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# THE DOWNSIDES OF DISTANCE

Sourcing has never been simple and uncomplicated. Throughout history, buyers have pushed at boundaries, extending their reach so as to engage with better, cheaper, higher-quality suppliers.

And in the closing years of the twentieth century and the early years of this century, those boundaries could arguably be extended no further. Quite simply, huge numbers of supply chains terminated in Asia, a region that had become the workshop of the world. What Japan had been several decades earlier, China then became.

And then Vietnam, Thailand, Singapore, India, Taiwan, Pakistan, Bangladesh, Sri Lanka: as buyers became more comfortable with distance, these too had their advocates. National specialisms developed, bolstered by growing skills bases and local supply chains geared to specific industries. In Taiwan, it was semiconductor manufacture. Vietnam, footwear. Thailand, hard disk drives. Pakistan, textiles. And so on, and so on.

But the party didn't last. Over the past few years, again and again businesses have seen the downsides of sourcing over such distances. The problem? Not cost. Not quality. Not innovation. Instead, the problem was irregular and unpredictable supply. Quite simply, sourcing at distance can render a supply chain more susceptible to disruption. Natural disasters. Logistics infrastructure failures. Port congestion. Piracy and theft. Political instability and war. Trade wars, tariffs, and customs hold-ups.

In short, sourcing at distance may be cheaper, but the disruption costs of a lack of resilience can be greater. So a new mantra is emerging: source for resilience, rather than source purely for cost. It's a mantra that calls for a different way of thinking about sourcing and supply chains. It's a mantra that calls for a different mindset, and different skills. But it's also a mantra that should lead to more resilient supply chains, and less disruption.

Talking to experts, in this paper we explore the issues around sourcing for resilience. So if supply chain resilience matters to you, this paper is essential reading.

**Professor Omera Khan, Executive Strategic Advisor**

# SUPPLY CHAIN IMPACTS IN 2020

Supply chains had a torrid 2020. As soon as Wuhan, the capital of China's Hubei province, went into Covid-19 lockdown on 23 January 2020, supplies from China began to be affected – disruption that was compounded when the other 15 cities in Hubei province also followed Wuhan into lockdown. Factories were shuttered; roads deserted; aircraft grounded. But the epidemic couldn't be contained, crossing borders to become a pandemic proper. And so, on 8 March 2020, it was the turn of northern Italy to go into lockdown. Much of the rest of Europe – and North America – again duly followed.

For understandable reasons, the headlines focused mainly on the impact on supplies of personal protective equipment and medical supplies, as nations banned their export in order to protect their own citizens. But supply chain professionals knew the truth: for many months, supplies of almost everything were affected. And the more complex the product that companies manufactured, the more likely it was that disruption somewhere in the supply chain would affect production.

For supply chain professionals, it was yet one more reminder of how wrong their cosy assumptions about supply chain risk could be. Brexit, trade wars, tariffs: in a few short years, the world had changed. More than that, the world had also become a more dangerous place.

## Adding in a natural disaster

Take the eruption of Iceland's Eyjafjallajökull volcano in 2010, and the subsequent closure of much of Europe's air space; for instance. Or the earthquake and ensuing tsunami that hit north-eastern Japan in 2011. Or the extensive multi-month flooding of many of Thailand's manufacturing areas that occurred the same year. Or Hurricane Harvey which devastated the Caribbean and south-eastern United States in 2017, followed by Hurricane Florence a year later. And the rise of piracy at sea, and truck hijackings, and thefts. In short, these were all dangers that proved no less devastating for being almost impossible to predict and plan for.

**A global survey of over 10,000 businesses across 39 countries, carried out by banking giant HSBC in September and October 2020, painted a stark picture. 93% of these businesses reported having concerns relating to their supply chain.** 40% of respondents, for instance, reported being worried about having suppliers in countries or regions which were unstable, or where there was a risk of tariffs or sanctions being imposed. 33% of respondents said that they had suppliers that were 'too distant'. 23% were concerned about suppliers that were insufficiently agile. Furthermore, almost one in five businesses – 19% – regarded supply chain disruption as being the biggest internal factor hindering their growth. Such concerns,

noted the report's authors, were consistent right across industries and geographies.

Yet if businesses thought that 2020 – and the years leading up to it – were challenging from a supply chain perspective, the arrival of 2021 did little to provide reassurance.

