

WHITEPAPER | APRIL 2024



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THE CONTENTS OF THIS WHITEPAPER?



INTENDED AUDIENCE OF THIS WHITEPAPER

- Anyone who deals with freight or logistics
- Business active freight-heavy sectors (such as automative, electronics, FMCG, logistics & transportation, manufacturing & utilities, packaging, retail & leisure)

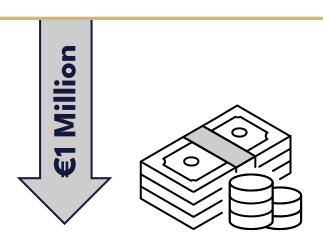
THEMES THIS WHITEPAPER WILL COVER

- The key themes affecting the freight and logistics sector in the UK and Germany
- How freight decision maker respondents are responding to these key themes with insights from one of the world's leading experts on trade and supply chains

UK AND DE FREIGHT TRENDS: 2024 AND BEYOND

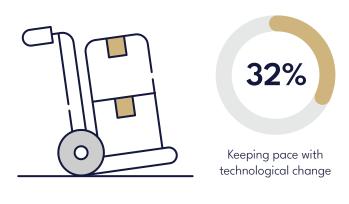
WE ANONYMOUSLY SURVEYED FREIGHT DECISION MAKERS IN GERMANY AND UNITED KINGDOM, AND THIS IS WHAT WE DISCOVERED...

The freight sector is being affected by a number of key themes, and has been adopting technology to support its response in 2023 and beyond.



€1 Million - the average budget cut enterprise shippers experienced in 2023 (with €986K being cut on average across all businesses surveyed)

100% OF THE FREIGHT DECISION MAKERS WHO TOOK PART IN THE SURVEY HAVE BEEN AFFECTED BY A NUMBER OF KEY THEMES IN 2023 INCLUDING:





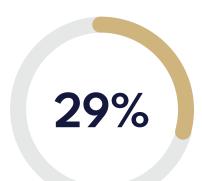


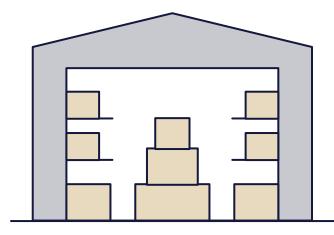
Half (50%) of businesses involved in the survey have registered lower customer satisfaction due to these themes

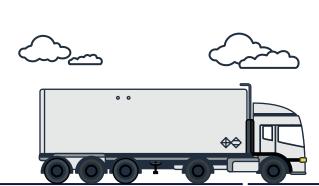


Nearly a third (29%) think climate change and rising costs will continue to impact logistics in 2024

But solutions are being adopted by respondents in response to these themes, with warehousing efficiency (29%) seen as the most viable way to boost customer satisfaction











31%

30%

Freight software management
(31%) and digital CMRs/
documentation (30%) are
also seen as key to supporting
growth and efficiency



99% of respondents are bringing in sustainable measures, policies and solutions to manage climate change's impact

And 100% believe tech will help them manage these key themes, with freight decision makers expecting advanced lane matching (25%), electric/hybrid vehicles (22%), and Al (20%) to have the biggest impact on logistics









MEET THE AUTHOR

I'm Dr. Rebecca Harding, the founder of Rebeccanomics, and a UK-based economist, academic, and global trade consultant whose focus is on the global macro trends (from war to sustainability, technology to general supply chain resilience) affecting the supply chain. I created the world's first automated sustainability scoring system for trade finance, defined the trade-based nature of modern conflict, and developed the world's first integrated data platform for assessing trade-based supply chain resilience.

You may have seen me at the <u>Financial Times Live</u> Global Commodities Summit, International Chamber of Commerce events, International Trade and Forfaiting <u>Conference</u> and <u>Global Trade Review events</u>. I also frequently discusses ESG, economics and geopolitics, trade, and trade finance on TV and radio including on BBC News, CNBC, and Sky News.





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Amazon Freight is at the forefront of the development and adoption of freight technology, offering real-time tracking of shipments, intermodal solutions and transparent pricing using lane-match analysis, all boosted by a large partner network in Europe. And, there's more to come: Amazon Freight is leading the way forward with innovation.

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RESEARCH METHODOLOGY

The research referenced in this whitepaper was conducted by Censuswide on a sample of 202 decision makers in the freight sector aged 18+ in the UK and Germany.

Freight decision makers were selected based on the parameters that they work full time or part time; have a role in the decision making process for freight in their organisation (as part of a group/committee, with input from staff/management, or are the sole decision maker); have a role in freight only, freight alongside other responsibilities (like operations/marketing), logistics, operations, or transportation; and work at a company with 10+ employees.

