

Executive summary

For better or worse, we now live in a world where the words "supply-chain disruption" apply to an astonishing number of issues affecting the global marketplace. Shortages of food, parts, and products; catastrophic climate incidents; political turmoil; inflation; stock market declines—all can be linked in some way to ongoing issues with global supply chains.

Meanwhile, of course, the companies that import and export these items around the world are all trying to devise strategies to minimize the impact of disruptions on their customers and businesses, if not the world at large.

Trade management on the global stage

Global trade practices have also taken center stage in the realm of politics.

The trade war between the United States (US) and China, retaliatory tariffs, sanctions, inflation, political instability, Russia's invasion of the Ukraine, Brexit — all have implications on global trade. Some of the more immediate impacts can be traced back to the pandemic, of course, but other political initiatives — such as Brexit — promise to have consequences that extend far into the future.

For example, Brexit initiated a new, more protectionist trade regime between the United Kingdom (UK) and the rest of the world, forcing companies that trade with the UK to implement new systems and processes in order to comply. Indeed, the UK's phase-out of its Customs Handling of Import and Export Freight (CHIEF) system in favor of the more technologically sophisticated Customs Declaration Service (CDS) system is among the top trade changes that companies in the United States, the European Union (EU), and the Asia-Pacific region indicate is currently affecting them the most.

Retaliatory tariffs and sanctions have also become a favorite tit-for-tat political tool for registering displeasure with another country's foreign policy actions. For example, the US and China continue to impose tariffs on each other with no real end in sight. And sanctions in the form of import/export limitations, tariff increases, trade status denials, port closures, financial restrictions, and other punitive actions — are now so pervasive that merely keeping up with them is a challenge for those involved in global trade compliance. Sanctions related to Russia's invasion of Ukraine have roiled world markets with supply-chain uncertainty and price fluctuations, sparking inflation and stressing consumers the world over.

In the Asia-Pacific region, China sits at the epicenter of global trade for thousands of companies worldwide, but trade with China is still fraught with complexities and nuances that businesses must navigate. Covid-related lockdowns in Chinese factories have led to product

delays and shortages. Increased scrutiny around forced labor have pushed supply-chain due diligence to the top of the list of concerns companies have about conducting trade in Asia, and with China in particular.

Disruption of key supply chains and changing market dynamics in the Asia-Pacific region have also given many companies cause to consider expanding local sourcing and near-shoring of manufacturing to create more reliable supply chains. Another popular option is to diversify into such countries as Vietnam, Thailand, and Indonesia, where labor costs are lower. And for many companies outside the US, taking full advantage of existing and potential new freetrade agreements (FTAs) in the Asia-Pacific region is a strategic priority as well.

In Latin America, rapid policy changes are complicating trade compliance and pushing companies to consider implementing more sophisticated technological solutions to ease their compliance burden. In Mexico, for example, the new National Customs Agency of Mexico (ANAM) has taken over many - though not all - of the tax collection, enforcement, and processing duties once performed by the Servicio de Administración Tributaria (SAT). Mexico is also attempting to crack down on corruption and smuggling, so transport service providers are now required to include a Bill of Lading supplement with their invoices that provides detailed data on drivers, transport operators, owners, and other intermediaries.

Widening skills gaps

Another consequence of the rapidly evolving regulatory, technological, and business environment in which global trade professionals operate is that companies are reporting difficulties finding people with the right set of skills to meet the challenges of this increasingly complex and technology-driven profession.

Now more than ever, logistics and supply-chain specialists need a diverse range of skills in order to do their jobs and advise business leaders about regulatory and compliance strategies. Communication and

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leadership skills, legal knowledge, negotiation techniques, technical know-how, business acumen, and problem-solving abilities are all part of the supply chain professionals' toolkit now, and companies are looking everywhere — colleges and universities, consulting firms, custom brokers, other companies — to find the talent they need.

Today, companies also are pursuing better methods of professional knowledge-sharing across the industry to help broaden and deepen the global trade and supply-chain talent pool.

Ever-evolving trade-management technology

Global trade management technology can help speed compliance, ensure data security, and improve operational efficiency, but adoption of these technologies is not as widespread as one might expect — or the industry might hope.

In our study, almost half of the businesses queried said they were either behind the technology curve or in the early stages of adopting global trade management technology. Less than half of companies reported having enterprise resource planning (ERP) systems with integrated data environments that could give users visibility across trade regions and business units. Then again, more than half also said they were either satisfied with the performance of their trade management technology or were actively exploring emerging technologies such artificial intelligence (AI) or blockchain to improve management of global trade functions.

