Department for Business & Trade

SME Capability and Digitalising Trade with Electronic Trade Documents

Qualitative research with SMEs and Trade Intermediaries

This is a report of research carried out by Ipsos UK Public Affairs, on behalf of the Department for Business and Trade.

Ipsos

Ipsos UK Public Affairs works closely with national governments, local public services and the not-for-profit sector. Its c.300 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. Combined with our methods and communications expertise, this helps ensure that our research makes a difference for decision makers and communities.

Research contractor: Ipsos UK Public Affairs, London UK
Research Authors: Sarah McHugh, Balaji Savatherajan

Acknowledgements:
The team at Ipsos UK would like to thank Pukul Rana, George Clarke, Megan Mcintyre, Ryan Newington, Leoni Law, Pamela Howie and Saima Nasrin from the Department for Business and Trade for their invaluable inputs during the project. Errors and omissions remain the responsibility of the authors alone.

Ipsos UK Public Affairs is part of the Ipsos Group.
www.ipsos.com/en-uk

This work was carried out in accordance with the requirements of the international quality standard for Market Research, ISO 20252.

Contents

Glossary

Term	Definition
Airway Bill (AWB)	A legally binding transport document issued by a carrier or agent that provides details about goods being shipped by air, serving as a receipt of goods and a contract of carriage.
Bill of Lading	A legal document issued by a carrier to a shipper that details the type, quantity, and destination of the goods being carried. It serves as a receipt of shipment, a contract of carriage, and a document of title.
Blockchain	A decentralised, distributed ledger technology that securely records transactions across multiple computers, ensuring that data cannot be altered retroactively without the alteration of all subsequent blocks.
Certificate of Origin (CO)	An international trade document certifying that goods in a particular export shipment are wholly obtained, produced, manufactured, or processed in a specific country.
CN22 / CN23	Standard international customs declaration forms used for transporting goods overseas via postal services, detailing the contents and value of a parcel.
Commercial Invoice	A foundational document in international trade issued by the seller to the buyer. It describes the goods sold, the price, and the terms of sale, and is primarily used by customs authorities to determine taxes and duties.
Commodity Code / Tariff Code	A standardised, internationally recognised sequence of numbers used to classify traded goods for customs purposes, determining the applicable tariff rates and regulatory requirements.
Customs Declaration	An official document submitted to customs authorities that lists and provides details about goods being imported or exported, ensuring compliance with local laws and calculating necessary tariffs.
Dangerous Goods Declaration	A formal document prepared by a shipper certifying that hazardous materials being transported are accurately described, classified, packaged, marked, and labelled in accordance with international and national regulations.
Data Encryption	The process of translating data into a secret code or ciphertext to prevent unauthorised access, ensuring information security during digital transmission and storage.
Digital Identity Registry	A centralised or decentralised system used to securely store, manage, and verify the digital credentials and identities of individuals or organisations.

Digitalisation	The broader transformation of business processes, workflows, and entire supply chains through the adoption of digital technologies.
Digitisation	The technical process of converting physical information or paper documents into a digital format.
Electronic Trade Documents (ETDs)	Digital equivalents of traditional paper-based trade documents (such as bills of lading or commercial invoices) that are created, transmitted, and stored electronically.
Electronic Trade Documents Act (ETDA)	UK legislation that provides legal recognition to electronic trade documents, granting them the same legal status and functionality as their paper equivalents.
Enterprise Resource Planning (ERP) Systems	Integrated software platforms used by organisations to manage and automate core business processes, such as accounting, procurement, project management, and supply chain operations.
EORI Number (Economic Operators Registration and Identification Number)	A unique identification number assigned by customs authorities to businesses and individuals trading goods internationally, used to track and register customs information.
Ex Works (EXW)	An international trade term (Incoterm) indicating that the seller fulfils their obligation to deliver when they make the goods available at their premises (e.g., factory or warehouse), leaving the buyer responsible for all transportation costs, customs clearance, and risks.
Freight Forwarder	A specialised company or agent that organises shipments for individuals or corporations to transport goods from the manufacturer or producer to a market, customer, or final point of distribution.
Interoperability	The ability of different computer systems, software applications, or networks to connect, communicate, and seamlessly exchange and make use of data.
Letter of Credit (LC)	A financial document issued by a bank guaranteeing that a buyer's payment to a seller will be received on time and for the correct amount, provided that specific delivery conditions are met.
Packing List	A detailed commercial document that itemises the contents of each package or container in a shipment, including weights, dimensions, and packaging details, used by customs and freight forwarders.
Phytosanitary Certificate	An official document issued by an exporting country's agricultural or environmental authority certifying that a shipment of plants or plant products is free of pests and diseases, meeting the importing country's requirements.
Small and Medium-sized Enterprises (SMEs)	A standard business classification for companies whose personnel numbers, revenues, or assets fall below certain established thresholds.