Its first few months, for instance, 2021 saw a global shortage of semiconductor chips severe enough to cause production stoppages in several industries; a sixfold increase in the cost of container shipping between the Far East and Europe; and a six-day blockage of the Suez Canal and a subsequent multi-week disruption to shipping schedules caused by the stranding of the 220,000 tonne Ever Given, a huge container ship capable of carrying up to 24,000 industry-standard 20-foot shipping containers. Ship owners faced an invidious choice: sit it out, along with hundreds of other ships backed up at either end of the canal, or head to Europe via South Africa's Cape of Good Hope, taking their chances with Somali pirates on Africa's East Coast, and Nigerian pirates on its West Coast.

In short, sourcing has reached something of a tipping point. And a tipping point, moreover, that is attracting attention not only within the world of business, but also within government. In the United States, for instance, there was deep disquiet at the highest levels when the country found itself unable to source adequate supplies of personal protective equipment and medicines during the early stages of the pandemic – disquiet that was only compounded by 2021's shortage of semiconductor chips, which was seen as badly damaging to a number of strategic industries.

But what can be done? In boardrooms and governments alike, a recognition is dawning that procurement practices need to change. For too long, goes the refrain, businesses have pursued Just in Time inventory management practices in conjunction with low-cost country sourcing – often combined with sole sourcing in order to drive economies of scale – and the result is that supply chains are now increasingly vulnerable to disruption. It is time, goes the argument, for procurement functions to pursue a different strategy: sourcing for resilience, rather than lowest cost.

### A different mindset

Conceptually, the notion has obvious appeal. But what exactly does sourcing for resilience mean? And how best to achieve it? If the appeal of the strategy is obvious, the means of fulfilling it are less so.



We must design and operate our contemporary supply chains to cope with the 'new normal' operating environment – volatility and more volatility.

One thing is clear, says **John Gattorna**, an influential supply chain thinker, adjunct professor at Sydney's University of Technology, and chair of Gattorna Alignment, a supply chain research, teaching, and consulting firm.

*"The procurement function is part of the solution, but it's also part of the problem," he notes. "For far too long, procurement functions have run a largely independent race, globalising the sourcing side of supply chains, and in the process losing their end-to-end perspective. And a lot of procurement functions don't report to business leaders with a genuine supply chain perspective, who might otherwise be able to rein them in: many report in to corporate CFOs, for instance, who haven't a clue about supply chain management or which KPIs they should be using to measure and manage their procurement functions. As a result, procurement functions tend to have a cost and finance perspective, and often ignore what is happening in manufacturing or on the all - important demand side of the supply chain."*

And to be fair, some in the procurement profession are perceptive enough to see this. **Stephen Day**, for instance, chief procurement officer at Kantar Group, a 30,000-employee global data analytics and brand consulting firm, is certainly one procurement professional who believes that the profession needs a firmer focus on resilience.

*"Collectively, as a profession, we must take ownership of the resilience agenda, and move away from such a strong focus on cost. We really need to start thinking much more about resilience—and not just physical resilience, but also resilience in terms of factors such as supply chain inventory holding, and improved logistics tracking data. When we're selecting and monitoring suppliers, for instance, we need to be better at understanding that supplier resilience embraces not just questions of location and distance and how much inventory suppliers hold, but also suppliers' own internal policies and practices in respect of resilience."*

# REPUTATIONAL RISK

Moreover, adds **Nick Wildgoose**, senior supply chain adviser to the Cambridge Risk Centre, an offshoot of Cambridge University's Judge Business School, and a director of procurement consulting firm Procurement Advantage, strategies, policies, and practices right across the buying organization itself need to change.

*"Fairly obviously, for instance, if a procurement organization is working to optimise resilience, then its internal KPIs must also reflect this: buyers must be more incentivised on resilience, and less incentivised on cost. And the procurement function itself must be measured and monitored on its contribution to resilience, and not just purchase cost. But other functions in the organization are also affected: product design, for instance, must design for resilience, avoiding unique items – even screws – so that the design itself doesn't introduce single points of failure."*

What's more, he adds, resilience shouldn't be defined only in terms of supply chain disruption and the consequent physical interruptions to the flows of goods and materials. There is a considerable overlap between resilience and the sustainability agenda, he argues: changes to the supply chain that make it more sustainable are also likely to make it more resilient. Reshoring or near-shoring a product because of questionable labour practices or environmental standards, for instance, also results in shortening the supply chain, tending to make it not only 'greener' in terms of its carbon footprint, but also more resilient as well.

