Strengthening supply chains

Growing Global

forvis mazars

Contents

Introduction

In an increasingly volatile world, the ability to scale and adapt global supply chains has become a defining factor in how organisations build resilience, respond to disruption and maintain competitive advantage.

Assumptions about global free trade and cost-optimised supply chains have given way to a far more complex and fragmented environment. Tariffs and geopolitical risk, in particular, are reshaping not only the structure of supply chains but also the way companies approach international expansion. According to our most recent C-suite barometer, four out of ten companies say that tariffs have triggered the development of new offerings in new markets, while as many as a quarter report changes to their entire operating model.

Companies planning or pursuing international expansion face challenges that initially look orderly: compliance, tax, technology and a step-change in supply chain complexity. In practice, however, operational challenges can rapidly multiply when critical steps are mistimed or overlooked, making the reality far more complex.

Despite this challenging context, 46% of companies plan to start operating in one or two new countries over the next five years and a further 37% intend to expand into three or more new territories. This acceleration in international expansion raises a critical question: are organisations equipped to scale effectively in a more demanding and complex environment?

This report examines how to restructure supply chains for international expansion. In the three key areas of operations, compliance and technology, we draw upon expert insights across key sectors to highlight approaches that lead to success, the missteps to avoid and the issues that most often require sustained management focus.

Key insights

1. Resilience is reshaping supply chain design. Geopolitical and climate volatility are forcing a shift from ultra-lean models towards more diversified supplier networks, selective inventory buffers, and greater visibility into supplier tiers and product origins.

2. International expansion in the current context is putting pressure on operating models. Growth across borders requires more than extending existing arrangements; it demands a rethink of sourcing, distribution, fulfilment, forecasting and execution.

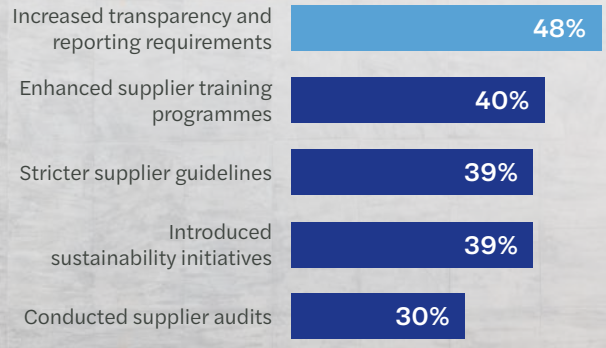
3. Operational maturity is becoming a prerequisite for sustainable growth. As supply chains scale, informal or poorly documented processes create execution risk, slow coordination and limit the ability to respond consistently across markets.

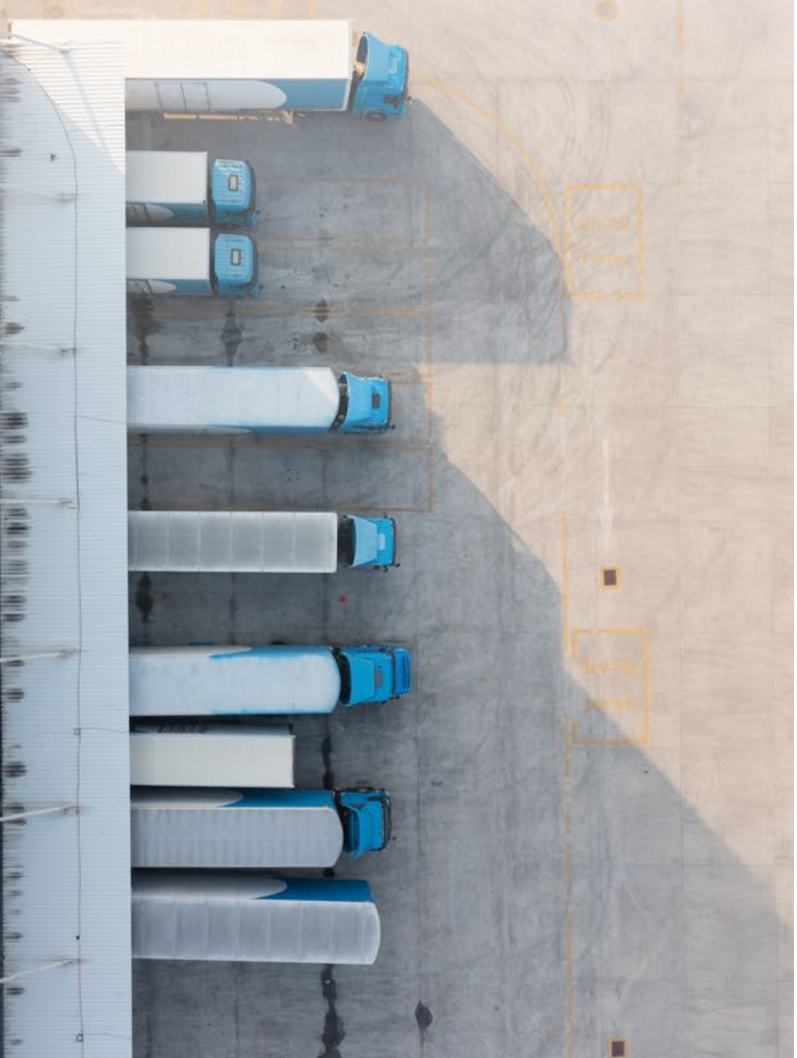
4. Compliance is now an embedded operational requirement. While compliance has always been a core requirement, increasing regulatory complexity across tax, labour, sustainability, customs, and data is making it a fully embedded, cross-functional priority that must be integrated into day-to-day decision-making.

5. Legacy technology and poor data quality are limiting performance. Fragmented systems and inconsistent data formats slow decision-making, increase error risk, and prevent organisations from scaling effectively. At the same time, while artificial intelligence (AI) has strong potential in forecasting, compliance monitoring, and workflow automation, many organisations cannot realise its benefits without first modernising core infrastructure and improving data quality.

