not a stumbling block for Leaders; they are able to take data from these widely dispersed and complicated processes and flatten their organizations.

Nearly all Leaders—84%—say they have been successful in breaking down organizational siloes across the entire product value chain, compared with two-thirds of other respondents. This correlates with much improved collaboration with internal functions up and down the value chain: more than

two-thirds of Leaders report seamless collaboration with Manufacturing (vs. 33% of others); half report seamless collaboration with R&D (vs. 25%); and 33% with Risk Management (vs. 20%). However, Leaders have room to grow—they are less likely than other respondents to report high levels of collaboration with the Customer Service, Finance, and HR functions.

To act on insights from such close collaboration, employees must be able to move quickly. This is true at GSK, where the pharmaceuticals supply chain's journey to becoming supply-chain-centric has flattened parts of the organization. "The flow of information is much quicker, because there's less rungs for it to go through," says Mr. Richardson. That enables GSK to move quickly to address unforeseen issues in the supply chain, and aids in the speed of decision-making.

Quick decision-making requires agile employees. Here, too, Leaders report far more nimble supply chain employees—three-quarters of Leaders say their value chain workers are agile (vs. 52% of others).

Real-time data is also essential to maintain visibility across the supply chain. While Supply Chain Leaders

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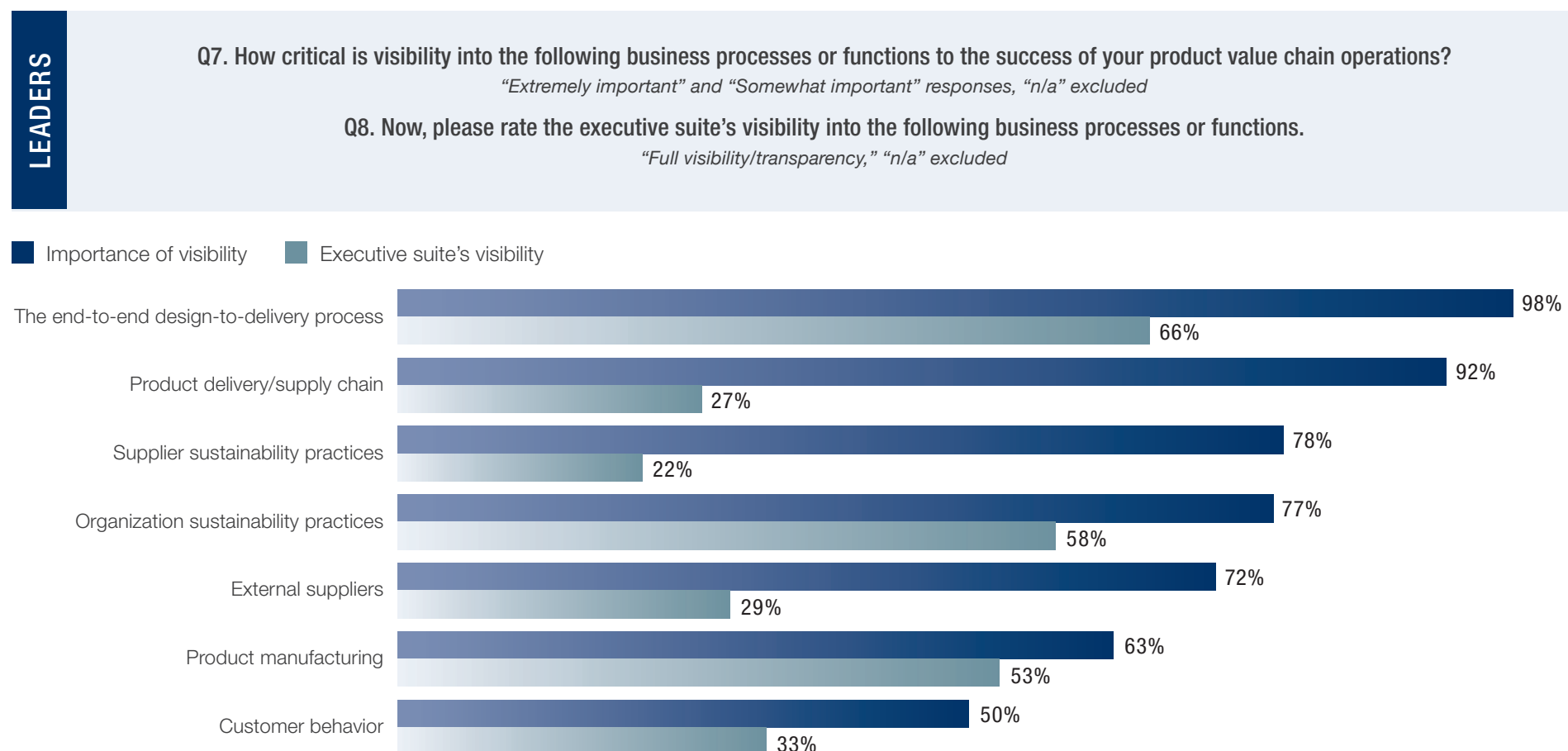
generally report greater visibility than others, this is an area where Leaders need to improve, especially as they look further down their supply chains. Without high levels of visibility into suppliers and sub-suppliers, companies increase their exposure to supply chain risks and become less resilient.