Likewise with reputational risk, he observes. As well as a lack of resilience, considerable brand damage can also result

from inappropriate sourcing decisions. Retailers such as Walmart, Benetton, Matalan, and Primark, for instance, were all sharply criticised by consumer activists after garment factories housed in the nine storey Rana Plaza building in Dhaka, Bangladesh, collapsed in April 2013, killing over 1,100 workers. Product supplies were obviously affected, but the reputational damage carried a much higher cost.

Another example, points out Wildgoose, is the horsemeat scandal that hit supermarket chains and catering firms across Europe in 2013, as laboratory tests showed that many meat-based products such as burgers and lasagna ready-meals contained horsemeat. Still others, supposedly made from beef, also contained pork in generous proportions, too – causing embarrassment to retailers and catering suppliers supposedly offering halal- and kosher-compliant meals. The problem: murky supply chains, with meat passing through numerous hands, presenting ample opportunities for adulteration. With supermarket shelves and warehouses suddenly stripped of now-unsaleable products, resilience was an obvious issue. But again, the reputational cost was arguably far higher.

Clearly, therefore, the resilience agenda is broader than the narrow confines of the procurement function on its own. It is for the procurement function to identify and select appropriate suppliers, to be sure. But other voices within the organization have a say in determining not only how 'appropriate' is defined, but also what exactly is bought from those suppliers. And that dialogue must go right to the top of the organization, stresses **Richard Wilding**, professor of supply chain strategy at Cranfield University's Cranfield School of Management, and the world's first professor of supply chain risk management.

That is because the procurement function's procurement strategy, he explains, must be considered as part of the business's supply chain strategy, which in turn is part of – and reflective of – the business's overall competitive strategy. And fairly obviously, he warns, tension will inevitably result if the two are in conflict.





A business with a firm competitive focus on competing through low cost, for instance, may find developing a greater focus on resilience to be difficult if the push towards low-cost sourcing means that it must engage with suppliers located in low-cost economies with less resilient business practices and logistics infrastructure.

In other words, says Wilding, for a truly top-to-bottom approach to resilience, consistent priorities need to be established right through the business's various strategies, so that those priorities are reflected in how the various parts of the organization engage with the resilience agenda, and how that agenda is communicated to suppliers.

Otherwise, resilience initiatives will inevitably be short-lived and ineffective, with the business slipping back to its old non-resilient ways as other competing priorities reassert themselves. What businesses must avoid, he emphasises, is a mis-match between the values espoused by the top management of the buying organisation, and the values of their supply chain partners.

*"If the only conversation with suppliers is about cost, then there's a risk that the business will create the impression that this is all that it cares about, and so will potentially open itself up to unintended consequences,"* he sums up.

### Building resilience

As we have seen, the past couple of decades have been characterised by a series of shocks to the world's supply chains: Covid-19, Icelandic volcanic ash clouds, the earthquake and ensuing tsunami that hit north-eastern Japan in 2011, the multi-month flooding of many of Thailand's manufacturing areas, and so on. And each time, a familiar – but short – litany of remedies is rolled-out as a means of increasing supply chain resilience. Chief among them: reshoring, and near-shoring.

But there's now an acceptance, say many supply chain experts, that not only are near-shoring and reshoring too simplistic as solutions, they are also extremely difficult to achieve – and arguably simply unworkable in many cases.

**Ed Weenk**, senior lecturer in supply chain management at Maastricht School of Management, for instance, argues that in many industries, it is not just individual suppliers that either moved offshore or set up business offshore, it is entire industries. Tier-1 suppliers; tier-2 suppliers; tier-3 and tier-4 suppliers: entire industries, along with the relevant skills, industry knowledge and infrastructure.

*"While it is difficult to generalise, for some industries – such as electronics, semiconductor manufacturing, and fashion – reshoring or near-shoring away from Asia is going to be difficult,"* he warns. *"Moving a single piece of the supply chain won't work: the rest of the supply base would still be in Asia. The old supply base, in Europe and North America, no longer exists."*

**David Loseby**, former group chief procurement officer at aeroengine and powerplant manufacturer Rolls-Royce, and now managing director at advisory firm Barkers Commercial Consultancy, agrees.