Maximising operational efficiency

Policies and measures driving positive impact on supply chain management





The efficiency of day-to-day supply chain operations has a substantial impact on outcomes, all the more so in a new territory. At an early stage of planning for international expansion, C-suite leaders should make it their job to assess the maturity levels of existing supply chain management, focusing on people, process and technology. Levels of preparedness can vary widely. Companies with long track records in industries where supply chains have been a preoccupation for decades will typically find themselves confronting lower levels of uncertainty. Among automotive OEMs and their tier 1 suppliers, for example, playbooks exist for most scenarios, from opening a new manufacturing plant to building a distribution network in a new territory. By contrast, organisations expanding abroad for the first time often encounter what seem like formidable challenges.

Organisation size is not necessarily a guarantee of comprehensive planning, thorough documentation and detailed risk management. A large, quoted company may have grown rapidly in organic fashion and still depend on informal conversations about everything from logistics to tax policy. Informality can promote agility, but it can also result in communication gaps. This becomes a risk when existing arrangements need to be adjusted at speed across national borders. Occasionally, the impact can be serious, creating bureaucratic obstacles and slowing down time to market and revenue generation.

Maximising operational efficiency

Cost versus resilience

International expansion often requires the restructuring of sourcing, distribution, costs and partner ecosystems. In some cases, supply chains in new territories are inherited through mergers and acquisitions (M&A). In others, new supply chains will need to be built from scratch. It may be wise to adopt different approaches in a new territory.

One consideration that runs through all of these decisions is the need to make trade-offs between resilience and efficiency. Different companies strike a balance between priorities in different ways, reflecting the choices available to them and their appetite for risk. The experience of Covid-19 created a lasting change in approach in many sectors, emphasising the need for supply chains that can cope with substantial levels of disruption. However, resilience is not the dominant consideration everywhere. Retailers, for example, typically have to manage substantial margin pressure and are often able to switch suppliers rapidly. As a result, many still tend to place a greater emphasis on efficiency alongside resilience.

Resilience requires agility. In retail and automotive manufacturing, supply chain managers have recently focused on expanding their range of sources. Many have built up inventory buffers selectively for critical products and components. In sectors like life sciences, where regulatory approval cycles are lengthy, it is impossible to relocate production overnight. However, it is possible to include back-up manufacturing sites in plans. Within the European Union (EU), where national regulatory regimes are similar, this tactic creates another way for supply chains to shift and flex in response to changing patterns of demand.

The trend toward regionalisation and near-shoring is substantial and growing. Many U.S. companies have switched suppliers of some inputs from China to established industrial clusters in Latin America, for example. In Europe, the near-shoring trend is benefitting suppliers in Eastern Europe and North Africa, particularly Morocco and Tunisia which are both part of a EU free trade zone for industrial goods. The combination of closer proximity and lower tariffs can lead to a marked improvement in supply chain risk profiles.

Simplifying supply chains can both contribute to resilience and create cost benefits. One way of pressing forward with this combined agenda involves going direct to supply, cutting out distributors and wholesalers. In consumer-facing markets, this approach can be deployed across inbound or outbound supply chains, or both. In the latter case, the result can become a direct-to-consumer supply chain, or a variant on the same model, a direct-to-retail.

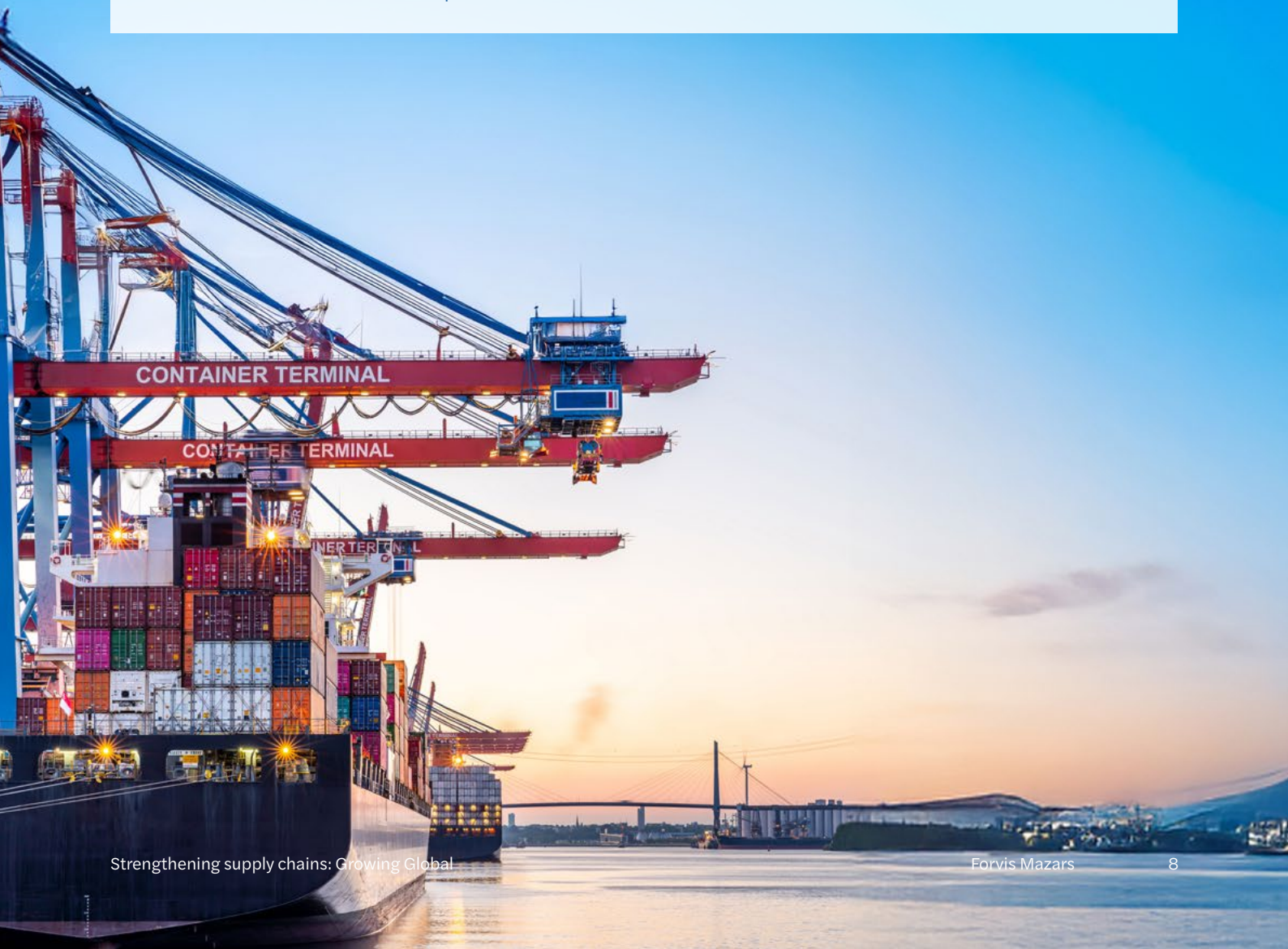
"For life sciences, supply chain resilience is no longer just an operational concern, it is a strategic and public health imperative. The shift towards re-shoring and regionalisation in Europe reflects a broader need to secure supply, reduce dependency and respond faster to patient needs"