The data was collected between August 25th - 31st 2023. Censuswide abides by and employs members of the Market Research Society and complies with the applicable laws and regulations, and with the MRS code of conduct, which is based on the ESOMAR principles. This survey, run by Censuswide, was supported by Amazon Freight. Data was collected anonymously and in full compliance with the UK and EU data protection legislation (e.g., GDPR).



WHO ARE THE RESPONDENTS

- The entire sample is referred to as 'freight decision makers.'
- Claims about 'SMBs' are based on responses from 102 interviewees from organisations with <249 employees.
- Claims about 'enterprise shippers' are based on responses from 100 interviewees from organisations with 250+ employees.
- Claims about 'freight-heavy sectors' are based on responses from 97 interviewees from the automotive, electronics, FMCG, logistics & transportation, manufacturing & utilities, packaging, and retail & leisure sectors.

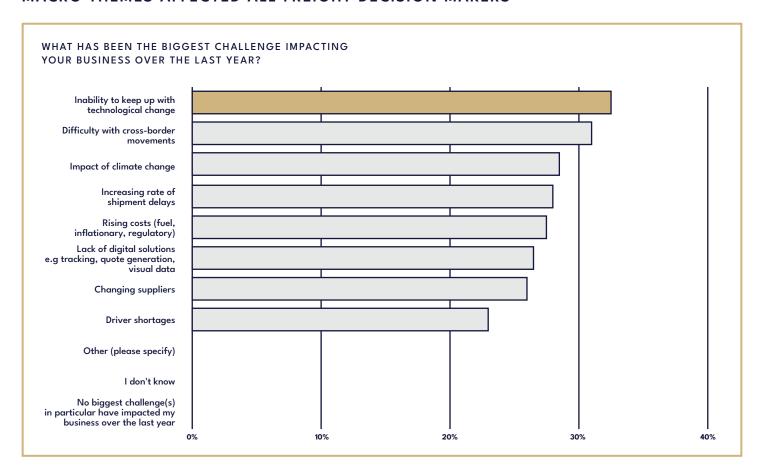
CHAPTER ONE: THE STATE OF FREIGHT IN 2023

WHAT ISSUES AFFECTED FREIGHT IN 2023, WHAT IMPACT ARE THEY HAVING ON BUSINESSES, AND HOW DID DECISION MAKERS OVERCOME THESE CHALLENGES?



Freight showed impressive resilience in the face of political, economic and geopolitical tests in 2023. This included the impact of inflation, economic downturn, and reducing revenues, all in the context of the fallout of the pandemic and other events like China's struggling supply chain, the 2021 Suez Canal crisis, and the impact of the Ukraine War. Freight has worked overtime to reduce delays and prioritise customer satisfaction, with many in the field adopting innovative new tech solutions to maintain successful operations as new challenges continue to emerge.

MACRO THEMES AFFECTED ALL FREIGHT DECISION MAKERS



Supply chain technology itself has seen tremendous growth over the last few years, according to PitchBook. 2021 in particular was a massive year for venture capital deals in the sector (\$60.8bn in total was invested into freight tech firms).

While this technology growth has created some hurdles for respondents looking to adopt it to solve other challenges, I believe tech remains a massive opportunity for the freight sector, if a few key obstacles are overcome:

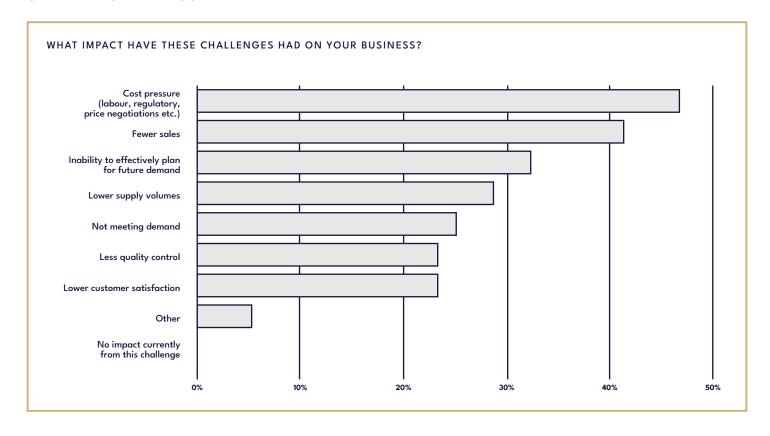
The underlying reason why freight decision makers may feel unable to keep up with tech change is because legacy processes and heavy regulations are preventing efficient uptake. Many of the overarching systems used by the industry are still heavily manual, and in the face of complexity this leads to inaccuracy. For example, at border crossings shippers often struggle to have the right paperwork, technologies, systems or barcodes to get them through in an easy way.

When freight is managing wider challenges, the temptation can be to just 'botch through' to get everything done, but this often results in further issues down the line. The whole system is in desperate need of unification and a 'single window' approach that allows better collaboration between technology, systems, shippers and countries. Changes need to be made at a policy level to support this, and the benefits for freight would be massive.

