RACONTEUR

The 2019 CPO Risk Agenda



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LEADERSHIP

The strategic CPO

In a fast-changing world, procurement increasingly belongs at the center of company strategy and risk management

Tim Cooper

isks involved when sourcing goods and services are increasing dramatically. This is strengthening the case for chief procurement officers (CPOs) to become more concerned with company risk management and strategy.

According to the latest Dun & Bradstreet *Global Supply Chain Risk* report, global sourcing risk has been increasing sharply. In the third quarter of 2018, risk increased 18 percent over the previous nine months, reflecting a trend toward companies sourcing from more high-risk countries, the report says.

Supply chains are also becoming more complex. The *BCI 2018 Business Continuity Report* says supply chain risks are becoming more dynamic as organizations are increasingly interconnected through global networks. While a wider reach provides more options for reducing costs and sourcing materials and talent, it can also increase vulnerability to disruptions.

This complexity also makes it ever harder to monitor supply chain risks; 30 percent of respondents to the BCI survey do not analyze disruption risk across their entire supply chain, compared with 22 percent in the previous year.

Mike Varney, partner in global risk practice at consultant Crowe Global, says the need to manage this complexity strengthens the case for CPOs to become more integrated in risk management, including communicating risks in the supply chain that could impact strategy.

"A typical example is where a company's strategy is to be the fastest producer of a product, but achieving this may actually result in higher cost and lower quality," he says.



54%

of procurement leaders say managing risks is a strong priority over the next 12 months



73%

of procurement leaders believe they have the support of their organization's leadership

Deloitte, 2018

"This may increase the risk of returned products and reputational issues due to quality and safety issues. But a strategic CPO could mitigate these risks through their procurement practices. Also being able to communicate those issues to the business clearly and concisely is important."

Mr Varney says these factors mean CPOs can transition their role and team. In addition to simply seeking prices and handling contract compliance and service level agreements, they can now help secure the long-term strategy of the business.

They can do this by looking at how sourcing aligns with the overall strategy of the business. For example, if the goal is to be cheap and fast, they can look at how sourcing can help achieve this most efficiently, by considering other factors than just cost and working with vendors. They can also build risk mitigation into service level agreements, and use contracting processes that are more relevant and not just a "cookie-cutter" approach.

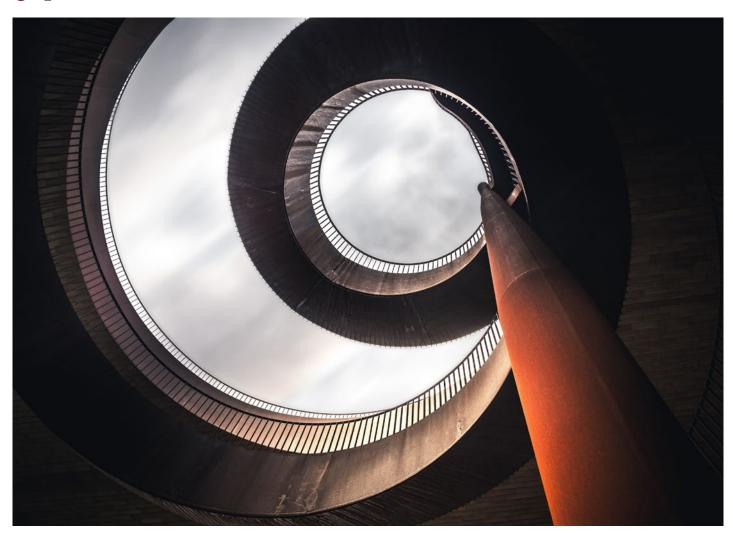
"In this way, CPOs can 'do the impossible' and succeed at both [traditional procurement and a strategic role]," he says.

To manage risk in procurement requires greater visibility in the supply chain, and understanding and monitoring how vendors support your business goals. This could include scenario planning, asking what could go wrong and what would you do in the event of disruption?

A recent example is the tariff wars, notably between the United States and China, which caught many companies unprepared. This resulted in interruptions in supply chains and higher costs that may not be possible to pass on to customers. A scenario plan could have identified ways to mitigate such a risk, says Mr Varney.