Key findings:

- · New regulatory agencies, systems changes, tariffs, and sanctions topped the list of factors most affecting global trade management business operations.
- Issues such as potential human-rights abuses and crackdowns on forced labor have made supply-chain due diligence in the Asia-Pacific region more important than ever.
- A rapidly evolving global trade environment is making it harder than ever for companies to find new talent with the skills necessary to excel.
- Topping the list of skills that companies are looking for in new hires are communication and leadership skills, legal knowledge of regulations and compliance, and negotiation and business acumen.
- Close to one-half of businesses are either behind or still in the process of adopting global trade management technology to meet modern trade challenges.
- Technology investment priorities currently center around data security, compliance, and data-sharing. However, some companies are exploring applications for emerging technologies such AI and blockchain.

METHODOLOGY:

Respondents to this survey included global trade professionals from the US, EU, UK, Latin America (primarily Mexico and Brazil), and the Asia-Pacific region (including China, Australia, Japan, Singapore, and Thailand). Our goal was to find out how the current trade environment is affecting trade management and supply-chain behaviors and attitudes around the world.

A total of 228 global trade professionals answered a 15-minute online survey, which were conducted in May and June, 2022. Most (185) of the respondents were from companies with more than \$100 million in revenue, but a sizeable number of respondents from Latin America (30 out of 70) were from companies with less than \$100 million in revenue. In addition, the majority of companies represented are involved in both import and export activities.

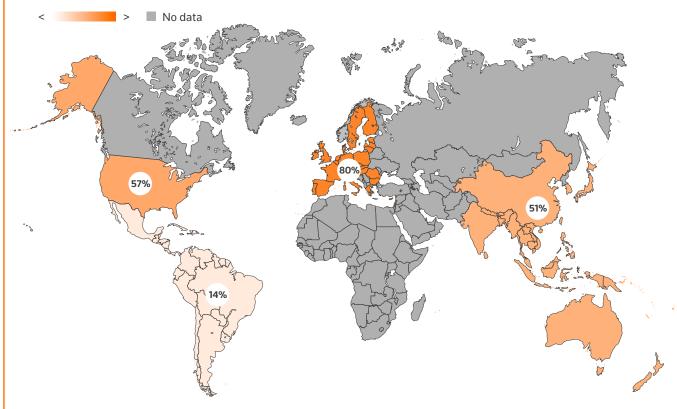
As for the individual respondents, more than half were either upper-level executives (president, CEO, COO, CFO, Executive VP) or director/managers responsible for procurement and/or trade logistics and supply-chain management. The sample also included trade and operations specialists, finance specialists, and procurement and supply-chain specialists. Manufacturing and technology/electronics companies had the heaviest representation (41%) among respondents, but other respondents included those who work in wholesale and retail trade, technical services, transportation and warehousing, automotive, healthcare, finance, and several other industries. More than one-third of the companies represented have headquarters in the US, followed by companies with headquarters in Mexico, UK, Germany, Australia, Brazil, Japan, and Singapore. Other countries with corporate headquarters included Sweden, Thailand, China, France, Spain, and Switzerland.

Global trade challenges and trends

All over the world it seems, new regulations, shipping requirements, tariffs, sanctions, and even whole regulatory bodies are in a seeming state of constant flux. Instability and uncertainty are simply facts of life for global trade managers today. In fact, keeping supply chains open and ensuring their security has never been more challenging, and the global political outlook does not offer much reassurance that tensions will ease anytime soon.

Numerous factors play into this volatility, and different regions of the world are not necessarily grappling with the same issues. For example, traders in the EU and UK spent the past year navigating the intricacies of Brexit, but Brexit itself was not cited by any of the companies surveyed as an issue impacting their business currently. Rather, 80% of companies in the UK and 57% in the US say their most pressing regulatory challenge at the moment is transferring operations over to the UK's new Customs Declaration Service (CDS) while the UK phases out its previous customs system, CHIEF. Barely anyone (14%) in Latin America considers CDS a problem, however, due to the region's relatively light trade with the UK.