The key themes faced in 2023 differed between respondents, with SMBs also impacted by shipping delays (34%), and enterprise shippers most likely to be affected by rising costs (39%). The respondents active in freight-heavy sectors reported that difficulties with cross-border movements was the biggest theme they faced (38%) in 2023.



THESE THEMES MEANT SOME FREIGHT DECISION MAKERS FELT UNABLE TO MEET CURRENT DEMAND

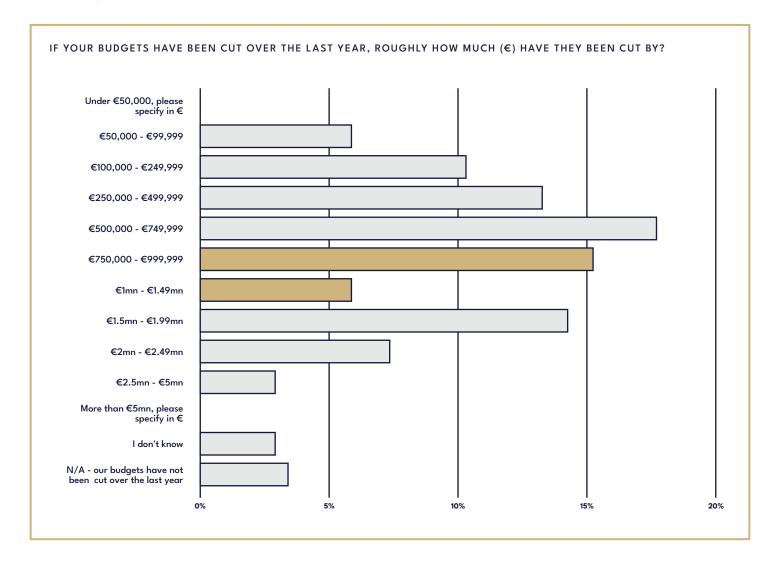


Key themes impacted organisations in different ways, although all tied back to the bottom line of the business.

The top themes that affected SMBs, keeping up with technological change and shipping delays, most likely resulted in lower customer satisfaction (37% & 18%) and lower sales (20% & 36%) respectively. The top theme that affected enterprise shippers, rising costs, most likely resulted in lower sales (42%). Freight-heavy sectors' top theme, difficulties with cross-border movements, most likely resulted in lower customer satisfaction and an inability to effectively plan for future demand (both 48%).



FREIGHT DECISION MAKERS EXPERIENCED AN AVERAGE ~€986K BUDGET CUT IN 2023, WITH ENTERPRISE SHIPPERS EXPERIENCING A €1M CUT ON AVERAGE



Only 3% of freight decision makers haven't experienced a budget cut in 2023.

The average budget cut experienced by UK freight decision makers was €988K, and in Germany it was €984K. SMBs' budgets were cut by €814K and enterprise shippers' by €1M on average. Freight-heavy sectors' budgets were cut by €920K.

BUT BUSINESSES OPTIMISED INVESTMENT TO BOLSTER RESILIENCE

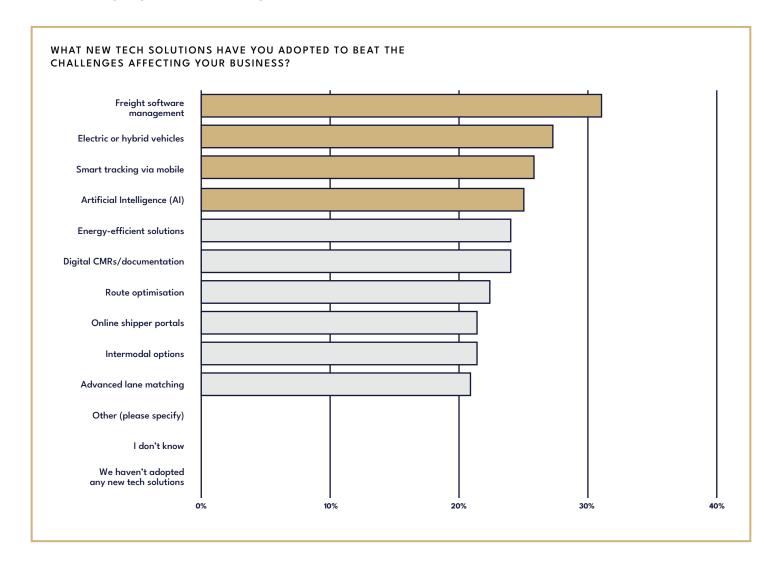
OVER THE PAST YEAR, WHICH BUSINESS FUNCTIONS HAVE SEEN AN INCREASE OR DECREASE IN SPENDING TO HELP YOU SOLVE THE CHALLENGES YOUR BUSINESS HAS BEEN FACING?