Chris Thomson, group procurement director at food supplier Dairy Crest, says his role has been highly integrated with other parts of the business for some time. This is partly due to the fundamental importance of strategic milk procurement to the business.

"We manage the milk supply to our business, and buying and selling dairy ingredients," he says. "That impacts directly on the profit and loss and gives us a good overview of the business end to end. Our strategic role means my team can be involved in developing brands and products from the perspective of milk supply and relationships with farmers.



"As part of that, it is also important that we help protect our brand, for example, through robust compliance in procurement practices. Procurement also has an impact on quality, service, sustainability and innovation. We have a leading and guiding role in elements of our sustainability agenda. Plus, we are responsible for managing risk, making sure we have robust contracts and clear expectations from suppliers. With the right skills, capabilities and people, we can make a very broad contribution to the business."

Mr Thomson says this strategic role is particularly important as the company prepares for potential supply chain risks related to Brexit. "We are making our risk management preparations for Brexit in a joined-up way across the business," he says. "My team is right in the middle of that."

Not all companies integrate procurement in this way. This may be due to the history of the business's structure or the capabilities of people in the procurement function. It also



If increasing globalization of the supply chain is a high priority for your business, you can use that to make sure you are influencing the agenda from a procurement perspective

Chris Thomson

Group procurement director, Dairy Crest

depends on the priorities of the business, says Mr Thomson.

"If increasing globalization of the supply chain is a high priority for your business, you can use that to make sure you are influencing the agenda from a procurement perspective," he concludes. "To integrate procurement more, you need relationships, collaborative working, shared objectives, focus and understanding of one clear and simple strategy."

LESSONS

Cautionary tales

Tim Cooper

BMW

Build a dashboard for full visibility of supplier risk

Carmaker BMW saw the 2011 Japanese earthquake as a wake-up call when executives realized the company had several critical suppliers, from paint pigment to semi-conductors, in Japan. Following the disaster, the company implemented technology showing where all its global suppliers are located.

Richard Wilding, professor of supply chain strategy at Cranfield School of Management, says: "If a disruption occurs, they can now see immediately which suppliers could be impacted and manage the risk ahead of competitors. They can also identify suppliers in potential disaster zones and manage that risk in advance."

To mitigate this concentration risk, Mr Wilding also recommends designing products that can use alternative materials.





Maersk

Open communications to mitigate the impact of cyber

The devastating NotPetya cyberattack of 2017 caught many large organizations unprepared and highlighted the dangers of digital risks in global supply.

NotPetya attacked 7,000 companies, disrupting supply chains and causing more than \$1 billion in lost sales and other costs.

However, transport giant Maersk responded well. It opened communication channels immediately and restarted operations in less than ten days, creating a new booking service from scratch.

Greg Schlegel, founder of the Supply Chain Risk Management Consortium, says: "Maersk had a game plan to handle the situation. Within hours it was communicating about the attack on Twitter, and it updated staff and customers daily."

However, Maersk says it still needs to learn to isolate potential future attacks and respond even quicker.

Mars

Map your supply chain for provenance

Last year, the *Cocoa Barometer Report* concluded that work to improve the cocoa supply chain had been ineffective. Chocolate-maker Mars conceded the chain was broken and earmarked \$1 billion to fix it. The company's plans include improving traceability in its supply chain, using GPS mapping to avoid sourcing cocoa from protected forests. It also intends to work directly with 75,000 farmers to increase productivity, income, resilience and overall sustainability.

Mr Schlegel at the Supply Chain Risk Management Consortium says: "Food and beverage companies want more traceability. They are also looking to use [distributed ledger technology] blockchain to help them mitigate risks such as product recalls. It allows them to trace from store shelf to farm."





Harley-Davidson

Harness artificial intelligence (AI) to predict disruption

When President Donald Trump's administration imposed tariffs on European steel and aluminium imports last year, Harley-Davidson said it would move production of its European Union-destined motorcycles from the United States to other countries.

This was in anticipation of a retaliatory tariff that could reportedly cost the company \$90 million to \$100 million a year.