Nigel Layton
Partner, Head of Life Sciences
Forvis Mazars Group

Spotlight: Re-shoring life sciences in Europe

The life sciences sector is at the forefront of the shift towards more resilient and regionalised supply chains. Recent disruptions have exposed Europe's reliance on overseas production, making supply chain security a strategic priority. Re-shoring is gaining momentum as companies look to strengthen local manufacturing, reduce lead times and ensure more reliable access to critical treatments. However, progress remains uneven, with regulatory, funding and capacity challenges still to overcome.

> Read more in our dedicated report.



Maximising operational efficiency **Cost versus resilience**

"What I see happening now is supply chains increasing the number of sources in each region so they can handle country risk and individual supplier risk much better. If you have just one supplier, in one region, for an important automotive component, production will collapse if they get knocked out."

Christian Back
Partner, Head of Automotive
Forvis Mazars Group

When moments of crisis occur, and resilience is required, institutional memory matters. Yet despite this, skills deficits are routinely included in lists of risks confronting supply chains. Furthermore, historic cost cutting, an ageing workforce, the need for modern skills and inadequate workforce training are all cited as additional causes.
For supply chain managers and senior leaders, maintaining an appropriate blend of skills, experience and agility in their teams needs to remain a key objective.

Maximising operational efficiency
Optimising performance

"Geopolitical risk, transport cost variations and climate change are all important. Companies are using strategic inventory buffers and predictive analytics to build resilience into supply chains."

Laurent Caporossi
Partner, Supply Chains
Forvis Mazars in France

Building or restructuring supply chains to meet the demands of international expansion requires in-depth operational knowledge and tactical decision making. For companies pursuing M&A to enter new markets, sustainability audits and ESG are becoming more common, as both can identify supply chain challenges. Over time, acquiring companies need to make decisions about how to adjust inherited supply chains. In the absence of major issues identified by due diligence, the likeliest option is to continue with the existing approach until strengths and weaknesses become apparent in more detail.

The classic supply chain challenge in a new territory involves fulfilment and two pain points arise frequently. The first involves a shortage of inputs during the ramp-up of production, which can be addressed by building up inventory buffers before the new venture enters the market. The second pain point involves quality issues resulting from inadequate industrial processes or a poorly trained workforce. Ideally, the solution involves using accepted industry frameworks such as design for manufacturing and design for assembly.

In addition, any business preparing for international expansion needs to undertake a series of basic preparations. These include building accurate forecasts of demand in new markets that factor in local preferences and trend cycles.

Likewise, the ability to create and adjust to 'what if' scenarios is essential. Among other things, this helps to model the impact of inbound and outbound disruptions, including the volatility of shipping costs. A key step includes ensuring that capacity exists for ongoing inventory management, particularly in the case of essential components and products. In addition, continually seeking out opportunities to improve last-mile performance, often retail focused, will pay dividends in the long run. Operational management also needs to take account of plans to use supply chains in a new territory as a testing ground for new approaches and techniques that might be adopted more broadly by the company if successful.

Maximising operational efficiency **Embedding compliance into operations**

As companies expand internationally, compliance is increasingly shaping day-to-day supply chain operations. Regulatory requirements across tax, sustainability, labour and trade are becoming more complex and more deeply embedded in how supply chains are designed, executed and scaled. Rather than being managed as a separate function, compliance must be integrated into core operational processes to ensure consistency, reduce risk and enable effective execution across markets.

"Agility is everything in supply chains. The best people do not just follow process; they respond to shocks in real time and build up muscle memory through lived experience. You cannot train that instinct overnight, but you can create the conditions for it to thrive."

Matt Dalton
Partner, Consulting
Forvis Mazars in the UK

Operational insights

1. Build agile supply chain operations that can adapt at speed.
Supply chains must be designed to respond quickly to disruption, shifting demand and supplier risk rather than relying on static, efficiency-driven models.

2. Strengthen operational discipline to enable consistent execution at scale.
As companies expand, formalised processes, robust planning and skilled teams are essential to avoid delays, quality issues and coordination breakdowns across markets.

3. Design supply chain models that balance resilience and efficiency.
Leaders must actively define trade-offs between cost, flexibility and risk ensuring operations can scale sustainably in more volatile environments.

Managing multi-national compliance

"Very often, the obvious risks are taken care of. But it is the unknowns and unconsidered areas that can be disturbing and disruptive. Equally, the rules can be so complex that it is easy for companies to lose sight of the big picture."