	FUNCTION(S) SEEING AN INCREASE IN SPENDING	FUNCTION(S) SEEING A DECREASE IN SPENDING
ENTIRE SAMPLE	↑ Sales (36%)	Advanced warehouse management (46%)
UK FREIGHT DECISION MAKERS	Tech workers staffing and sales (both 35%)	Leadership staffing (46%)
GERMAN FREIGHT DECISION MAKERS	Marketing and communications (40%)	Advanced warehouse management (51%)
SMES	↑ Sales (35%)	↓ Logistics staffing (43%)
ENTERPRISE SHIPPERS	Tracking & delivery and inbound freight coordination (both 40%)	Advanced warehouse management (56%)
FREIGHT-HEAVY SECTORS	↑ Sales (44%)	Operations and marketing (40%)

The reason freight has been investing so heavily in sales is likely because during tough times sales needs to be prioritised to support normal revenue levels, keeping businesses' lights on. It's such a competitive landscape and the combination of high inflation, uncertain economic conditions and stagflation, deflation in China, and then higher oil prices, gas prices and fuel prices, means organisations need to sell so much more to stay afloat. They aren't overcompensating.

When we see this investment into sales start to reduce, we'll know that freight is entering a recovery phase and will be recalibrating towards growth and transformation.

TECH INNOVATIONS WERE ALSO ADOPTED TO MANAGE THE IMPACT OF KEY THEMES



All respondents said they adopted new technology in 2023 to manage the key themes they're facing.

Freight software management was the top solution adopted across the UK (31%), Germany (31%) and by operators active in freight-heavy sectors (35%). The top tech solution adopted by SMBs to tackle 2023's key themes was AI (32%). For enterprise shippers, smart tracking via mobile (34%) was the priority.

KEY INSIGHTS ABOUT FREIGHT'S TOP THREE 2023 TECHNOLOGIES

1. FREIGHT SOFTWARE MANAGEMENT

Freight software management refers to technology that supports the overseeing and management of the delivery of goods. It helps automate traditionally manual processes, helping freight decision makers power a faster, more cost-effective supply chain.



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Freight software management should also support connectivity between trade networks, empowering cross-country shipping and making compliance easier. In this regard, **Amazon Freight** offers both online tools and a self-service transportation management system to help customers manage their shipments on demand.

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2. ELECTRIC AND HYBRID VEHICLES

Electric and hybrid vehicles were the second most likely technology to be invested into in 2023 by UK and German freight decision makers.



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This is also a priority for Amazon Freight. In October 2022 Amazon pledged to invest €1 billion (including more than £300 million in the UK) over the next five years to further electrify and decarbonise its transportation network across Europe, delivering packages to customers more sustainably. We also unveiled our first-ever fully electric HGVs in our UK fleet in March 2022.

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KEY INSIGHTS ABOUT FREIGHT'S TOP THREE 2023 TECHNOLOGIES

It's promising to see an uptake of electric and hybrid vehicles within the freight industry. The next step needs to be that infrastructure enabling these vehicles is adopted more heavily on an international level. Shippers who are working hard to be more sustainable by adopting electric and hybrid vehicles can also support this movement by making a big noise to local governments about the need for increased investment into this infrastructure.

3. SMART TRACKING VIA MOBILE

For freight decision makers managing key themes affecting their business and supply chain, visibility over their shipments can allow full oversight on where goods are at any given time. This can be a game changer, providing complete transparency to their customers.



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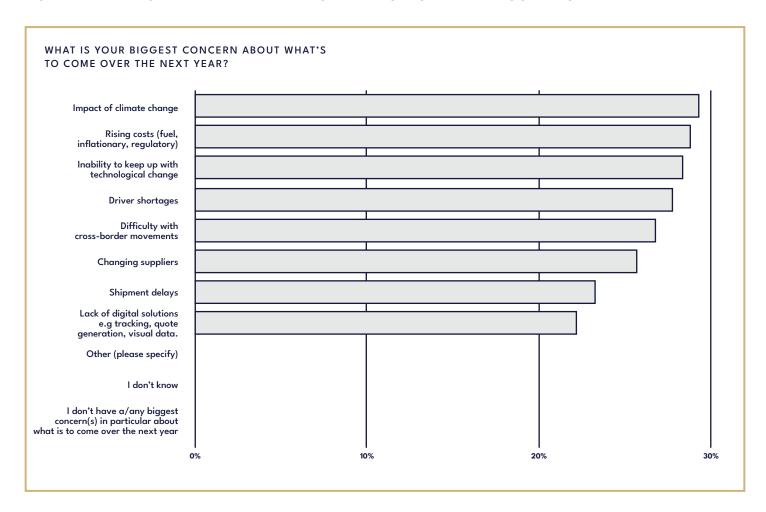
At <u>Amazon Freight</u>, trailers are equipped with GPS tracking, providing customers with real-time visibility to carriers and drivers via the Amazon Relay app.