Percentage of companies by region impacted by UK Customs **Declaration Service as a top challenge**



Source: Thomson Reuters 2022

The CDS is a more technologically sophisticated system that promises to make trade with the UK much smoother and easier, but it requires companies to adapt their systems to the new regime, which in some cases means additional investments in technology and personnel that may take an unforeseen bite out of the budget. The CDS's impact is wide-ranging, however, as more than half (51%) of respondents from the Asia-Pacific region also listed it as a top concern. That concern is immediate, too, as import declarations on the CHIEF system will not be allowed after Sept. 30, 2022, and export declarations will not be allowed using CHIEF or the National Export System (NES) after March 31, 2023. Thereafter, all businesses trading goods with the UK will have to process import/export declarations through the CDS.

Tariffs and Sanctions

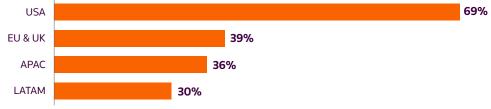
In the global political chess game, tariffs and sanctions have become many a country's favorite method of registering disapproval with another country's policies and behaviors without risking military involvement. Consequently, global trade channels have become a mind-boggling patchwork of ever-changing rules and restrictions, turning compliance in many places into a legal and logistical minefield.

For example, ongoing trade disputes between the US and China affect companies in virtually every industry, and broader US tariffs on steel and aluminum have prompted such countries as Canada, Mexico, India, and Turkey to retaliate with their own

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tariffs on a variety of US goods. Consequently, it's not surprising that the country with the highest number of companies affected by retaliatory tariffs is the US, at 69%. Meanwhile, in the EU and UK, 39% of companies rate retaliatory tariffs as one of the top factors affecting their business, while only 36% of companies in Asia-Pacific countries do, and even fewer companies (30%) in Latin America see tariffs as a top concern.



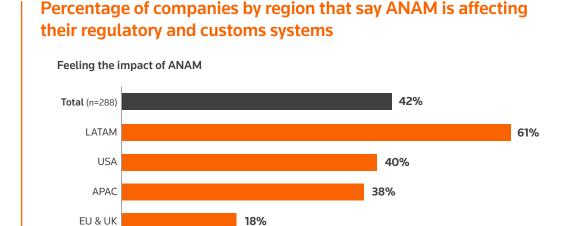


Source: Thomson Reuters 2022

A similar dynamic is at work when considering the massive number of sanctions currently levied on Russia for its military incursion into Ukraine. Half the companies in the US, EU, and UK cited regulatory changes associated with Russia sanctions as major factors that are currently impacting their business and customs systems. In the Asia-Pacific region, however, only 26% of companies said Russia sanctions were affecting their customs systems; and in Latin America, only 20% of companies cited these sanctions as a systems concern.

Rapid change in Mexico and Latin America

A far more important factor affecting regulatory and customs systems for companies in Latin America is the creation of ANAM, Mexico's new national customs agency, as well as Mexico's recently mandated inclusion of a Bill of Lading Supplement with all import/export invoices.



Source: Thomson Reuters 2022

A full 61% of survey respondents from Latin America cited the creation of ANAM as having an impact on their regulatory and customs systems, with the majority of the companies affected (58%) generating less than \$100 million in annual revenue. In open-ended guestioning, more than half (54%) of Latin American companies also referenced Mexico's new Bill of Lading Supplement requirement, which mandates that all import/export invoices contain detailed data on drivers, transport operators, owners, and other intermediaries.

For Latin American companies, the creation of ANAM arguably simplifies import/export procedures, but it does require companies to adapt to a dual-agency system. As of the beginning of this year, ANAM took over responsibilities for import/export procedures, inspection, and enforcement that were previously in the domain of another agency, the Servicio de Administración Tributaria, (SAT). Companies trading with Mexico must now do so through ANAM, and adhere to ANAM's procedures and requirements — but the collection and inspection of income taxes, value-added taxes, a special tax on products and services called IEPS, and other applicable trade taxes are still being done through SAT.

In the long run, splitting ANAM off from SAT may indeed create more efficient trade and tax practices for companies doing business with Mexico, but until new technology and systems have been assimilated and established, some additional complexity and confusion is inevitable. Add to that a new Value Manifest format for importers, as well as the burden of providing more transport data through the Bill of Lading supplement — which is part of a nationwide crackdown on corruption and smuggling — and it is evident that Latin American companies are dealing with a great deal of change in a short span of time.

Change comes to Central and South America

While tariffs and sanctions are not as pressing a concern in Central and South America as they are in other parts of the world, rapid regulatory changes at major ports of entry are receiving a great deal of attention. In addition to Mexico's ANAM, for example, Brazil introduced its National Single Window Project (Portal Único Siscomex) in 2014 and has been upgrading it in stages ever since.