Telex Release	An electronic message sent by a shipping line or agent at the port of loading to the port of discharge, advising that the original physical bills of lading have been surrendered, allowing the cargo to be released to the consignee without presenting the physical document.
Trade Finance	Financial instruments and products—such as lending, factoring, export credit, and insurance—used by companies to facilitate international trade and commerce by mitigating risks and providing working capital.
Trade Intermediary	A third-party entity or organisation (such as a customs broker, freight forwarder, or logistics provider) that facilitates international trade transactions between buyers and sellers.
Wet-ink Document	A physical document that has been signed by hand using a pen, often legally required in certain jurisdictions or for specific types of traditional legal and commercial transactions.

Executive summary

Overview of the study context and objectives

The UK Government sought to modernise and streamline international trade through the Electronic Trade Documents Act, which entered into force in September 2023. Prior to this legislation, exporters were legally required to maintain physical, paper versions of certain trade documents for them to be legally binding. The new legislation eliminated this requirement, establishing a legal framework that allowed exporters to transition to fully paperless processes for both commercial and regulatory documents.

A rapid evidence review, conducted prior to this primary research, found that the potential economic benefits of trade digitalisation could be significant, though global adoption seems to have remained low.

To understand adoption, implementation, and benefits realisation in practice, this qualitative research study examined the reality for UK exporters. The aim of the research was to explore the awareness, understanding, and experiences of small and medium sized enterprises regarding digital trade documentation, alongside the perspectives of the trade intermediaries that supported them. The research sought to identify the practical benefits of digitalisation, the structural barriers preventing widespread adoption, and the role of the broader logistics ecosystem in driving industry change.

Audience segments

The research comprised 23 qualitative interviews conducted between February and March 2026. The sample was designed to capture a cross section of the UK goods export market.

- Small and medium sized enterprise goods exporters (15 interviews): This segment included verified UK goods exporters across various sectors and regions. To ensure a balanced analysis, the sample was methodologically divided based on their current capability and awareness. It included businesses actively using digital documents, businesses that were aware of the Electronic Trade Documents Act (ETDA) 2023 but chose not to adopt digital tools, and businesses with no prior awareness of Electronic Trade Documents.

- Trade intermediaries (8 interviews): This segment included senior decision makers from organisations that facilitated international trade. The sample comprised freight forwarders, customs agents, port logistics providers, and trade technology platform developers. These participants provided an overview of how the broader supply chain supported smaller businesses and drove technological adoption.

Reported current experiences of trade documentation

- A mixed economy of digitalisation: The documentation landscape was varied. While many businesses used basic digitalisation (such as emailing static PDF invoices or uploading data to courier websites), the use of more complex Electronic Trade Documents (secure, encrypted platforms that legally transfer ownership, such as an electronic Bill of Lading) remained rare.

- Reliance on outsourcing: Small businesses outsourced their export administration. Many operated on an Ex Works-basis (where the buyer assumes responsibility for transport and customs), paying freight forwarders to handle regulatory documentation. This removed many small businesses from the decision making process regarding digital adoption.

- The friction of physical paper: Traditional paper documents caused supply chain bottlenecks. Administrative mistakes on physical certificates caused border delays because the original paper had to be returned and reissued. Furthermore, the physical movement of paper introduced risks of loss and fraud.

Awareness and perceptions of Electronic Trade Documents

- Low legislative awareness: Direct awareness of the Electronic Trade Documents Act was low among small businesses. Digitalisation was often viewed as an operational requirement mandated by a courier, rather than a national legal framework.

- Realised operational benefits: For businesses using digital tools, the realised benefits were increased speed, operational efficiency, and improved accessibility. Digital templates saved administrative time and provided a digital archive for repeat orders.