Cranfield School of Management's Professor Wilding says AI can now help companies anticipate a huge range of potential disruptions, including political interventions, before their competitors. "This can monitor free information like Twitter," he says. "For example, if union representatives in ports are tweeting about potential disruption, you can plan what to do about that."

Nike

Answer activism with transparency

From the early-1990s to 2005, Nike went from denying responsibility for inhumane conditions in its factories to leading other companies in disclosure. The shift was a response to sustained activism. According to the Network for Business Sustainability, it illustrated how a firm can use transparency to mitigate risk and add value.

More recently, Nike also announced plans to use automation to reduce supply chain steps by 30 percent.

Professor Wilding says societal impact of supply chain decisions can be a source of risk. But automation and onshoring factories can lead to job losses in developing countries, so companies must balance their response carefully.

Supply Chain Risk Management Consortium's Mr Schlegel adds: "Social media is a big risk. Companies have to stay ahead of what people are saying about them and refute claims with facts."



Derisking supply chain links

The management of risk by procurement is changing. While the function and the business faces many of the same challenges it always has, these risks are now manifesting themselves in different ways

Roseanne Spagnuolo

iven global interdependencies and diverse business lines, it is no longer right to think about supply chains in a traditional and linear way. Your suppliers are also likely to be your customers or your competitors. This is especially true in the tobacco and automotive sectors where organizations are pivoting towards ecigarettes and battery-operated cars. Competition for raw materials in these areas will come from unlikely places and procurement chiefs have to be ready for that.

What's more, risks will not present themselves in silos, which means procurement cannot manage them in a silo. Procurement must offer its expertise on supply chain risk to inform an enterprise-wide approach.



Procurement is uniquely positioned to understand the evolving risk profile of a changing supply chain

Procurement's unrivalled 360-degree view of the corporate ecosystem, from the supplier to the customer, means it has a unique opportunity to do this and so much more. It is perfectly positioned to ensure the holistic approach exists, but procurement chiefs have to step up as leaders to do so.

This is a more important job than ever. Technologies and tools such as Twitter mean news, especially bad news, travels fast. Businesses no longer have any time to respond to events; they either respond immediately or suffer the consequences, which can include long-term brand damage. Businesses spend years building trust in their brand, but that can be wiped out in seconds.

Traditionally, businesses and their procurement functions have responded to events after the fact. You only have to think back a few years to the 2011 earthquake and tsunami in Japan. It was only after the disaster struck that businesses actually began to find out what impact it was having on their supply chains. Many ended up finding out things about their supply chains that they simply never knew and this meant the event ended up having a bigger impact on them than perhaps it should have.

Now that the response has to be holistic, in almost real time and immediate, some are moving in this direction. Companies such as technology manufacturer Flex have established new ways to manage risk. Its innovative Flex Pulse Center monitors all aspects of the company's global supply chain in real time, connecting intelligence across the world to provide insights that help to reduce risk and improve efficiency.

And right now is the exact right time for procurement to lead. Geopolitical risk and uncertainty about the global economy mean events are conspiring to create the situation where risk could blow up in the face of businesses at any moment.

BELOW

The Maersk and IBM blockchainenabled shipping solution TradeLens processed more than 20 million containers in its first year (2018) With the pendulum swinging back towards protectionism, many are examining whether localizing supply chains will actually help them mitigate risk more effectively.

So what can procurement chiefs do to get to this position? They need to educate internally, to explain to the C-suite why the function matters and what could go wrong if it is not given the necessary technological tools to do the job.

New technology such as blockchain can help provide transparency in the supply chain, creating an unalterable record of movement of goods. It is a solution already in use; for example, last summer Maersk and IBM collaborated to create TradeLens, a blockchain-enabled shipping solution that brings together port and terminal operators, global container carriers, customs authorities, and transport and logistics companies.

The digitization of the supply chain ecosystem helps prevent documentation errors, increases visibility and is a more efficient means of communication.

Procurement is uniquely positioned to understand the evolving risk profile of a changing supply chain. The complex and interdependent nature of modern supply chains means procurement needs an integrated approach to deliver value. It needs visionary leaders willing and able to step up to leadership. Above all, it needs to recognize that only a holistic approach will meet tomorrow's challenges.