And while more than three-quarters of respondents recognize the importance of visibility into the

sustainability practices of their organization and suppliers, few have full visibility into either.

As we have seen, large majorities of Leaders are acting on sustainability initiatives as a result of customer-centricity. But to be completely successful at making their organization more sustainable, Leaders may need to increase their visibility into this vital area.

Fig. 4: Leaders recognize the importance of visibility, but few report full transparency



Sustainability comes to the forefront

Sustainability will be a growing focus for organizations across industries over the coming years as they seek to meet internal goals, satisfy consumer demand, and comply with regulations. A majority of our respondents say their organizations have a plan to reduce carbon emissions (71%). Leaders are even more in tune with the importance of sustainability: 86% say a sustainable supply chain is a competitive differentiator, compared with 68% of other respondents.

Leaders show the importance of these priorities by being willing to sacrifice profits in the short term to meet their goals. Three-quarters of Leaders say they are willing to do so, compared with just 55% of other respondents. This willingness to give up some of their impressive financial metrics is crucial as Leaders pave the way for other organizations on their sustainability journeys.

Being a Supply Chain Leader means experimenting to find innovative solutions, and leading the charge in moving to sustainable manufacturing and sourcing, even if those solutions in the short term may be dead ends or come at the expense of profitability. A large majority of Leaders are already addressing sustainability issues in at least some of their products across manufacturing, engineering, and delivery; over two-thirds (69%) say they have implemented sustainable practices on a wide scale across their supply chains in these areas.

However, when it comes to after-sales support and ensuring that suppliers source sustainable materials (see Fig. 5), Leaders face challenges. These data

Fig. 5: Supply Chain Leaders incorporate sustainability into many areas



underscore the need for all organizations—even those with leading supply chains—to increase their visibility into their sustainability practices throughout the supply chain

The customer focus of Supply Chain Leaders feeds into their leadership on sustainability; 59% say that customers are increasingly sensitive to such issues (vs. 49%); and 69% say that customer demands are guiding most of their sustainability initiatives (vs. 51%).

According to our analysis, sustainability is the most challenging area for Supply Chain Leaders. Not only do they have less visibility in these areas as they look further down the supply chain, they lag in ensuring suppliers source sustainable materials. Leaders highlight time to implementation (59%) and customer demand for speed and convenience (49%) as top obstacles to sustainability—and are significantly more likely than others to say that designing sustainable products (44% vs. 27%) and sourcing sustainable materials (50% vs. 24%) have grown more difficult over the past three years.

While all companies face stiff headwinds when it comes to ensuring sustainability up and down their supply chains, keeping an eye on customer-centricity and insights from real-time data may help ease the burden. Additionally, the use of intelligent technologies may help organizations meet those many goals.



Bringing it all together: Intelligent technologies

Managing the complexity of the modern supply chain requires strategic thinking, flexibility, and involved employees. Many organizations are focused on applying intelligent technologies like automation, machine learning, and AI to streamline processes, automate routine tasks, and assist in the effectiveness of Internet of Things (IoT), blockchain, augmented and virtual reality, and drones.