- Misalignment on trade finance: While the government highlighted improved access to trade finance as a benefit of digitalisation [1], this did not resonate with small businesses. They prioritised direct cost savings on courier fees and administrative time, rather than unlocking new lines of credit from banks.

Barriers and enablers to adoption

- The international barrier: The challenge is uneven acceptance in practice, not just the legal position. In many destinations, electronic trade documents may be permitted in principle, but customs/border/health authorities, banks, and carriers still require paper originals for

[1] https://www.gov.uk/government/news/paperless-trade-for-uk-businesses-to-boost-growth

some steps. Because a single paper requirement keeps the whole shipment on paper, UK exporters often run hybrid or paper-first processes, limiting the benefits of digitalisation. The UK also retains some paper requirements, which further constrains end-to-end digital adoption.

- Awareness and capability gaps: Barriers differ by complexity. For basic digital tools (e.g., uploading documents, online portals), the dominant issue is awareness and signposting. For more complex Electronic Trade Documents and data-integrated solutions, the barriers were greater. Businesses first need to know these options exist, then need the capability to adopt them. They also then need the budget for software, systems integration, supplier/bank readiness, and internal technical skills. Where awareness of basic tools is low, awareness of ETDs is usually lower; among firms that are aware, capability constraints become the binding barrier.

- Interoperability challenges: A lack of interoperability between isolated technology platforms meant that digital documents generated on one system could not always be opened or verified by overseas banks or supply chain partners, making investment in new software feel like a commercial gamble.

Awareness and perceptions of Electronic Trade Documents

- Intermediaries as educators and enforcers: Trade intermediaries acted as the primary educators and drivers of digital adoption. They frequently forced small businesses to abandon paper based routines to comply with digital mandates from global shipping lines and aviation authorities.

- Peer support networks: In the absence of government campaigns, small businesses relied on peer support networks and online seller forums to crowdsource compliance advice. Rather than consulting official guidance, small business owners frequently shared advice with one another online to figure out new tax rules or navigate mandatory digital portal requirements

- Expectations of government intervention: To accelerate adoption, participants requested a single, centralised government portal for trade requirements and business health checks. Furthermore, experts concluded that reaching a critical mass of digital trade required structural mandates from the government and logistics carriers, alongside international diplomacy to secure global acceptance.

Section 1: Introduction and context

1.1 Policy and research context

The UK Government seeks to modernise and streamline international trade through the Electronic Trade Documents Act, which entered into force in September 2023. Prior to this legislation, exporters were legally required to maintain physical, paper versions of certain trade documents for them to be legally binding. The ETDA eliminated this requirement, establishing a legal framework that allows exporters to use either traditional paper-based documents or transition to fully paperless processes. As a result, under UK law (the Electronic Trade Documents Act 2023), an Electronic Trade Document is defined as a digital document that has the exact same legal function, effect, and treatment as its traditional paper equivalent. This covers documents such as bills of lading, bills of exchange, promissory notes, ship's delivery orders, and warehouse receipts.

The transition to paperless trade represents a significant economic opportunity. According to World Trade Organisation (WTO) estimates, an average cross-border transaction requires the exchange of 36 documents and 240 copies.[2] The government's impact assessment to support the ETDA suggested that it could generate £1.14 billion in net benefits over ten years.[3] Another study into the benefits of digitalisation of trade processes between the UK/US showed UK bilateral exports could increase by 3.9% in agriculture and 6.8% in non-agricultural goods.[4]

Small and medium-sized enterprises (SMEs) are expected to be the primary beneficiaries of these reforms. SMEs historically bear a disproportionate burden of the bureaucracy and costs associated with paper-based trade, which consumes a larger share of their profit margins compared to larger enterprises. Furthermore, SMEs have traditionally faced greater barriers to accessing trade financing; an area where Electronic Trade Documents can provide significant improvements. ETDs make it easier for banks and financiers to lend to SMEs by making trade transactions visible, verifiable, and faster.[5] Digital documents reduce the errors, delays, and fraud risks associated with paper, giving lenders greater confidence that a trade is real, compliant, and enforceable. This, in turn, lowers the cost and risk of providing finance to smaller firms, which are often disproportionately excluded from traditional trade finance market improvements. The anticipated benefits of ETD adoption for SMEs are wide-ranging, including reduced paper and printing costs, time savings on physical document handling, accelerated customs clearance, reduced fraud, and easier compliance. However, the realisation of these