Eline Polak
Partner, Indirect Tax
Forvis Mazars in the Netherlands

Managing compliance with local laws, regulations and tax rules is the most frequently identified challenge among companies planning for international expansion. When companies expand abroad, they are typically confronted by a complex web of regulations covering labour law, tax, data privacy and sustainability. Compliance is essential: it mitigates legal, financial and operational risk and enables companies to win the trust of new customers. Failure to prioritise compliance can result in financial penalties, reputational damage and even impaired market access. Increasingly, however, compliance is about more than reducing these risks to a minimum. For example, the levels of supply chain visibility required by some sustainability regulations have the potential to help companies boost the resilience and efficiency of their operations.

> Explore our Risk & regulation insights

Managing multi-national compliance
The growing influence of sustainability mandates

Sustainability is increasingly regulated. Alongside EU and U.S. regulations, in South-East Asia and India, a growing base of national and state-based sustainability legislation now exists. Senior supply chain managers must possess a clear understanding of the relevant rules.

Carbon emission policy tools, such as the EU's Carbon Border Adjustment Mechanism (CBAM), impose a cost for imported carbon-intensive goods to encourage cleaner industrial production worldwide. The EU requires importers to declare the *actual* emissions embedded within those goods in order to avoid high default EU calculation factors. The difference is worth understanding: one company we spoke with estimates that using actual supplier data would have saved his organisation 30% of the fee that it paid using the EU's calculation factors. The EU's CBAM began definitive implementation in January 2026 and the UK is expected to follow suit with similar policy discussions continuing in Australia, Canada and the United States.

Waste regulations, including the EU's Packaging and Packaging Waste Directive/Regulation (PPWD/PPWR) and a number of nationally imposed laws, aim to reduce packaging volumes, increase levels of recycling and shift the burden of lifecycle accountability on to vendors. The rules typically include restrictions around packaging design, labelling and documentation. They apply to any organisation selling packaging or packaged products within the EU, regardless of packaging origin or vendor location. Exemptions are narrowly defined and typically require a detailed legal assessment. Similar schemes are planned or operational in Australia, Canada, Chile, India, South Africa and the UK.

"Procurement departments are changing rapidly because they need to assess geopolitical and sustainability risks in the deeper supply chain from a board perspective, it is crucial to give strategic orientation to procurement. They can exert a powerful influence on sustainability performance."

Carolin Friedrich
Partner, Head of Sustainability
Forvis Mazars Group

"The more organisations quantify the links between climate change, biodiversity and their own supply chains, the more sustainability makes sense in business terms. At a basic level, it allows organisations to plan for the future."

Alice Strevens
Director, Sustainability
Forvis Mazars in the UK

The growing influence of sustainability mandates

Biodiversity regulations are typically modelled on a global agreement that commits governments to assess and monitor biodiversity risks linked to large, multi-national companies. Governmental implementation is variable, which makes it essential for supply chain managers to understand the context in individual territories. In the EU, for example, the Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS) define comprehensive reporting standards. In addition, the Corporate Sustainability Due Diligence Directive (CSDDD) requires EU-based companies to monitor environmental and human rights risks. The EU's rules cover global companies headquartered outside the bloc with subsidiaries based inside it.

Labour standards and anti-slavery regulations are enforced by the EU's CSDDD. In addition, from December 2027, the EU's Forced Labour Regulation is expected to prohibit goods produced outside the bloc by involuntary labour. The EU's enforcement powers will enable it to block imports, prevent them from being exported or order their withdrawal from EU markets and destruction. Many other nations possess their own regulations and action plans relating to forced labour, for example, U.S. Customs and Border Protection acts against forced adult and child labour using the Tariff Act of 1930 and other targeted, standalone laws.

Deforestation prevention measures, such as the EU Deforestation Regulation (EUDR), are evolving rapidly, yet awareness of their impact is often low. The EU's comprehensive regulation requires companies of any size within the bloc to prove that a range of products do not originate from land deforested legally or illegally after 2000. The EUDR enforces a duty for companies to exercise due diligence on deforestation.

> "With tight margins, many UK retailers are sticking to the bare minimum on sustainability. But that is starting to change. The more forward-looking brands are using it to stand out, not just tick a box."

Matt Dalton
Partner, Consulting
Forvis Mazars in the UK

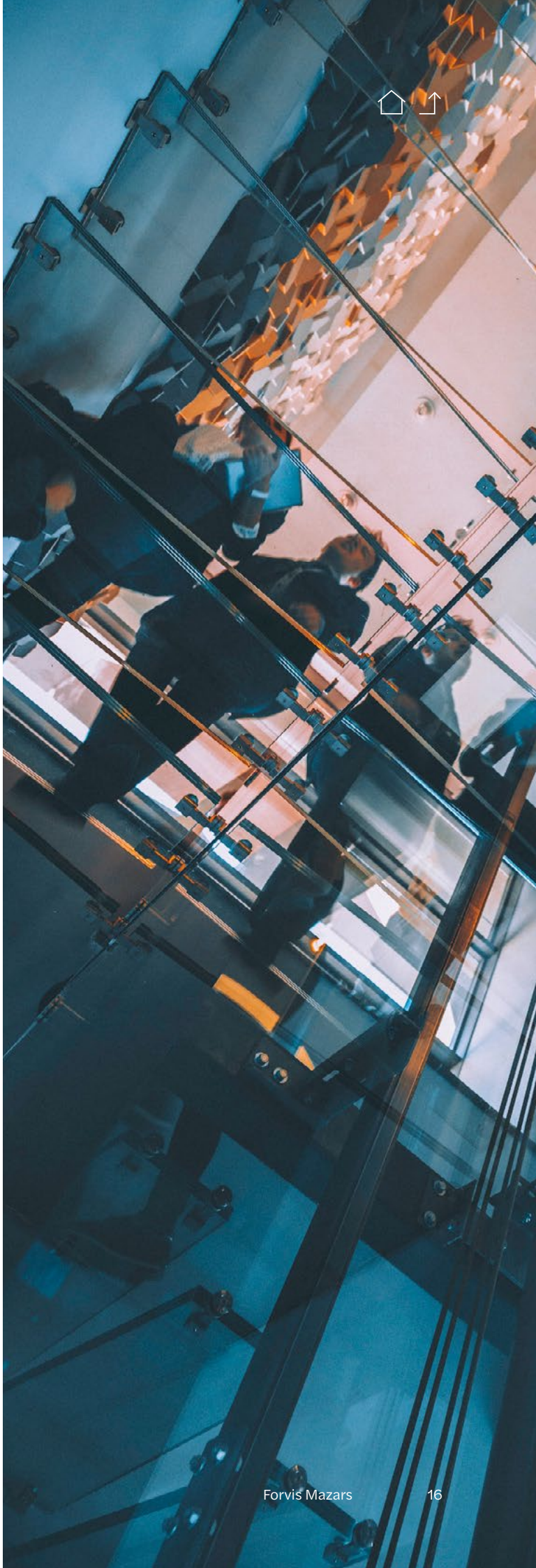
As businesses expand across borders, they need to invest in managing the constraints that regulations like these impose worldwide. However, compliance is often far from simple, often requiring close scrutiny of suppliers and entire supply chains. In many cases, regulations impose a due diligence duty, intended to foster ongoing monitoring. In multiple cases, EU-level regulation co-exists with national legislation, creating potential complexities.