One of those upgrades includes the Unique Import Declaration (DUIMP), a single import declaration system that streamlines the import licensing process and allows importers to use a single license for multiple types of import operations. DUIMP does this, however, by centralizing the government's information, tax, and fee payment systems and automating cargo validation, all of which requires importers to adapt their own technology to the new system in order to comply.

Many companies in Central and South America are also choosing to meet these challenges by investing in global trade technology that integrates with Brazil's platform and allows companies to take full advantage of the country's upgraded systems and processes.

Asia-Pacific trade faces shaky supply chains

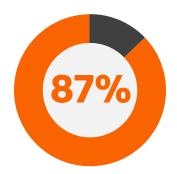
Across the globe, there are many factors influencing trade dynamics in the Asia-Pacific region, partly because trade with China permeates the region, partly because the region itself is so diverse, and partly because so many companies in the region - particularly those located in China, Japan, South Korea, Singapore, and Taiwan — are involved in high-tech manufacturing. Shortages of semiconductors and the raw materials needed to make them have hit Asia-Pacific supply chains extremely hard, and various infrastructure issues have resulted in persistent import/export bottlenecks and rising freight costs.

As the pandemic subsides, however, companies in our survey expressed a high degree of unanimity about which factors that are currently impacting their import/export activities with Asia-Pacific countries.

Second, 83% of respondents agreed (46% strongly) that Asia-Pacific supply-chain disruptions due to the pandemic and worldwide economic turmoil are having a major impact on their businesses.

The aforementioned semiconductor shortage is one such disrupting factor, but so too is the Russia/Ukraine conflict; further, a wide variety of raw material and parts shortages have plagued businesses the world over.

These disruptions have been so destabilizing that 78% of respondents also agreed that global multinationals should consider diversifying their supply chains by either expanding their local sourcing or by using near-shoring for manufacturing to maintain consistent supply chains. Furthermore, 70% of respondents from Asia-Pacific companies noted that such countries as Vietnam and Thailand



87% of APAC respondents agree that supplier due diligence across the supply chain is now more important than ever due to increased regulations.

Source: Thomson Reuters 2022

have become favorite choices for supply-chain diversification, particularly for larger companies that generate more than \$100 million in annual revenue.

Of course, the word "consider" is important here, because exploring the possibility of switching to suppliers from different countries is a very different thing from actually doing it. Nevertheless, the ongoing uncertainty of global supply chains has prompted companies everywhere to re-evaluate their sourcing and devise contingency plans for possible future disruptions to key products and materials. In the automotive industry, for example, the rapidly shifting market demand for electric vehicles is also allowing smaller Asia-Pacific companies outside of China, Japan, and South Korea to play a larger role.

Actually, moving physical infrastructure and establishing new trade routes is no easy feat and always comes with costs and risks of its own. Companies contemplating supply-chain moves

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into other regions also might want to consider that an average of 58% of our survey respondents expressed confidence that the Asia-Pacific region will likely be leading the post-pandemic economic recovery — and for companies actually based in that region, the level of optimism shot up to 83%.

Other factors affecting import/export business processes for those involved in trade in the Asia-Pacific region were the complexities of managing export control requirements, particularly with China and Japan, and making strategic use of free trade agreements (FTAs). Further, 90% of companies in the Asia-Pacific region also cited retaliatory tariffs as a significant business burden, and 65% mentioned data residency issues as an ongoing concern.

Top changes impacting import/export business in Asia

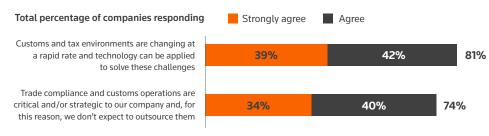
| Percentage of companies by region | Total (n=147) Strongly agree Agree | USA (n=54) | EU & UK (n=36*) | LATAM (n=27*) | APAC (n=30) | Below \$100M revenue (n=26) | \$100M plus revenue (n=121) |
|---------------------------------------------------------------------------------------------------|------------------------------------|-------------------|-----------------------|------------------|--------------------|--------------------------------------|--------------------------------------|
| Asia will lead economic post-pandemic recovery more than any other region | 24% 33% 58% | 44% | 56% | 59% | 83% | 73% | 55% |
| Managing Export Control requirements is becoming more challenging in markets such as China, Japan | 25% 47% 72% | 74% | 67% | 48% | 97% | 58% | 75% |
| Retaliatory tariffs have had a significant cost impact to my business are hard to manage | 21% 48% 69% | 70% | 67% | 48% | 90% | 46% | 74% |
| Data residency is a significant concern for managing my trade related data | 30% 35% 65% | 59% | 61% | 70% | 77% | 69% | 64% |