*"The skills, the manufacturing assets, the technical intellectual property: they've all been offshored. As individual nations, we don't have the supply chain and manufacturing infrastructure in place any more to reshore in any meaningful timescale. On any significant scale, reshoring would take decades."*

**Rob Handfield**, professor of supply chain management at North Carolina State University's Poole College of Management, makes much the same point. Any talk of extensive reshoring and near-shoring is simply naïve, he argues: the realities of reshoring are much more complex than imagined, and in respect of near-shoring, few countries match the scale, supply base, and logistics infrastructure of China.

Pointing to his recent testimony to the United States Senate Committee on Homeland Security and Governmental Affairs, based on his experience volunteering during the initial phases of Covid-19 pandemic with the Department of the Air Force Acquisition Task Force that was attempting to source supplies of personal protective equipment, medicines, and ventilators, he stresses that reshoring is not a 'quick fix': even when suitable manufacturing capacity still exists, the process of supplier qualification, audits, start up, quality certification, and on going ramp up can take several years.



# RESILIENCE A BOARD-DRIVEN AGENDA

The cost of a lack of supply chain resilience can be high. Reputational damage. Lost sales. Lower profitability. And—potentially—shuttered factories and stalled production lines.

Who is responsible for delivering that resilience? The procurement function plays a part, but ultimately, resilience is a board-level responsibility.

So boards need to develop the habit of scrutinising and questioning the business's supply chain operations, just as they do its finances, strategies, and policies.

**Turn over to see our  
resilience checklist.**



## CHECK LIST FOR RESILIENCE

- ✓ Where are suppliers' factories located?
- ✓ Are there any obviously apparent risks attached to those locations?
- ✓ What contingency plans exist for if the business couldn't source from there anymore?
- ✓ For strategic and business-critical items, how much visibility is there into tier -2, -3, and -4 suppliers?
- ✓ Is the business heavily exposed to one or more suppliers? Or one or more particular countries or geographic regions of the world?
- ✓ How reliant is the business on free trade, and tariff-free and quota-free trading?
- ✓ Does the business 'war-game' and 'stress-test' its supply chain and sourcing practices?
- ✓ Could subscribing to one of the various supply chain intelligence services appreciably reduce risk in terms of shipping routes, port hazards, and long-distance truck routes?





# WHAT CAN BUSINESSES DO?

So what *can* businesses do? Despite the difficulties of reshoring and near-shoring, businesses do have other options open to them, he believes.

*“The answer is better supply chain management,” he stresses. “Better contracts, smarter inventory holding, more responsiveness, better intelligence, better relationships, and better supply chain visibility technology. These can make a significant contribution to better resilience.”*