Transatlantic ESG divergence: the U.S. approach

Different approaches to sustainability regulation on either side of the Atlantic may be a significant challenge for companies. While the U.S. federal government has weakened climate-related policies and ESG and sustainability rules, the EU has largely moved in the opposite direction in recent years. The challenge for corporates involves the need to adapt to two increasingly different regimes, anticipate further regulatory changes and align business operations with expectations in different jurisdictions.

By contrast with the EU, sustainability regulations in the U.S. are often fragmented, sector- or location-specific and voluntary. Legal differences create a distinction, too. In the EU, regulation frequently involves 'double materiality', requiring companies to disclose environmental and social information that affects their business, as well as how their operations impact people, societies and the environment. Where ESG mandates still exist in the U.S., they typically rely on 'single materiality', ie the potential impact of sustainability factors on a company's earnings, performance and valuation.

In the U.S., regulatory differences at state level add a noticeable level of complication. Several states have passed anti-ESG laws. Among pro-ESG states, California implements comprehensive climate-related risk reporting for all companies that do business in the state. Meanwhile, Colorado passed legislation in 2025 mandating emissions disclosures from companies generating over $1bn in revenues. For national businesses, the need to deal with varying state laws has become a significant challenge.



Managing multi-national compliance
The value of traceability and visibility

The need for traceability and deeper visibility into supply chains frequently arises as a direct result of regulation and tax requirements. The EU's carbon border adjustment mechanism, for example, requires companies to calculate, verify and report the embedded greenhouse gas emissions of imported goods. Meanwhile, rapidly changing tariffs, and responses to them, have complicated customs procedures. To qualify for preferential rates, companies must typically provide customs authorities with supporting documentation or digital product passports that verify proof of origin.

Companies expanding internationally should be aware that the challenges created by overlapping and fragmented regulations across different territories can be significant. Traceability presents specific challenges, including the need to establish deeper visibility into supply chains. For example, a recent survey of global supply chain managers by McKinsey & Co. noted that while 95% have a good understanding of tier 1 supplier risks, only 42% say the same about tier 2 and beyond. Among the reasons offered for not probing the supply chain more deeply is a lack of appropriate software and the fact that senior management do not consider multi-tier supply chain risk a priority.

"You cannot sell or promote a green energy project if you cannot demonstrate that all its inputs are sustainable to some extent, which ties back to the traceability issue. But it is a paradox, because the more we develop renewable energy projects in Europe, the more we rely on Chinese-made equipment, whose production methods may not meet environmental or social standard regulations."

Philippe Bozier
Partner, Energy & Infrastructure
Forvis Mazars in France

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Managing multi-national compliance
The value of traceability and visibility

Other challenges include the workload created for suppliers by multiple customers requesting detailed datasets on a regular basis. Among smaller suppliers, IT infrastructure may be limited, or the data itself may be non-existent. Data formats and methodologies often prove to be incompatible. Security and data sovereignty can become additional concerns. Challenges like these are being addressed by efforts designed to standardise data flows in vertical sector supply chains. DECADE-X, supported by Airbus, Collins Aerospace, Thales and Liebherr, aims to improve data exchange in aerospace and defence. In the automotive and chemical sectors, CATENA-X and CHEM-X operate in a similar fashion.

The effort to increase visibility can also prompt improvements in commercial risk management, allowing companies to better target product recalls and manage inventory more efficiently. It also becomes easier to identify a company's most efficient and reliable suppliers. New information can identify new risks: for example, in the case of dual-sourced components, appointing an entirely different supplier may make sense if your company has two immediate suppliers reliant on the same upstream source.

In new territories beyond familiar markets, companies also need to be aware of the potential for fraud and deception, which creates a further reason to enhance supply chain visibility and traceability. At a recent criminal trial in London, for example, a 38-year-old former DJ received a four-year prison sentence for using forged airworthiness certificates to sell unauthorised components to major airlines around the world, including American Airlines, Delta Air Lines and Ryanair. The fraud resulted in the airlines accruing losses of £40 million, mostly associated with the effort to identify unauthorised components installed within a widely used commercial jet engine used by Airbus and Boeing.

"Traceability fundamentally needs digital support in order to understand where your products are coming from, so that you can actually create that product passport in order to pay the relevant taxes or even get your imports and exports through customs. Companies cannot do this on a spreadsheet."

Alice Strevens
Director, Sustainability
Forvis Mazars in the UK

Tax: an integral part of decision making

"As supply chains continue to evolve, it is essential to assess the associated tax impacts to ensure that all relevant costs are fully understood and reflected in decision-making from the outset. Analysing the impact of proposed changes on areas such as transfer pricing, customs duties and permanent establishment risk, for example, enables businesses to plan with confidence and mitigates the risk of unexpected costs or disruption arising at a later stage."