When asked about their top strategic goals for the overall organization as well as goals for the product value chain, Leaders overwhelmingly ranked “using automation to perform routine tasks” (45% vs. 26% of others for the overall organization; 47% vs. 23% of others for the supply chain). This suggests that Leaders are focused on harnessing the power of intelligent technologies to increase efficiency in their day-to-day operations. What’s more, Leaders are also integrating AI and machine learning to support their real-time data insights and reach their strategic customer-centricity and sustainability goals, as well as increasing their resiliency.

As part of our leader-group definition, all Leaders are deploying such technologies at scale in their supply chains, while a third of other respondents have not yet started this rollout. Leaders are also way ahead when it comes to using a variety of other emerging technologies—76% are deploying IoT in some areas (vs. 20% of others); 64% are deploying Big Data or predictive analytics (vs. 15%); and 48% are deploying RPA (vs. 14%).

And Leaders who are deploying these technologies are more likely than non-Leaders who have deployed them to see benefits from their use, in a variety of areas: 88% of those Leaders using RPA say it helps deliver a customer-centric experience (vs. 74% of others); 86% say their use of Big Data has increased visibility (vs. 70%), as well as flexibility (86% vs. 71%); and 86% say 3D printing helps meet sustainability goals (vs. 52% of others).

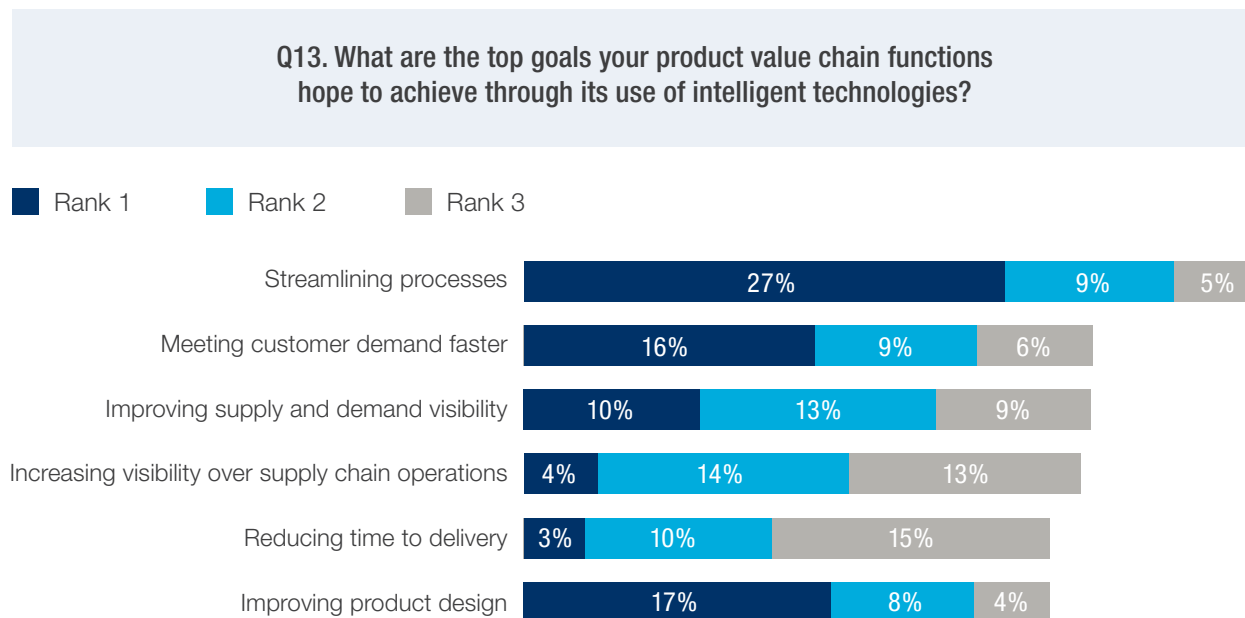
But, as Ms. Lopez of Unilever notes, “You have to fall in love with the problem you have, not with the technology.” Viewing Supply Chain Leaders through this lens helps explain their success in many other areas: they are not just using the latest buzz-worthy technologies. Instead, they are gaining insights and acting on them to create a more customer-centric, sustainable organization.