Source: Thomson Reuters 2022

Change begets change

The common denominator in all of these changes — whether involving tariffs, taxes, sanctions, or other regulations — is that governments all over the world are digitizing and integrating their customs and tax platforms to take advantage of the more centralized, sophisticated technologies that enable greater data security and transparency and are now more easily available. These agency changes, in turn, are pushing companies to either upgrade their own systems or adopt new systems altogether in order to keep up with their compliance obligations. Indeed, 81% of survey respondents agreed that the solution to rapidly changing customs and tax environments lay in adopting more capable global trade technologies. Further, 74% agreed that trade compliance and customs operations are such critical, strategic functions that they would prefer not to outsource them.

Changes businesses say are affecting import/export activity in Central and South America



Source: Thomson Reuters 2022

A majority of survey respondents were also in agreement that corporations should be strategically leveraging special customs regimes and FTAs to reduce customs duties, attract new investments, and trim costs all along the supply chain. Again, the best way to accomplish these goals is by taking full advantage of global trade technologies that help companies identify hidden opportunities in an environment of complex and ever-evolving regulatory oversight.

Other initiatives, such as Authorized Economic Operator (AEO) programs, are also intended to speed up and simplify customs - in fact, 80% of company representatives in Latin America, and 92% of those in the Asia-Pacific region agree that AEO programs help.

Talent and skills gaps: a widening chasm

The rapidly evolving regulatory, technological, political, and business environment in which global trade professionals operate has created a conundrum for companies seeking to hire into these positions. Specifically, it is becoming increasingly difficult for companies to find professionals with the right set of skills to meet their needs.

The skills gap and other challenges facing global trade

| | Total (n=228) Strongly agree Agree | USA (n=70) | EU & UK (n=49) | LATAM (n=70) | APAC (n=39) | Below \$100M revenue (n=43) | \$100M plus revenue (n=185) |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------|----------------------|---------------------|--------------------|--------------------------------------|--------------------------------------|
| Supply chains and global trade has evolved rapidly in recent years, making it hard to find talent with the right skills to fill these roles | 50% 27% 77% | 80% | 78% | 69% | 85% | 60% | 81% |
| There is a gap in specialized skills needed for effective global trade management | 45% 23% 68% | 77% | 69% | 56% | 72% | 47% | 73% |

Source: Thomson Reuters 2022

Indeed, more than three-quarters (77%) of respondents to our survey agreed that the rapid evolution of the industry has made it more difficult to fill key roles, and 68% agreed that there is a definite skills gap when it comes to the specialized knowledge and abilities needed for

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effective global trade management. The situation is so acute, in fact, that an average of 45% of companies surveyed said they were considering outsourcing to fill these skills gaps.

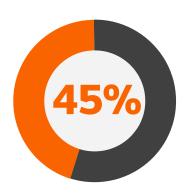
This is an understandable situation, given the expanded scope of responsibilities involved in global trade and supply-chain management. Not only must global trade managers be expert researchers and analysts, they must also be savvy negotiators, stay up to speed on international regulatory and economic policies, be aware of global politics, understand the legal and strategic aspects of the business, easily grasp new technologies — and be confident enough to advise leaders about global business strategy and supply-chain risk. Further, they must do all this while managing the daily variables of international transport and delivery.

Filling trade-management skills gaps

When asked to rank the skills needed for effective global trade management, survey respondents rated virtually every skill offered as either very important or important. In order of desirability, the skills companies rated as "very important" in new hires include:

- communication and leadership
- legal, regulatory, and compliance
- negotiation and problem-solving
- business strategy
- information technology and automation
- logistics management
- cost and financial management
- project management
- cross-cultural, global management
- human resource management

These roles are big, important jobs to fill, and the industry is working hard to improve the infrastructure and communication necessary to develop top-quality talent. Indeed, 91% of respondents agreed that industry knowledgesharing is crucial for nurturing an effective global trade and supply-chain talent pipeline. Efforts in this area are also underway to improve programs at colleges and universities, where 57% of companies say they look for new talent that can be readily trained into the profession. The ground for college graduates is especially fertile at companies generating less than \$100 million in annual revenue, where 70% of those companies say they recruit from colleges and universities.