Claire Cowen
Partner, International Tax
Forvis Mazars in the UK

Tax is a vital part of preparing for international expansion. Setting up or changing supply chains typically requires expert scrutiny of multiple issues, from transfer pricing to tariffs, customs, duties and value added tax.

From a tax perspective, process matters. From a business perspective, agility and entrepreneurial instincts often matter more. It is not unusual for these two approaches to come into conflict. In most contests of this kind, there is only one long-term winner: the tax authorities. For the business, the results can include stalled operations, disrupted forecasts and cashflow difficulties.

Coordination between specialists in procurement, supply chain, the legal team and the tax team is essential as the aim is to avoid crises that trigger delays. Commercial decisions taken by other specialists or senior leaders nearly always have tax consequences. We recommend that companies involve tax experts in discussions about international expansion at an early stage.

Adjusting supply chains to cope with international expansion becomes easier in the presence of robust and well-documented plans for existing arrangements. These provide a stable point of comparison, including a clear sense of the risks that each organisation is prepared to tolerate. The details matter: if an organisation is unsure about who manages its cross-border tax liabilities, it becomes harder to calculate how these will change as it enters a new market.

For example, a company moving into a new territory may have to reconsider its transfer pricing policy. Doing this may involve a benchmarking study designed to demonstrate to tax authorities and auditors that intercompany transactions are correctly valued. The process can be complex and time consuming. However, if a robust and well-documented approach to transfer pricing already exists within the company, execution is often faster.

Compliance insights

1. Integrate evolving regulatory requirements into supply chain design.
Regulations such as CBAM, CSRD, CSDDD and OECD Pillar 2 are directly shaping sourcing, production and distribution decisions, requiring early integration into operating models.

2. Strengthen governance to manage global regulatory fragmentation.
Diverging regimes across regions, particularly between the EU, U.S. and emerging markets, require coordinated oversight, local expertise and continuous monitoring to ensure compliance and avoid disruption.

3. Develop end-to-end traceability to meet regulatory and reporting demands.
Requirements on emissions, product origin and supply chain due diligence are increasing rapidly, making visibility across multiple supplier tiers essential for both compliance and risk management.

Leveraging technology as a key driver

The challenge of legacy systems

"In most large organisations, you expect to see a ton of maturity in supply chain management. Yet many large organisations use the 'brute force' approach: a lot of people working on a lot of spreadsheets, not using the technology options they possess. They have not completed digital transformation in a way that allows them to shift the burden of work from old-school data entry to doing the analysis."

Jonathan Stomberger
Partner
Forvis Mazars US

Technology is essential to managing the scale and complexity of increasingly complex and regulated global supply chains. However, software designed for enterprise resource planning (ERP) frequently acts as a barrier to progress.

Many businesses have delayed ERP upgrades because of the risk of disruption. Deferred upgrades and continued use of ageing systems have often resulted in negative outcomes for supply chain professionals. These include continuing reliance on systems that cannot monitor inventory levels and other KPIs in real time. Where legacy ERP reaches its limits, workarounds include extracting the data and continuing the work on spreadsheets, creating the potential for error and data duplication. Supply chain teams frequently compensate for ageing ERP systems by acquiring standalone software designed for specialised tasks. However, training, support and maintenance is either neglected or perceived as too expensive. In the absence of modern data-sharing techniques including Application Programming Interfaces (APIs), shifting data between applications can become error prone and time consuming.

By contrast, modern ERP systems are modular and interoperable, allowing standalone software programs to be integrated into workflow. For many supply chain teams, working with a modern, well-functioning ERP system enables a step change in productivity. ERP markets will enter a long-awaited upgrade cycle, driven by the need to deploy AI in back-office functions and impending deadlines for the withdrawal of maintenance and support by vendors.

For companies planning international expansion that remain dependent on legacy systems, it is vital to scrutinise the resulting risks closely. In the context of M&A-driven expansion, compatibility between existing and acquired ERP systems is a key consideration. In the case of both M&A and greenfield expansion, it is worth verifying that capacity exists to handle increased transaction volumes. Developing plans to integrate existing systems with a new system in a new geographical location is a non-negotiable requirement.

Leveraging technology as a key driver

Managing supply chain data

Data is another essential area of focus. In the context of M&A-enabled expansion, incompatibility between data formats used by the target company and acquiring company is frequently an issue. Left unaddressed, challenges of this kind can result in decision makers receiving misleading performance reports.

Data challenges affect tax calculations in multiple ways. Supply chain managers may model the options for their supply chains in terms of tariffs, for example. However, they often cannot know what impacts to include because of abrupt policy changes and the retaliation that follows. Revising spreadsheet-based models under these circumstances becomes extremely challenging. What is required is a system that rapidly allows users to change multiple parameters.

Interoperability challenges are also frequent. For example, the OECD's Pillar 2 Global Anti-Base Erosion (GloBE) rules aim to set a floor on the minimum amount of tax paid by multinational enterprises in each jurisdiction in which they operate. Here, systems of record often struggle to cope.

"Retailers and other consumer-facing companies began data mining 20 years ago. They now operate at a very high level of digital maturity, tracking extremely complex supply chains."

Isabelle Massa
Partner, Head of Consumer
Forvis Mazars Group

> Explore our practical guide to Pillar 2 Global Anti-Base Erosion (GloBE)

"Companies need to ensure that their technology is well-governed, scalable and reliable when they begin cross-border operations. Their infrastructure needs to be able to handle the transaction volume. Data needs to conform with regulations and follow a uniform model to ensure that everyone is looking at a single accurate picture of performance."

Christian Segurado
Senior Manager
Forvis Mazars US

The transformative potential of AI

"AI will have a major impact on supply chains. Ahead of us is a one-to-two-year window in which the AI use cases are going to start emerging. Many will transform tasks that today require heavy manual processing. Wherever you have got 15 people keying in accounts payable vouchers, that is a use case ripe for AI."