LEARN MORE

CHAPTER TWO: FREIGHT'S EVOLUTION INTO 2024

WHAT KEY THEMES DO FREIGHT DECISION MAKERS EXPECT TO EXPERIENCE IN 2024, AND WHAT OPPORTUNITIES ARE THERE TO MANAGE THESE FACTORS?

FREIGHT DECISION MAKERS SEE CLIMATE CHANGE AND RISING COSTS AS KEY THEMES THEY WILL NEED TO MANAGE OVER THE COMING YEAR



Climate change is at the top of the agenda for freight decision maker respondents. This is being driven by changing regulations, including the EU policy that by 2027 shipping companies need to surrender allowances for 100% of their reported emissions, while all EU countries have committed to reforming the carbon market by the same year. In short, all emissions—especially carbon—are being measured more deeply than ever, with some banks even starting to require that this is disclosed as part of a company's onboarding process. Freight is taking this very seriously.

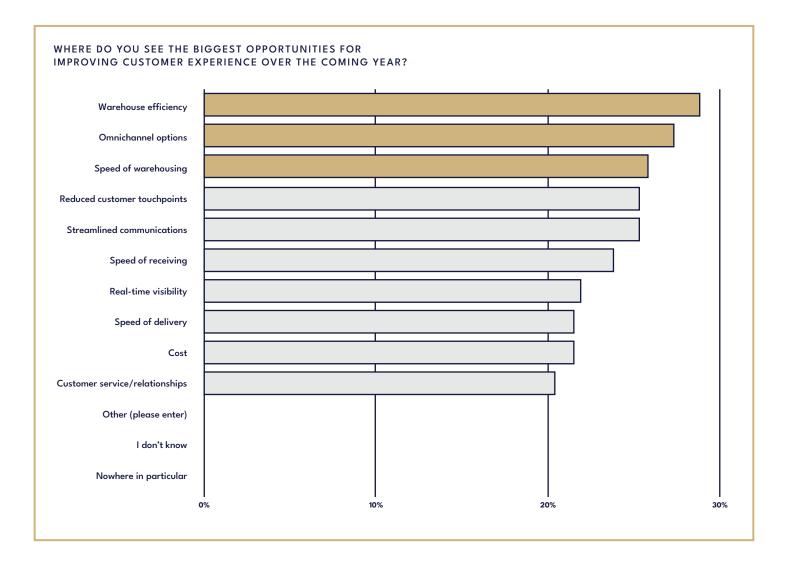
Over the next few years this will see shippers investing into data collection and impact mitigation as they work hard to comply with new regulations.

UK respondents said the biggest theme they will be managing in 2024 is driver shortages (33%), while German respondents want to make cross-border movements more seamless (31%). For SMBs driver shortages are again a top theme they expect to be managing (33%) and for enterprise shippers it's driving success despite rising costs (33%). Freight-heavy sectors want to ensure they can keep up with, and benefit from, technological change (36%).

It's interesting that driver shortages are still seen as a key theme for UK and SMB respondents because arguably this is a legacy issue. I believe this may fit within the wider context of economic instability. It's harder to maintain working capital as costs are going up, so businesses want to know that their 2023 investments, like training and hiring more drivers, are going to pay off.

We're also in a period of change where regulations are shifting and tech is developing. As a result there is pressure on businesses to have a growth mindset, despite experiencing cost squeezes. This is a tough landscape to be in, especially for small businesses, so the resilience that's been fostered over the last few years will need to be maintained.

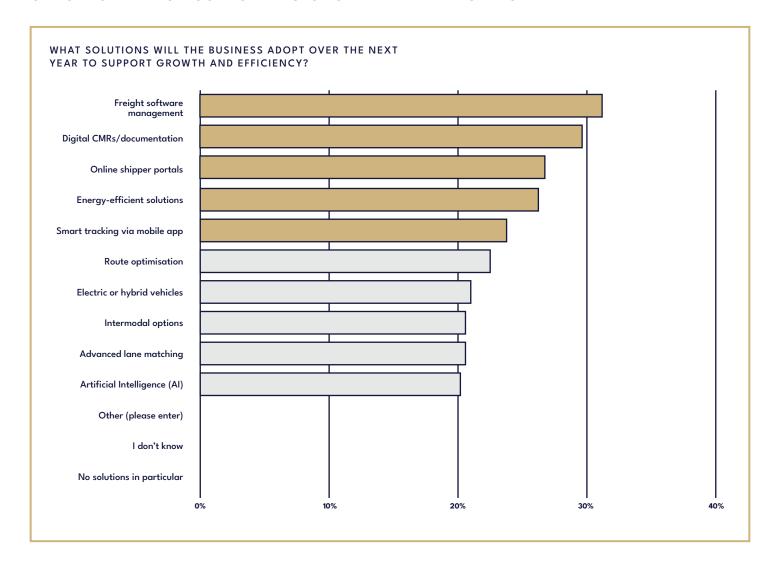
WAREHOUSING EFFICIENCY IS SEEN AS THE TOP OPPORTUNITY FOR IMPROVING CUSTOMER EXPERIENCE