TECHNOLOGY

Designing risk out of the supply chain

In an increasingly fast-moving world, where risk increases alongside rising customer expectations, supply chains must adapt using digital technologies

Mike Scott

upply chains are becoming increasingly complex, global, outsourced and extended, making it more difficult for companies to know what their suppliers are doing. This means they cannot see supply chain risks that can threaten both their reputation and business continuity, let alone tackle them.

At the same time, the world is becoming increasingly connected as the fourth industrial revolution, or Industry 4.0, starts to take hold. In an age of online shopping, consumers expect increasing personalization and sustainable products, and they expect it now. Products are becoming more complex, but product life cycles are shrinking.

All these trends put increasing pressure on supply chains and create a need for what the consultancy McKinsey calls "Supply Chain 4.0: the application of the Internet of Things (IoT), the use of advanced robotics and the application of advanced analytics of big data in supply chain management".

Industry 4.0 creates disruption and requires companies to rethink the way they design their supply chain. McKinsey adds: "Place sensors in everything, create networks everywhere, automate anything, and analyze everything to significantly improve performance and customer satisfaction." While this creates new possibilities and can make operations more efficient,



89%

of executives believe current supply chain operating models are too complex to be effective

Accenture, 2017

it also creates a mountain of data and only by using digital technologies can procurement departments deal with it.

According to the consultancy Accenture, 89 percent of executives believe current supply chain operating models are too complex to be effective and need to be simplified.

"The supply chain must become more responsive to customers. They now expect a wider selection of customized, reliable and sustainable products, delivered as quickly as possible," says Frank Meuwissen, managing director, supply chain, operations and sustainability strategy, at Accenture. "This requires a more flexible and service-oriented supply chain operating model that can cost-efficiently provide a highly personalized service down to the individual customer level."

Flexibility and agility, powered by increased connectivity, will become central in a supply chain-as-a-service operating model instead of the traditional supply chain functions, and this will enable companies to mobilize the right assets to fulfill each customer's order. Greater agility also enables firms to tackle emerging risks by reacting quickly to changing market conditions, to gain a competitive advantage by launching new products ahead of competitors and ramping up production quickly.

"The core of the procurement process is risk management," says Frédéric Stalder, head of performance and process management at chemicals group Clariant. "The number of risk issues is increasing rapidly; there are more and more regulations to deal with, and barriers to trade. We also need to consider social governance issues, the environment, interruptions to production and risks to supplies. We need to be able to cope with them all."

Digital technologies offer myriad opportunities for companies to think differently about the supply chain and how it operates. "Startups tackling supply chain and logistics are innovating across a variety of areas from freight shipping to food supply chain tracking to autonomous lastmile delivery," according to CB Insights.

Digitization is a trend that is transforming companies' relationships with their suppliers, says Albie van Buel, global senior vice president of procurement at the wind turbine manufacturer Vestas. "We are in an industry that is developing very rapidly. The more digital we can



be the better. It's really about having that data capacity," he says.

"There has been an enthusiastic take-up of digital technologies in the procurement sector. It's seen as one of the key enablers to deal with the increased complexity we face in terms of the number of markets, the number of products and the speed required to go to market or to respond to customers."

The wind industry faces particular challenges in relation to where turbines are built; many markets have local content rules that require a certain proportion of the value chain to be in the country where the project is to be sited. "This means we have to deal with a wider range of regulations and find new suppliers in the host country. But, at the same time, we have to maintain the consistency of our products and our ability to execute," he says.

Digitizing the supply chain enables Vestas to create a digital marketplace, so it is connected to its suppliers. "A digital information stream creates more transparency on where and how we operate, and it creates much better governance of the procurement process, reducing the



In the long run, we can't operate without a digital supply chain

Albie van Buel

Global senior vice president of procurement, Vestas

opportunities for suppliers to deviate and less risk of mistakes," says Mr van Buel.

Vestas will look at how artificial intelligence can improve supply chains. "But I think it's three to five years away. We don't see many applications for us yet," he adds.

However, technology will be central to Vestas' efforts to manage its supply chain, although Mr van Buel thinks most companies will stick with trusted suppliers. "There is a lot of technology available now. We use the SAP Ariba platform. You have to make a good choice and stay consistent with what you have chosen. But in the long run, we can't operate without a digital supply chain," he concludes.