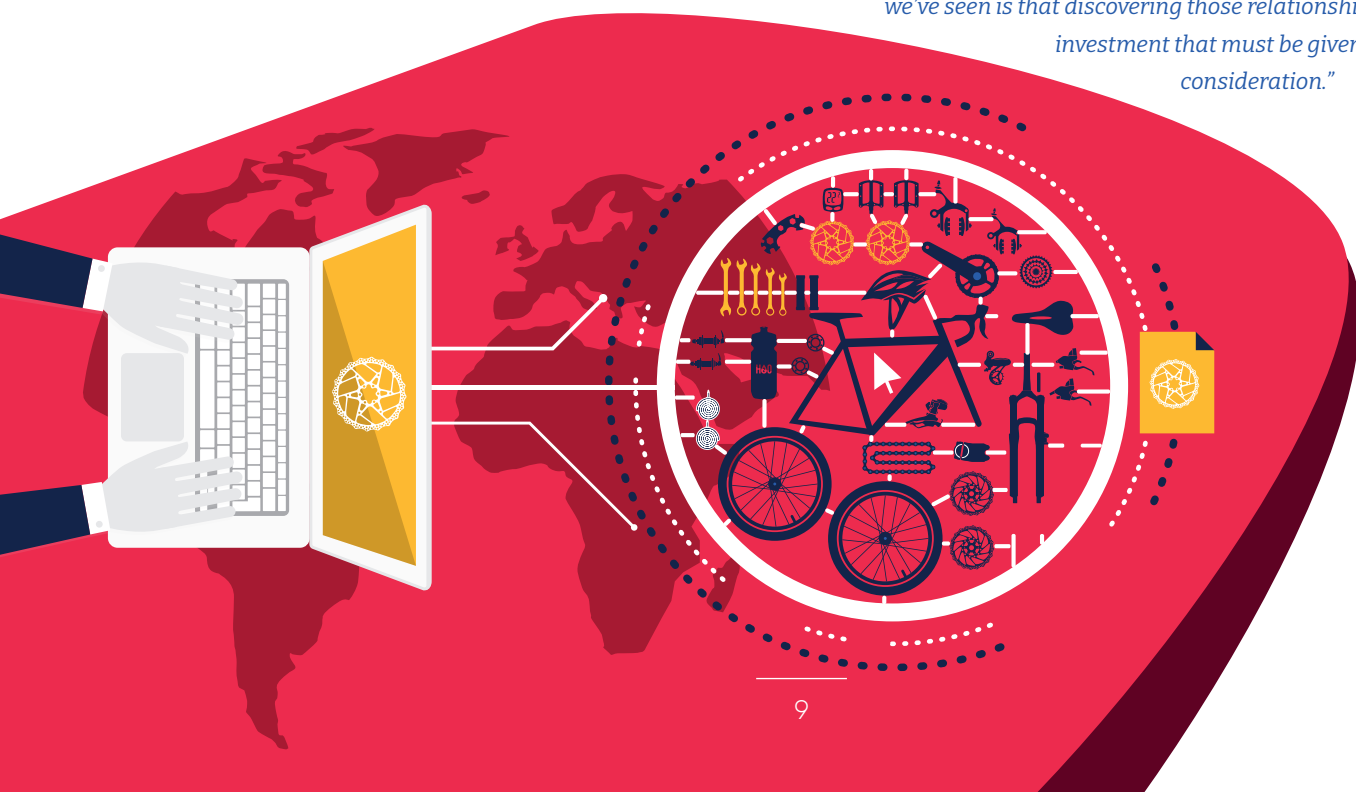
And businesses themselves are seeing the same opportunities, adds Katie Tamblin, chief product officer responsible for product marketing and insights at supplier assurance advisers Achilles, which helps over 600 procurement organizations globally to make data-driven sourcing decisions.

In contrast to near-shoring and reshoring, some strategies generally always make consistent pragmatic sense, she argues – adding that Achilles’ own survey data shows a growing interest in precisely such strategies.

*“Supplier discovery – identifying further potential suppliers – always makes sense, especially when moving away from single sourcing, and isn’t difficult to do,” she notes. “Supply chain mapping also makes consistent sense, and has become business-critical for strategic products: businesses need to know who those tier-2, tier-3, and tier-4 suppliers are. And while supply chain mapping is more difficult than supplier discovery, an emerging generation of new AI-based tools are automating the task, building highly-granular maps of which companies are dealing with which suppliers. Drilling down into the supply chain has never been easier.”*

Or more imperative, perhaps, adds Cranfield School of Management’s Richard Wilding: time and again, he points out, events highlight the lack of supply chain visibility that is present in the typical supply chain.

*“Understanding first-tier relationships isn’t difficult,” he points out. “But while drilling into second- and third-tier relationships is more difficult, it’s generally very worthwhile. And one of the lessons of the various disruptive events that we’ve seen is that discovering those relationships is an investment that must be given serious consideration.”*



# RESILIENCE & POSTPONEMENT WHERE NEAR-SHORING CAN DELIVER VALUE

Many observers caution against seeing near-shoring as a quick-fix solution to the resilience-sapping effects of long-distance sourcing. Tunisia and Turkey might be closer than China, but that doesn't necessarily mean that they possess the skills, logistics infrastructure, or manufacturing capacity that would render them capable of substituting for China.

But there are still opportunities to obtain value through near-shoring, insists David Loseby, former group chief procurement officer at aeroengine and powerplant manufacturer Rolls-Royce, and now managing director at advisory firm Barkers Commercial Consultancy.

Some work that he undertook for a European leisure retailer, he explains, involved the import of bicycles from China, Vietnam, and Thailand. Resilience was an issue for the retailer in question, but so was responsiveness, and flexibility. Reshoring would contribute to enhancing all three, but was not a viable option on cost grounds. But near-shoring— with a twist —was a viable option.

The strategy: postponement. Bicycle components are sourced from China, Vietnam, and Thailand—exactly as before. But once manufactured, they are shipped to a purpose-built factory in a low-cost southern location in Europe, where they are assembled as required into the bicycles that retail stores needed to replenish their stocks.