Despite advanced warehouse management seeing a decline in investment in 2023 (46%), freight decision makers (especially enterprise shippers and freight-heavy sectors) acknowledged that warehousing efficiency is the biggest opportunity for improving customer experience in 2024. SMBs said faster warehousing (30%) is the biggest opportunity for customer experience this year.



FREIGHT SOFTWARE MANAGEMENT SEEN AS THE BIGGEST OPPORTUNITY FOR SUPPORTING GROWTH AND EFFICIENCY



2024 appears to be a year of opportunity with all respondents saying they will be adopting solutions to support growth and efficiency.

Freight software management is the top projected investment in 2024, but SMBs (30%) and freight-heavy sectors (33%) said their key focus will be digital CMRs/documentation (30%). For enterprise

shippers the priorities for investment are online shipper portals, energy-efficient solutions, and smart tracking via mobile apps (all 30%).

This ties back to my insights from Chapter One, concerning the factors associated with cross-border trade and the movement towards digital trade and a 'single window' approach. Digital CMRs/documentation fit within this and could support a more streamlined, tech-enabled freight sector.

INTERMODAL FOR REDUCING CARBON AND COSTS

Although it has been used for many years now, intermodal shipping is being reprioritised as a more sustainable, forward-thinking solution. By combining different methods or 'modes' of transport, it allows businesses to harness the relative strengths of rail, road, sea and air transport for better performance.

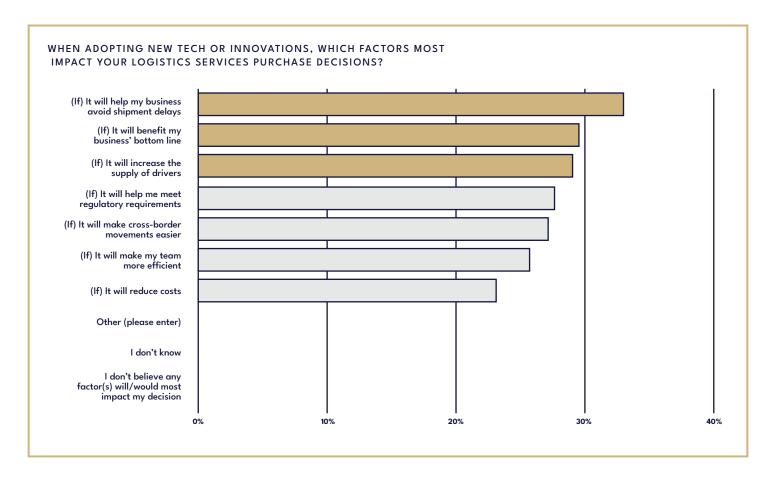
Anything that is using interoperable services is going to help reduce emissions and cut costs. By looking at the whole value and supply chain (e.g., using electric vehicles and alternative fuels) you can build a system that makes all of freight's footprint lower. Intermodal is part of that journey.

Using technology that enables easy collaboration between all parts of the supply chain (whether ports or freight partners) is essential to this, and so too is a digital trade model enabled by governments. Seaborne freight is leading the way here, where vessels using biofuels land at a port and can be connected with more efficient on-land vehicles.

Intermodal can offer a competitive advantage and help save the planet, and will drive the most impact if it's applied within a more collaborative, tech-enabled freight sector.



THE VALUE OF INVESTING IN LOGISTICS SERVICES AND TECHNOLOGIES



The primary reason freight decision makers said they are adopting new tech and innovations is that these solutions will help them avoid shipment delays (33%). For SMBs, new tech and innovations are most likely to be invested in if they will help increase the supply of drivers (33%), and enterprise shippers (27%) and freight-heavy sectors (34%) want to see bottom line benefits.

The EU's customs union supports a high quality cross-border technology offering. The priority for freight companies within this is to choose the right technology that's future-proof in a fast-moving landscape. For example, while AI solutions may seem exciting and come with many benefits, AI shouldn't be implemented without considering what it's needed for, how it's going to be onboarded, what training is required alongside implementation, and so on.

To find the right technology, organisations need to work out what problem they want to solve and identify the options out there for solving that problem. Do they already exist, or do they need to tailor something new? Are there laws or technology evolving outside their organisation that'll change everything? Will new technology be compatible with what key ports are looking to adopt? Creating a technology value chain is critical before new innovations are invested in.