TECHNOLOGY

How technology can cut procurement risk

Staying one step ahead of procurement risk is crucial for business continuity and even survival

Mike Scott

hen Hurricane Michael, one of the biggest tropical storms ever to make landfall in the United States, struck in October 2018, IBM knew three days before the devastation started that seven of its sites, 21 datacenters and 58 suppliers were in harm's way, and started planning for how to keep them safe.

It was able to be this prepared in part because it owns the Weather Channel and was collating all the latest forecasts as they happened, says Lou Ferretti, project executive in the company's supply chain risk, environmental and compliance programs. But it was also bringing all the company's artificial intelligence (AI) and cognitive abilities to bear, analyzing social media, news reports and other sources to get the fullest possible picture of what was happening on the ground.

Through its cognitive supply chain risk management system, it monitors a range of potential supply chain disruptions, from earthquakes and floods to drought and forest fires, as well as events such as strikes and social unrest. "We monitor every risk event around the world and we can narrow it down very quickly to what we need to worry about," he adds.

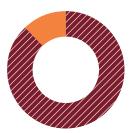
Technological approaches such as this will be increasingly crucial in future. The amount of data available has exploded in recent years and companies' ability to analyze it has not kept pace.

"Five years ago, before we had all this cognitive information, we were having to deal with events like the Fukushima nuclear disaster and huge floods in Thailand, and we had people manually doing the assessments," says Tom Ward, IBM's AI project leader. "It was too much to keep up with. Now we know with high confidence what is going on around the world and how it affects us."

The value of having as much information at your fingertips as possible is that it increases the number of options you have to mitigate risks. In that sense, being a procurement manager is like being the captain of a big ship, says Frédéric Stalder, head of performance and process management at chemicals group Clariant. "It's important to get the information that you need in advance to avoid the hazards.

"We need to monitor new trends, ensure our operations are sustainable, make sure we comply with all the regulations. Yes, we still need to control costs, but more and more we need to develop new strengths to support value drivers in the company," he says. "Procurement guys in future should not just be focusing on suppliers; they need to understand what's going on in the market, feedstocks, customer needs, internal operations and the financial situation."

Clariant has 220 internal audits a year, as well as customer and system audits, and the procurement team are involved in all of them. Mr Stalder says: "We can't work like we did in the past, with



88%

of procurement leaders are still not proactively leveraging data analytics for predictive supplier quality and risk management



46%

of procurement leaders cite lack of data integration as main barrier to digital technology

Deloitte, 2018

Excel spreadsheets. We have to use big data so we can connect all our internal information with external data. We have developed a number of tools to help us."

The company screens information from a number of sources, cross-checking them to ensure they are not "fake news", and if the information is deemed important, procurement managers are alerted. Such information can save millions of dollars and prevent significant disruption to supplies and operations. In 2017, a fire at a chemicals facility in Rotterdam halted production and Shell, which ran the facility, declared *force majeure*, which drove prices up sharply and rapidly.

Clariant was able to secure supplies from an alternative provider before *force majeure* was declared because a truck driver told the company that he could not pick up his load because of the incident. "We took the decision to source from a different supplier and saved a lot of money," Mr Stalder says.

"Procurement is now more about risk management than negotiation. It's not a supply chain any more, it's a supply network and we need full transparency. Clariant has about 40,000 suppliers and, while the normal focus is on the biggest suppliers, the risks mostly reside in lower tiers, so we decided to expand our focus on them. For that you need a profound monitoring system. There has been a big increase in interest in big data."

The group is also embracing AI. He says: "It's important for forecasting where future risks will come from. We have a lot of retrospective data, but we want to move to a more forward-looking system."

The rise of the IoT is also helping with procurement and supply chain risk, IBM's Mr Ward adds. "IoT means we can now monitor assets in motion, so if there is an event, we can see how it will affect individual trucks," he says.

Staying on top of your procurement risks is crucial, not just to ensure business continuity, but also for the future health of your company. Mr Stalder concludes: "Our big customers like L'Oréal and the automotive companies require this kind of modern monitoring system. Being able to prove you have a professional risk management system in place helps us to win business. Senior management recognizes that managing risks is not just a cost burden, but something we can use to increase sales."