Data-driven organizations can react quickly to an unforeseen event or market change and have increased visibility up and down the supply chain. As intelligent technologies mature, they could soon go

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— Ana Lopez, VP of Manufacturing North America, Unilever

Fig. 7: Companies have high hopes for their intelligent technologies



beyond predictive insights to suggest solutions to anticipated issues.

GSK has been employing real-time data analytics for many of its operations over the past 12 months, which Mr. Richardson notes is “giving the folks responsible for planning, operating, and designing the supply chain some real information that enables them to redesign the supply chain, get it performing as it should, and actually make interventions.”

The company’s use of data has also created efficiencies, which has enabled GSK “to release some of that cash back to the organization, whether that’s prioritized into investment in our factories,” or other areas, says Mr. Richardson.

Obtaining and acting on data-driven insights depends on a capable, empowered, and agile workforce. Almost all of our leader group (92%) say their employees are prepared for digital innovation (vs. 60% of others), and Leaders are constantly refreshing their employees’ skillsets as the technology landscape evolves. Leaders are significantly less likely to report difficulty in recruiting (9% vs. 25% of others) and retaining (7% vs. 19%) supply chain employees.

It is this mix—talented, satisfied employees harnessing the power of intelligent technologies to meet organizational goals around customer-centricity and sustainability—that makes a Supply Chain Leader. When organizations get it right, the results are impressive.

Conclusion and calls to action

The journey to become a Supply Chain Leader will not be easy for many organizations. It involves putting a major focus on functions often used to working in the background; a delicate balance between customer demands, sustainability initiatives, and business as usual; and effective adoption of emerging technologies.

Even Supply Chain Leaders cannot rest on their laurels, especially in the face of a global pandemic and economic crisis; our research shows they too need to improve visibility into their suppliers, and ensure good sustainability practices are in place across the supply chain. We recommend the following steps to help companies become Supply Chain Leaders:

- Establish a consistent data flow from design to manufacturing, logistics, planning and maintenance functions.
- Make the supply chain a key part of creating and acting on organizational strategy.
- Focus on achieving visibility across the complete end-to-end supply chain, including suppliers and partners.
- Leverage new technologies (machine learning, AI, IoT) and motivate employees to be part of the journey toward customer satisfaction.
- Continue to break down organizational silos within the company, fostering seamless collaboration between functions.
- Enact sustainability practices throughout design, manufacturing, and delivery for the long term, including supplier practices.

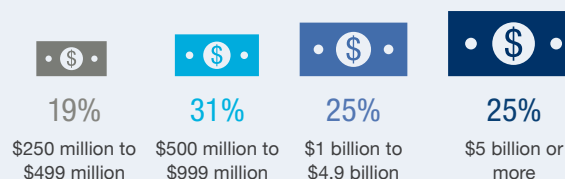
Methodology

Oxford Economics and SAP fielded a quantitative survey to 1,000 executives in Q1 2020. All respondents influence decision-making in their supply chains (53%) or are supply chain decision-makers (53%).

Industries



Revenue size



Geography

Respondents are located in North and Latin America (32%); Europe (39%); and Asia-Pacific (30%).

Functions

Respondent functions were evenly distributed between R&D; Manufacturing; Supply Chain Planning; Logistics; and Maintenance & Physical Asset Management.

We conducted executive interviews with the following:

- Ana Lopez, VP Manufacturing NA, Unilever
- Gareth Richardson, VP Supply Chain Services, GSK
- Dr. Michael Steiner, Member of the Executive Board – Research and Development, Porsche AG

We thank all executives for their participation in this research program.

About Oxford Economics

Oxford Economics is a leader in global forecasting and quantitative analysis. Our worldwide client base comprises more than 1,500 international corporations, financial institutions, government organisations, and universities. Headquartered in Oxford, with offices around the world, we employ 400 staff, including 250 economists and analysts. Our best-in-class global economic and industry models and analytical tools give us an unmatched ability to forecast external market trends and assess their economic, social and business impact.

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