Jonathan Stomberger
Partner
Forvis Mazars US

AI adoption in supply chain management remains in its early stages. Logistics routing is an obvious hotspot in terms of activity, driven by the availability of high-quality digital maps. However, according to the World Trade Organisation, only 10% of large companies worldwide are using AI to check trade compliance and regulations. Just 8% are using AI for customs classification and documentation.

The potential of AI remains significant. However, in many cases, other challenges must be confronted first, including modernisation of hardware, software and networks. Data quality and governance involve additional likely challenges.

Unlike generative AI, which is based upon probabilistic logic, machine learning is deterministic and therefore suited to multiple tasks in supply chain management. Leading use case scenarios in this area include predictive analytics, including improved forecasting, inventory optimisation and complex 'what-if' scenarios. Large retailers, in particular, are exploring AI's potential in these areas.

Generative AI has substantial potential to assist companies in keeping track of changing regulations. By scanning legal updates and specialist publications in real time, it can automate detection of compliance gaps and propose remedies. Services of this kind will allow human employees to spend less time on monitoring and more time developing high-quality responses to regulation.

Today, many supply chain planners rely on standalone third-party software packages and tools such as Munich Re's calculators for assessing the climate change vulnerability of specific locations. Agentic AI opens up the possibility of incorporating routines like these into largely automated workflows that substantially improve productivity.

One of the most ambitious long-term goals for AI involves digital twin technology to create a virtual version of the entire supply chain, continually synchronised with the real world by data flows from all relevant systems. Key markets for digital twin development include energy supply networks, manufacturing and healthcare.

> Explore our Digital transformation and AI insights

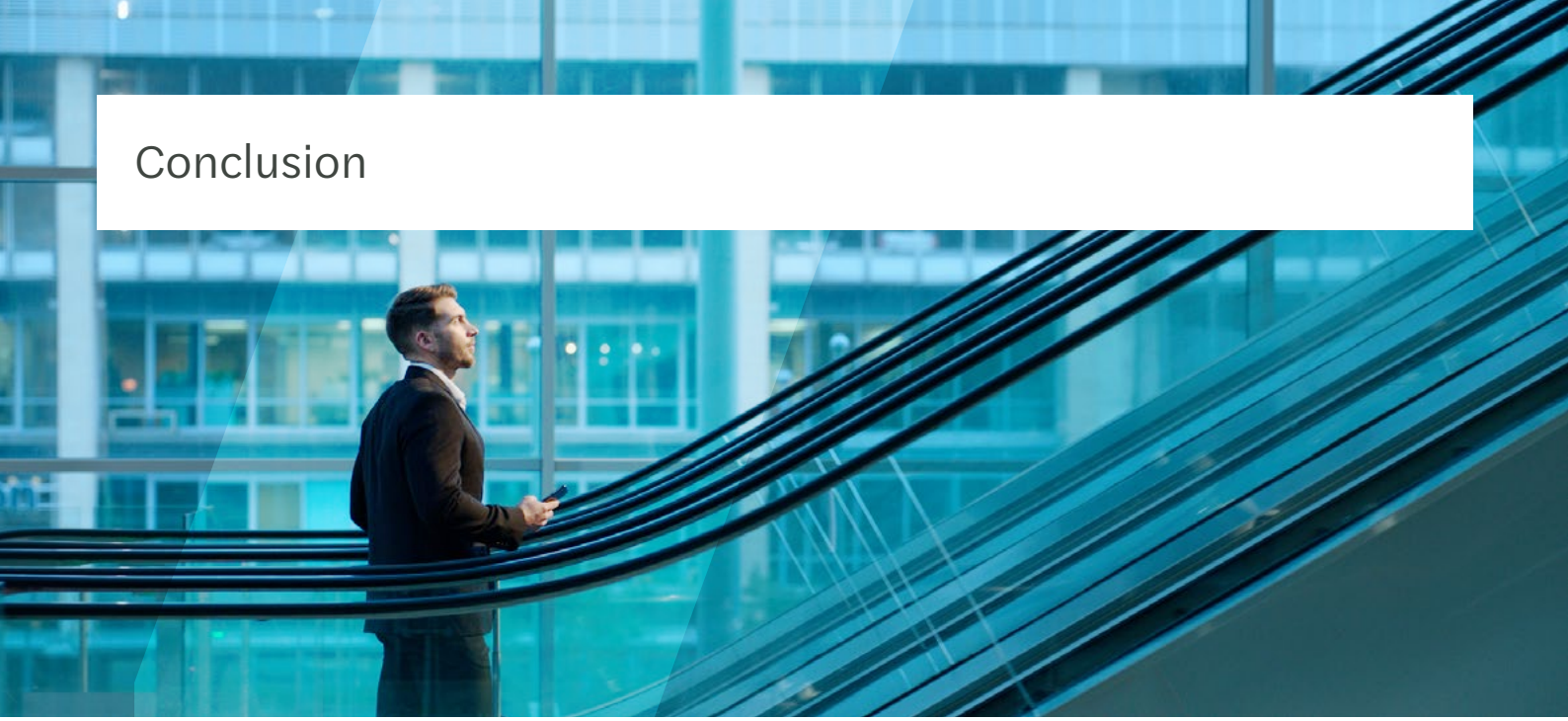
Technology insights

1. Modernise core systems to support global scale and complexity.
Legacy ERP systems and fragmented architectures must be upgraded to enable integration, real-time visibility and efficient cross-border operations.

2. Establish strong data foundations to enable reliable decision-making.
Standardised, high-quality and well-governed data is critical to support forecasting, compliance, tax calculations and performance management across markets.

3. Build the capabilities required to scale AI and advanced analytics.
AI can transform forecasting, compliance monitoring and operations, but its impact depends on robust infrastructure, interoperable systems and accessible, high-quality data.