Procurement is now more about risk management than negotiation

Frédéric Stalder

Head of performance and process management, Clariant

GEOPOLITICS

Balancing local sourcing and the best deal

Striking the right balance between profitability and customer expectations to source locally can be a headache for procurement leaders

Tim Cooper

ressure from politicians and environmentalists to source locally is an increasing headache for many chief procurement officers (CPOs), whose goal is usually to seek the best goods and services for the best price, wherever they come from. However, there are ways to balance these often competing demands.

The pressure to source locally has been particularly strong in the United States, where bringing jobs and production back to the United States has been a cornerstone of President Donald Trump's administration. Through his speeches and tweets, Mr Trump has tried to shame publicly individual companies that do not follow his "America first" mantra. But CPOs around the world, from China to the UK, face similar challenges.

Paul Dittmann, assistant department head of supply chain management and senior lecturer at the University of Tennessee, agrees that pressure to localize supply chains in the United States and elsewhere has grown. Increasing emphasis on local sourcing from nationalist politicians adds to existing calls from environmentalists to reduce pollution from transportation of goods by sourcing locally.

But Mr Dittmann warns CPOs to be careful about bowing to such persuasive forces. "Everyone wants to stay local, but not at the risk of serious damage to the firm's viability,"



leaders still
have limited or
no visibility
beyond their
tier 1 suppliers

Deloitte, 2018

he says. "If your global competitors have a lower cost structure than you, the long-term results can be catastrophic, putting the firm in jeopardy. Is it better to stay local and eventually lose everything or do what's necessary to preserve the financial viability of the firm?"

Bernie Donachie, managing director at consultants Protiviti, says the greatest pressure on CPOs is not from nationalist sentiment, but rather from customer expectations.

"It depends more on how important local sourcing is to the customer," he says. "It's particularly important if you supply goods and services to the public sector, for example, as many public organizations actively look for that. Also, if local sourcing is part of an organization's branding, then they must walk the talk. Environmental activism is another big factor.

"This is a big concern for a CPO because it means their customers or clients come to expect local sourcing. However, they must strike a balance between satisfying that need and being profitable."

One way for companies to strike the right balance between profitability and customer expectations is to have a code of conduct for suppliers. Components can include labor practices and environmental impact to show they are meeting ethical standards with foreign suppliers. But they can also set levels or targets for local sourcing of products and services.

"For example, a utility that I worked with in Canada had a code of practice that, in addition to environmental and child labor law practices, stated they will source as much as possible in their province," says Mr Donachie. "Others may state they want to support local minority and women-owned business enterprises. Others are not that bold."

Procurement scoring systems can make this process more standardized and transparent. For example, if your code states that you want to source from businesses in your state, you can award points for those businesses. However, points are also awarded for quality, cost effectiveness and all the other criteria you need to ensure profitability.

"CPOs need to be careful using these scoring systems, however," says Mr Donachie. "Sometimes the system forces the CPO to select a second or third-choice vendor leading to quality, delivery or pricing issues." ●

PROCUREMENT LEADERS

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For more information, please contact Procurement Leaders:

- info@procurementleaders.com
- **L** +1 303 800 5298
- www.procurementleaders.com
- in Procurement Leaders
- **☞** @ProcurementLDRS



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Publisher Alex Bowman-Bassin

Managing editor Benedict Buckland

Editorial consultant Gren Manuel

Editor Peter Archer

Designer Grant Chapman, Sara Gelfgren **Head of production** Justyna O'Connell **Digital marketing manager** Fran Cassidy

Contributors

Tim Cooper

Award-winning financial journalist, he has written for publications including *The Spectator, London Evening Standard, Guardian Weekly and Weekly Telegraph*.

Mike Scott

Freelance journalist, specializing in environment and business, he writes for the *Financial Times, The Guardian* and 2degrees Network.

Roseanne Spagnuolo

Director of research and insights for Procurement Leaders. With 12 years' expertise advising executives on risk management, change management and talent, Roseanne partners with CPOs to drive transformation efforts and accelerate decision-making.

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