“Skills in certain locations in Europe were lower than in the retailer’s home market, but so were costs,” notes Loseby. “Fully assembled products, from sub assemblies, were no more than two days away from the retail outlets, meaning that the retailer could offer great customer service, and achieve higher levels of resilience—but at a lower cost than by attempting to reshore and manufacture in the home market.”



Moving away from single-sourcing is another resilience-boosting strategy. For the automotive industry, the Japanese earthquake and tsunami of 2011 served as something of a wake-up call in this respect: previously, single-sourcing had been endemic on cost grounds, and when those single sources turned out to be plants in north-eastern Japan, significant disruption resulted. Paint pigment manufacturer Merck KGaA supplied several car makers from its seven plants in Japan – including one earthquake-damaged plant that was the world's sole source of the paint pigment Xirallic. Beyond the immediately-affected plants of Toyota, Suzuki and Nissan, stoppages and line rescheduling occurred in both Europe and North America, affecting automakers as diverse as Ford, Volvo, GM, Renault, Chrysler, and PSA Peugeot Citroën.

But moving away from single-sourcing must be undertaken intelligently, stress experts. Kantar Group's Stephen Day, for instance, emphasises the importance of not just moving away from single suppliers, but also the importance of moving away from single geographies: the value of having two suppliers is diluted if both suppliers are in the same region of China, or the same Chinese city – as many businesses found out to their cost in the early stages of the Covid-19 pandemic. Procurement Advantage's Nick Wildgoose, too, cautions against self-inflicted concentration risk: dual-sourcing from the same country so as to conserve the procurement function's travel budget, or creating logistics flows which group together multiple items from multiple suppliers into single shipments in order to cut freight costs.

Most experts, too, echo and endorse North Carolina State University's **Rob Handfield's** views on the resilience-enhancing value of better supply chain visibility – and in particular, the value of achieving it through technology.

Gattorna Alignment's John Gattorna, for instance, sees considerable gains from end-to-end supply chain visibility. The key point to remember, he stresses, is that – properly carried out – end-to-end digitalization

also involves mapping all of a business's sourcing and supply chain processes, the applicable data flows, and creating and maintaining fully-accurate master data.

*“What results is an ability to make very, very quick decisions, reducing the business's time-to-recover, and delivering faster decision-making, faster response times, and a business that moves to a quicker beat,” he explains. “The goal is to become more like fast-fashion retailer Zara: moving at a faster pace, and being able to respond and recover more quickly.”*

And the benefits of doing so don't just accrue to the business as a whole, notes Kantar Group's Stephen Day: the procurement function itself is a major beneficiary. Sourcing over long distances, sourcing across multiple time zones, and sourcing over unreliable and inadequate logistics infrastructure brings complexity, challenge, and stress to a procurement function.

*“And increasingly, the procurement function is seeing the downsides of that,” he sums up. “With distance, everything becomes more difficult. Supplier management, quality assurance, ESG compliance, ensuring fair and equitable employment conditions and working conditions, diversity compliance – everything. The more that a procurement function improves resilience, the more it helps to reduce the impact of such challenges on the procurement function itself.”*



# SKILLING FOR RESILIENCE



If you read the case study of the European retailer and its decision to near-shore bicycle assembly, it's difficult to avoid being impressed by how – at a stroke – the retailer simultaneously not only improved resilience, but also improved its competitive position through being more responsive to the marketplace.

As you'll realise from reading it, the case study in question came from a long-standing connection of mine, David Loseby, a former group chief procurement officer at Rolls-Royce, and now managing director at advisory firm Barkers Commercial Consultancy.

And chatting to David about the case study, he explained that developing this distinctive strategy was no accident. To think 'outside the box' like that, stresses David, it is important to acquire and exercise skill sets that are very different from traditional procurement training.

*"To get to that solution called for critical-thinking skills, and an ability to look at the problem from a different perspective—a commercially-orientated supply chain perspective, rather than a narrow procurement perspective. It's about blending and applying sales-centred thinking, procurement-centred thinking, and procurement-centred thinking," he told me.*

In other words, it's about 'soft' skills, not just the traditional hard skills. The ability to communicate effectively with people, persuade them, and influence them. Collaboration skills, strategizing skills, synergizing skills—it is so-called 'right brain' skills like these that are required if resilience is to be pursued to the full.

That isn't to say that traditional procurement skills don't matter, of course. They are important—vitally important—as well. But they need complementing: complementing with other, 'soft', 'right brain' skills. Procurement professionals need both.





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## SOURCING FOR RESILIENCE

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