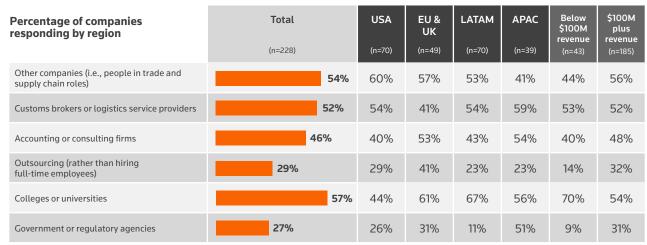
45% of companies worldwide say they are considering outsourcing to fill skills gaps.

Source: Thomson Reuters 2022

Other talent options

Of course, the more traditional methods of acquiring talent are still being used as well. These include hiring people away from other companies or training customs brokers, logistics providers, and workers in other supply-chain roles to take on larger responsibilities in a corporate environment. Interestingly, 46% of company respondents also said that accounting and consulting firms (primarily the Big Four) have also become a ready pool for skilled talent, due primarily to the growing importance of technical acumen, data analytics, and strategic cost-control in the industry.

Sources for recruiting new talent



Source: Thomson Reuters 2022

Outsourcing is another option as well, but only companies in the EU and UK seem to have much of an appetite for choosing outsourcing over hiring full-time employees. Elsewhere, less than one-quarter to one-third of companies expressed a preference for outsourcing, and most of those (32%) were larger companies with \$100 million-plus in annual revenue. More than half (51%) of companies from the Asia-Pacific region also cited government and regulatory agencies as potential sources for new hires, whereas only 11% of respondents from Latin America thought hiring government agency personnel was a good idea. The US, EU and UK all fell somewhere in between, at 26% and 31% (EU and UK combined) respectively, on the idea of persuading government personnel to jump to the corporate side.

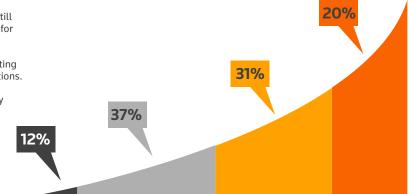
Global trade technology: adoption is accelerating

Given the increasing complexity of the international regulatory environment and the speed at which trade data must now be processed, it is no surprise that global trade technology is playing an increasingly important role for companies that import and export goods around the world. What is surprising is how few companies have fully invested in trade technology, particularly automation. Considering how much more efficient and accurate such systems are, as well as the ancillary benefits that come from having a more granular understanding of, and control over, the entire supply chain, this lack of investment is troubling.

The global trade technology adoption curve



- Early stage We are at an early stage in adopting technology, automating our global trade functions.
- Established We have established technology deployed for global trade management, with no immediate plans for significant change.
- Exploring emerging technologies -We are exploring emerging technologies such as AI or blockchain to help better manage our global trade functions.



Source: Thomson Reuters 2022

The results of this study suggest that close to half (49%) of businesses worldwide are either behind the curve or in the early stages of adopting global trade management technology. Fortunately, only 12% are still relying on manual systems for trade management

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and logistics. Further up the curve, 37% of respondents say they are in the process of adopting automation technology for global trade functions — which, depending on the systems a company already has in place, often entails enterprise-wide upgrades of ERP systems and establishing pathways for data-sharing and integration.

Managing the technological journey

Transitioning from manual processes to partial or complete digitalization of data is typically the most labor-intensive part of a company's technological journey, but the transition doesn't have to happen all at once. For example, it is possible to automate a function like deniedparty screening using separate software modules that don't require digitalization across the entire enterprise. Such options allow companies a great deal of flexibility in how they go about adopting and integrating new technologies into their existing systems. Indeed, almost one-third (31%) of companies surveyed indicated that they already have some form of global trade management technology in place and have no immediate plans for change presumably because their systems are working well and the company does not yet feel the need for any further upgrades.

How far ahead of the technology curve a company wants to be with its trademanagement systems really depends on the company's needs and goals in terms of minimizing risk, maximizing efficiency, and the extent to which the company wants to leverage its trade data to gain a competitive advantage. At the cutting edge of innovation, for

Emerging technologies such as Al and blockchain may soon offer companies new ways to manage global trade functions, as well as tools for gathering and processing data for the purposes of strategic business intelligence.

example, emerging technologies such as AI and blockchain may soon offer companies new ways to manage global trade functions, as well as tools for gathering and processing data for the purposes of strategic business intelligence. Currently, 20% of the companies surveyed say they are exploring the use of AI and blockchain, and companies in the US, EU and UK appear to be slightly more interested in these technologies than companies in other parts of the world.