CONCLUSION: FREIGHT'S BRIGHT FUTURE

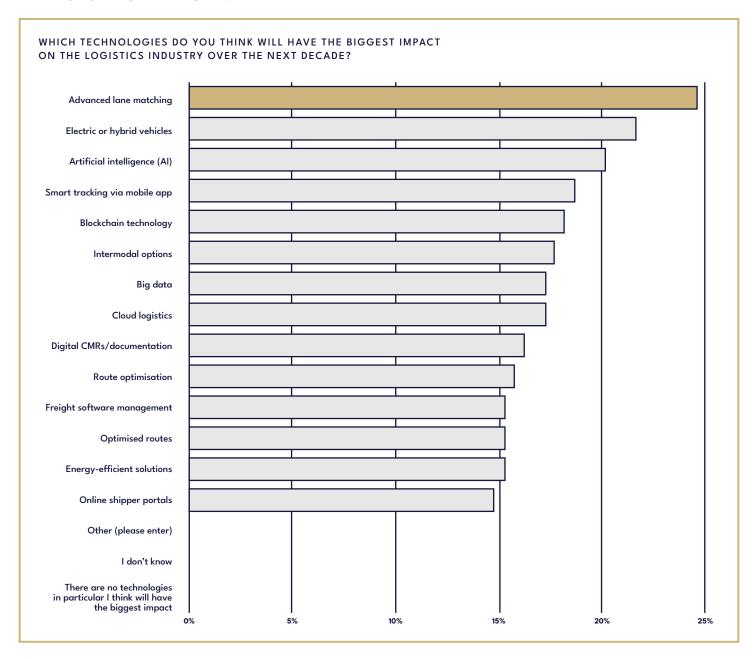
WHAT INNOVATIONS CAN WE EXPECT TO SEE IN FREIGHT'S FUTURE, AND WHAT BENEFITS WILL THEY BRING?

In the UK and Europe, the ongoing shift to a digital trade and single windows approach—having everything all in one place—will be transformative for the sector. It will mean we may not need paper documents any more, supporting easier tracking and simplifying compliance, and will connect freight, finance, logistics and supply chains, which will speed everything up and support cost reductions. This will also enable organisations to better adopt sustainable practices.

Freight can help fast-track this by lobbying policy makers for better traction and speed of uptake on single windows and digital trade. If we can then implement technology that is consistent with this movement, we'll be in a good position to manage our biggest future challenges.



WHAT KIND OF TECHNOLOGY WILL GUIDE THE FUTURE OF FREIGHT?

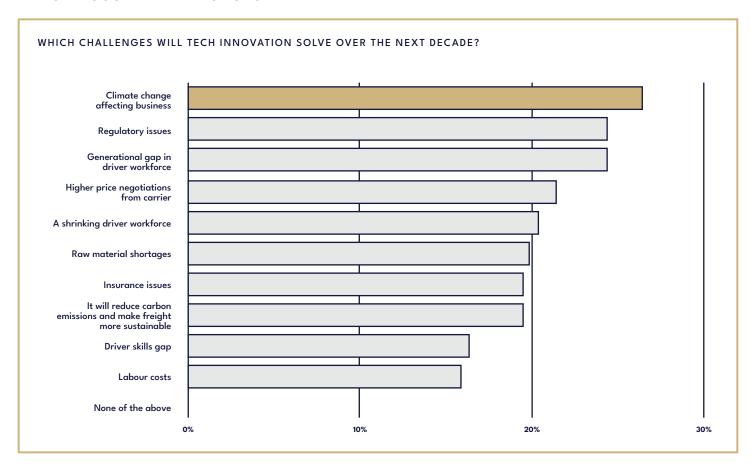


Advanced lane matching **(25%)** was recognised by respondents as the technology that will have the biggest impact on freight in the next decade. Advanced lane matching uses data and technology to generate optimal matches of backhaul movements with shipments to improve asset utilisation in logistics. This can support freight cost-effectiveness and support organisations' sustainability initiatives.



Day-to-day, for freight lorry drivers going through customs and border points, advanced lane matching is going to make life simpler—full stop. But it should also be recognised that advanced lane matching is part of a wider story, building towards the single window approach that will help centralise all of freight, allowing the sector to work together to be more efficient.