Conclusion



The ability to scale supply chains effectively is now a critical determinant of international expansion. In a context shaped by tariffs, rising costs, location risk, new regulations and the demands of sustainability, traditional approaches are no longer sufficient.

In the domain of operations, senior leaders must begin preparations for geographical expansion by accurately assessing whether their current supply chains are functioning with the level of sophistication required to cope with international expansion.

Whether a company is building a new supply chain from scratch or adapting an existing one, serious consideration needs to be given to striking the right balance between cost efficiency and resilience. In the case of expansion enabled by M&A, sustainability audits and ESG DD may well point to weaknesses in existing arrangements. In addition, companies starting to work with new suppliers must closely examine the potential for component shortages and quality issues in the early stages of production. Accurate demand forecasting is essential, as is a thorough approach to modelling 'what if' scenarios around potential inbound and outbound disruptions. This report also recommends that companies engaged in international expansion should consider using new territories as a test location for supply chain innovation that could be deployed elsewhere in the future.

Compliance with local laws, regulations and tax rules is non-negotiable. In the case of sustainability, compliance also has the potential to help companies detect previously unsuspected supply chain risks. Senior business leaders should possess at least a broad understanding of the relevant rules and should encourage closer collaboration between specialists from procurement and elsewhere to work together closely. Efficiency relies upon good communication and strong documentation policies in each specialist area. Tax advice should be incorporated into supply chain planning from an early stage, as changes to supply chain structure can trigger time-consuming recalculations and result in different liabilities. Understanding the implications in good time is advisable.

"Supply chains involve many moving parts and many questions. The problems that arise are usually fixable, although one solution might be slightly better than another. The important thing to remember is that few solutions will deliver exactly what you want but the ability to make the right decisions is fundamental to strengthening supply chains."

Claire Cowen
Partner, International Tax
Forvis Mazars in the UK

Conclusion

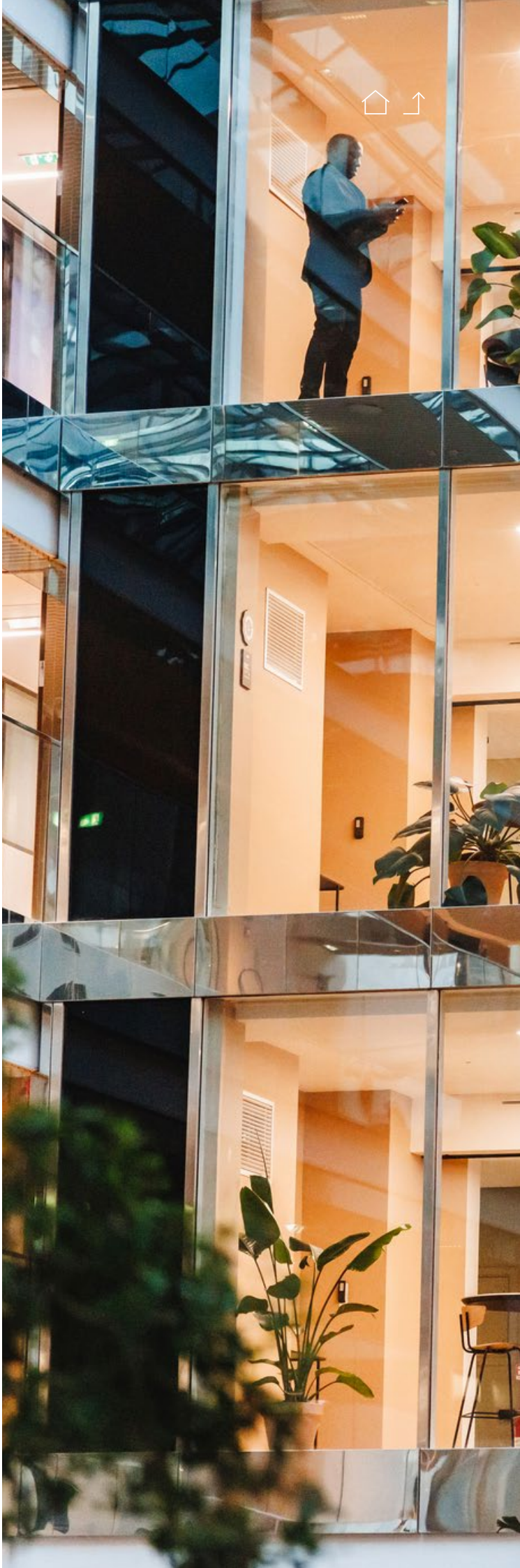
Companies expanding overseas need to closely scrutinise their technology infrastructure. This starts with understanding the constraints of their current ERP system and its ability to integrate with systems based overseas. The same applies to any dedicated software to which an overseas operation will need access. Data is another key concern: it is essential that systems at headquarters and those of an overseas subsidiary use the same data formats and configurations. We also recommend that companies explore the use of technology solutions for traceability as they move into new markets.

When asking the question of, does the increasing complexity of supply chains mean that the discipline should have a dedicated representative in industry boardrooms. For the largest global organisations dealing with consistently high levels of scale and complexity, the response is typically yes. For many other companies, however, the answer may not be quite so clear cut.

Supply chains frequently create more risks as companies expand across borders. However, the workload required to construct the supply chain of a new international venture resembles an iceberg. In volume terms, 10% of the task is visible above the surface. This is the realm of strategy, including everything that leads to the decision to commit to a new territory. By contrast, 90% of the iceberg's mass sits below the waterline in the sense that it involves largely operational decisions.

This hybrid blend of supply chain characteristics, occasionally strategic, mostly operational, will inform the approach to management for many companies in the absence of a dedicated boardroom advocate.

Under these circumstances, board members will need to become closely involved in scrutinising the choices made by managers and experts as they turn strategy into operational reality. It is equally important to keep a watching brief on the human capital, business processes and technology required, investing as necessary so that operational maturity matches the level of performance required international expansion.



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