Platforms and software

As for the technology platforms that companies are already using for global trade and supply-chain management, an average of 57% are using the tools available to them through their ERP software. Almost two-thirds (64%) of the companies in the US operate this way, but there are many different types of ERP systems, and using them exclusively for global trade management has some inherent limitations.

Technology platforms used for Trade and Supply Chain Management

| | Total (n=228) | USA (n=70) | EU & UK (n=49) | LATAM (n=70) | APAC (n=39) | Below \$100M revenue (n=43) | \$100M plus revenue (n=185) |
|------------------------------------------------|------------------|----------------------|----------------------|-----------------|--------------------|--------------------------------------|--------------------------------------|
| Enterprise Resource Planning (ERP) software | 57% | 64% | 51% | 60% | 49% | 56% | 58% |
| Global Trade Management (GTM) software | 41% | 44% | 49% | 37% | 33% | 44% | 41% |
| Supply Chain Management Software (SCM) | 38% | 37% | 45% | 33% | 38% | 42% | 37% |
| Transportation Management Software (TMS) | 33% | 30% | 39% | 34% | 31% | 37% | 32% |
| Data analytics for global trade & supply chain | 26% | 27% | 35% | 24% | 15% | 23% | 26% |

Source: Thomson Reuters 2022

In addition to their ERP systems, from one-quarter to one-third of the companies surveyed also said they use some form of specialized software, be it Global Trade Management software, Supply Chain Management software, Transportation Management Software, or some sort of program for trade compliance, screening, or third-party due diligence. More than one-quarter of companies (26%) said they also use data analytics for trade analysis and supply-chain purposes. No matter what technology they are using, however, the tougher challenge for many companies is putting together a team that knows how to leverage the full capabilities of the tools companies already own.

For multinational companies to take full advantage of the most sophisticated technologies available for trade management and analysis, they need a fully integrated, cloud-based data environment that gives them complete supply-chain visibility across regions and business units, regardless of where the trade department is located geographically. On average, 49% of the companies surveyed have such as system, and that number jumps to 69% in the Asia-Pacific region, due to the regional influence of such tech giants as China and Japan.

Data environments and information sources

Still, more than half of the companies surveyed continue to rely on partially integrated systems that don't give them full visibility across the regions in which they operate or of their different business units. And almost one-fifth (19%) are still operating in highly siloed environments with disparate systems for each region and/or business unit, severely limiting their ability to share, compare, and analyze their business's trade data.

Current data environments for global trade technology

| | Total (n=228) | USA (n=70) | EU & UK (n=49) | (n=70) | APAC (n=39) | Below \$100M revenue (n=43) | \$100M plus revenue (n=185) |
|--------------------------------------------------------------------------------------|------------------|-------------------|----------------------|--------|--------------------|--------------------------------------|--------------------------------------|
| An integrated system with visibility on trade across regions | 49% | 39% | 49% | 47% | 69% | 39% | 49% |
| A partially integrated system, with visibility across some regions or business units | 31% | 33% | 31% | 37% | 18% | 33% | 31% |
| Disparate systems for each region and/or business unit | 19% | 26% | 20% | 16% | 13% | 26% | 20% |

Source: Thomson Reuters 2022

Source: Thomson Reuters 2022



One of the advantages of automating trade functions through a third-party service provider is that, if the product is properly supported, keeping track of changes in trade classifications and regulations is automatic as well. However, only 20% of companies surveyed say they rely on automated third-party intelligence to keep them up to speed on crucial compliance requirements. Almost two-thirds (65%) said they lean on the advice of consultants, 57% monitor government alerts themselves, and half obtain the information they need by conducting their own online research. None of these methods is entirely foolproof on its own, of course, so it is likely that many of these companies use a combination of information sources to monitor classification and regulatory changes that apply to them.

Technological performance: satisfaction almost guaranteed

At the same time and despite more widespread adoption of global trade technology, only about one-quarter of companies say they are "very satisfied" with their current technological capabilities. Many also put themselves in the "satisfied" category, but US companies in particular expressed a desire for technology that better meets their needs. Among the items on their wish list are:

- better integration of trade systems and data across the company
- more transparency into trade routes and the supply chain
- better insights from trade data to help drive business decisions
- improved ability to keep up with classifications.

A company's overall satisfaction with its technology may have something to do with its size and ambitions, however. In most categories, our study showed that smaller companies tend to be slightly more satisfied with the performance of their technology than are larger companies.