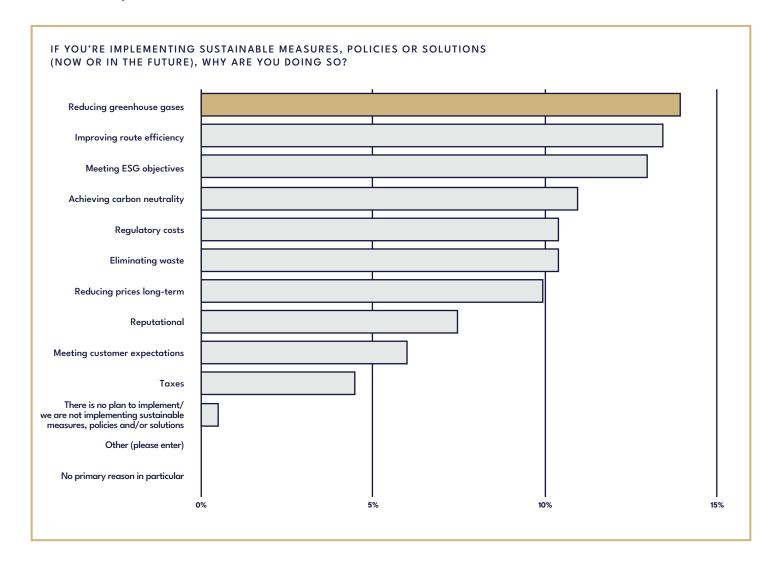
THE FUTURE BENEFITS TECH WILL BRING, INCLUDING A MORE SUSTAINABLE SECTOR





Tech isn't a panacea. It's not going to solve all of the problems facing freight. But it is a tool to help us solve these problems—whether that's reducing the impact of climate change or complying with changing regulations. There's a critical need for businesses and large companies in the freight sector to work with governments and banks on digital trade. If we can join all these things together, and everyone adopts it quickly enough, the technology that emerges really does help make freight smoother and make processes more effortless and streamlined.

FREIGHT DECISION MAKERS ARE IMPLEMENTING SUSTAINABLE MEASURES, POLICIES AND SOLUTIONS



Previous sections have shown how reducing the impact of climate change is a key focus for freight decision makers, and technology is seen as a critical solution to doing so. In this context, it makes sense that sustainable measures, policies and solutions are a priority for over **99%** of respondents. This reflects how important sustainability is now, and will continue to be, for the future of freight.

It's reassuring to see that climate change is at the top of the agenda for freight decision makers. We still have a long way to go, and it's something the industry needs to think about in terms of the bigger picture. The long term perspective for shippers needs to be: we want to make a change and need to make a big noise, we are spending and we want to work with governments to make this happen.



KEY TAKEAWAY:

UNDERSTANDING WHAT INNOVATIVE FREIGHT TECHNOLOGY IS OUT THERE, AND WORKING WITH A PARTNER WHO CAN SUPPORT THEM TO MAKE THE MOST OF THIS OPPORTUNITY, WILL EMPOWER FREIGHT DECISION MAKERS TO MANAGE FUTURE CHALLENGES



Amazon Freight: Your partners

Amazon Freight was pleased to sponsor this research and whitepaper with Rebeccanomics and Censuswide. The findings provide insights for freight decision makers in the UK and Germany who want to see how their peers are investing in technology to support the ongoing growth of their business.

We are excited to continue to partner with customers in the UK and Germany to lead the way forward with innovation.

Why is Amazon Freight the right innovation partner for you?

Competitive spot and contract rates - Amazon Freight's all-in rates are transparent through booking, whether customers need to move a single load quickly or want contract rates on their most-used lanes.

Scale - Customers can tap into a vast network of Amazon Freight carriers through Amazon Transport Services (AT) and Amazon Relay. Its technology toolset includes exclusive load boards for booking freight at the click of a button, and a self-serve portal. It also leverages advanced technology to deliver on its promise that it'll cover 100% of loads booked.

Fulfilment - Similar to when using Prime, as soon as customers press "buy", Amazon Freight takes care of everything. Through its internal freight brokerage system it exchanges PO/FBA information to secure customers an FC delivery slot, matching them with the right trailer and keeping them updated throughout the cargo journey.

Transparency - Amazon Freight's spot tool is instant and includes all surcharges (fuel, booking in, currency). Unlike most large logistics firms, all pricing is fully transparent from the moment customers sign up, with no hidden fees.

Visibility - Amazon Freight's trailers are equipped with GPS tracking, and the Amazon Relay App ensures real-time visibility to carriers and drivers.

Do you want to find out more about Amazon Freight and how we can support you to navigate your logistics needs in the present and into the future? Contact us here.

About Amazon Freight: <u>Amazon Freight</u> offers transport logistics solutions to retail businesses of various sizes looking to ship freight via road transport. Our middle-mile technology driven network of thousands owned trailers and partners connects shippers across the UK and EU with approved Amazon Freight carriers. We let them move cargo at a range of delivery speeds to meet their customer needs.

Our FTL (full truckload) services and LTL (less-than-truckload)* services let our partners navigate their logistics needs. Whether you are off-Amazon or using FBA for your cargo delivery, we offer full visibility and transparency throughout the journey. Once you book with us, you can get fully visible shipments, simple quoting and 24/7 support and monitoring from our customer service team.