Technology investment priorities

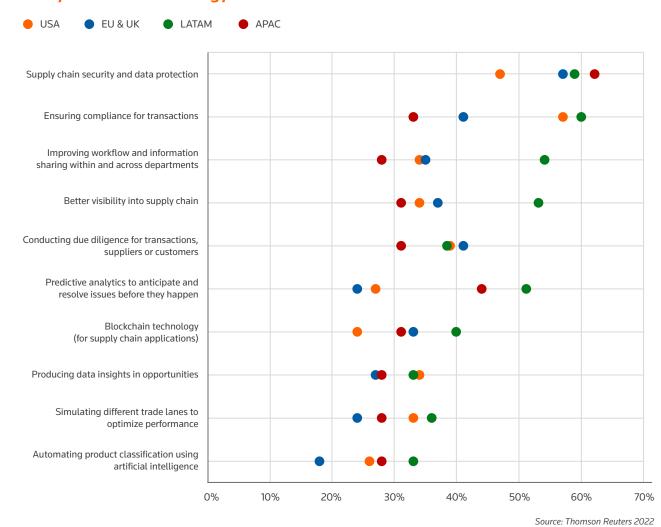
When it comes to investing in technology, budget constraints are almost always a consideration, so companies must prioritize adoption by need. And in the current legal/ regulatory environment for global trade, companies need technology that can help them navigate ever-changing regulations and sanctions, keep their operations and data secure, contain costs, and help management make smarter business decisions.

At the moment, companies say their technology investment priorities revolve around data and supply-chain security, compliance, and improving workflows and data-sharing across departments.

Other high investment priorities include:

- better visibility into the supply chain (for security, compliance, and cost containment)
- ability to conduct due diligence for transactions, suppliers, and customers;
- predictive analytics and scenario modeling ability to use data to produce insights and opportunities
- modeling capabilities to simulate trade-lane options and optimize performance
- use of blockchain technology in the supply chain
- using AI to automate product classifications

Priority areas for technology investment



By region, US companies prioritized compliance over everything else, and companies in other parts of the world put supply-chain security and data protection at the top of their technological wish list. In general, smaller companies were slightly more likely to favor the most common priorities (e.g., security, compliance, data-sharing), but all companies ranked their other technological priorities more or less the same, with some fluctuations from region to region. For example, companies in Latin America and the Asia-Pacific region are almost

Conclusion

Global trade management issues — particularly supply-chain stability, tariffs, sanctions, and customs compliance — were once relatively quiet back-office concerns, but they are now being discussed regularly and openly on the global stage. In addition, governments around the world are upgrading the technologies they use for managing trade, creating systems that make better use of digital data, systems integration, and automation. One consequence of this trend is that governments and corporations all over the world are co-evolving technologically, prompting both to adopt ever more sophisticated systems and processes.

When it comes to trade and technology, the stated goal of most governments is to streamline and simplify their processes and operations, and the goal of most companies is to find more efficient, effective ways to meet their compliance obligations, mitigate risk, and gain a competitive advantage. Global trade managers work at the center of these new systems and processes, and because the stakes are so much higher now, the scope and complexity of their jobs has grown exponentially. Today's global trade managers must have the technical knowhow of an engineer, the legal sense of an attorney, the scrupulousness of an accountant, the organizational skills of a project manager, the business acumen of an executive, the cultural awareness of a diplomat, and the communication skills of a leader. Further, their jobs require them to be extremely detail-oriented while also maintaining a keen awareness of the larger business, political, and economic context in which their businesses operate.

Global trade jobs have become so complex and important, however, that companies are having trouble recruiting and developing enough new talent to fill the skills gaps that this expanding palette of responsibilities has created. Rapidly advancing technologies are forcing industry veterans to learn new ways of working, to be sure, but they are also creating veins of opportunity in the areas of data analytics, business intelligence, and overall management of information technology systems.

Because global trade management technology and systems are becoming essential industry tools, virtually every multinational company involved in global trade is in the process of managing its own technological evolution — however, some are farther along than others. Roughly half of the companies responding to this survey are in the beginning and middle stages of their technological journey, while the other half are either content with the systems they have in place or are actively exploring the possibilities of new technologies such as AI and blockchain.

At the time of this survey, however, the majority of companies involved in global trade are focusing their technological attention on data security, compliance automation, and developing systems for more transparent data-sharing. These are the building blocks of a modern global trade management system, and making sure that these systems operate as efficiently and effectively as possible should be a top priority for every company involved in import/export activities.

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