[2] standtoolkit22_e.pdf
[3] https://www.gov.uk/government/publications/electronic-trade-documents-bill-impact-assessment
[4] https://assets.publishing.service.gov.uk/media/669fcf5b49b9c0597fdb0349/benefits-of-the-digitalisation-of-trade-processes-and-cross-border-barriers-to-their-adoption-report.pdf
[5] https://www.tradefinanceglobal.com/posts/can-smes-benefit-from-digital-solutions-in-trade-finance/

benefits may be uneven across sectors, with time-dependent or low-margin businesses potentially standing to gain the most.

Despite the ETDA having been in force for over two years, a critical evidence gap underpins the current policy landscape. There is currently a lack of up-to-date, primary research evidence detailing the actual levels of awareness, understanding, and utilisation of ETDs among SME goods exporters. Furthermore, there is limited insight into the practical significance of perceived barriers to adoption—such as initial implementation costs, cyber security concerns, a lack of trusted information, and the challenge of ensuring ETDs are legally recognised by receiving destination countries. There is also a need to better understand how businesses are interacting with trade intermediaries, such as freight forwarders, who have begun offering support services to facilitate the transition.

This research directly addresses this gap, generating qualitative evidence from twenty-three depth interviews—comprising fifteen SME goods exporters and eight trade intermediaries. By engaging with SMEs at varying stages of the ETD journey (current users, those aware but opting not to use them, and those with low awareness), this study provides nuanced insights into the realities of paperless trade. The findings will serve as the latest step in building the evidence base.

1.2 Insights from the rapid evidence review

To contextualise the primary qualitative research, a rapid evidence review was conducted to examine the existing literature and expert perspectives on the adoption of Electronic Trade Documents. The review analysed recent reports, academic articles, and expert interviews to understand the broader landscape of digital trade.

Low adoption, emerging momentum and the platform problem

Despite potential benefits, the review found that global adoption remained low. Only 1% to 2% of trade documents were fully digital globally (ICC 2024), and less than 4% of bills of lading were electronic, despite over forty years of attempts. [6] From this low base, however, the review found that adoption was accelerating among large players. The use of electronic bills of lading had doubled since 2023, and nine major carriers representing 75% of global capacity had committed to reaching 100% digital adoption by 2030.

While large commodity traders and major shipping carriers were accelerating their use of electronic documents, small and medium sized enterprises remained largely untouched by this transition. The evidence indicated that the primary barriers for smaller businesses were a lack of awareness and a heavy reliance on intermediaries, with 62% of small businesses unable to

[6] Sources: Ioannou, 2025; ICC UK, 2024; Finocchiaro & Castellani, 2023.

name customs simplifications and 92% relying on third parties for compliance.[7] Furthermore, the market was dominated by closed, incompatible systems that did not communicate with one another. Past attempts to digitalise trade repeatedly failed because they relied on closed consortiums (private networks that required all parties to sign up and pay), highlighting the need for open, interoperable infrastructure.

Legal limitations and international lessons

The review highlighted that while the United Kingdom Electronic Trade Documents Act provided a strong, technology neutral legal foundation, domestic law alone was insufficient to trigger widespread adoption. Because international trade required alignment with partner countries, the lack of agreed global data standards and varying local laws created ongoing legal uncertainty. The evidence stressed the need for trusted accreditation and governance of reliable systems, rather than just enabling legislation. To overcome these barriers, the review pointed to successful international models, such as the open infrastructure of TradeTrust in Singapore, and the aviation sector, which successfully normalised electronic airway bills through a single, coordinated industry resolution.

Sectoral differences and the role of banks

The evidence review identified that the impact of digitalisation varied by sector, although it explicitly caveated that the evidence base for sectoral differences was thin. Time sensitive commodities and sea freight users stood to benefit the most from faster digital processing, whereas containerised trade faced greater coordination challenges due to the high number of actors involved. Crucially, expert interviews revealed that banks were not the primary drivers of adoption. Because only 10% to 15% of global trade involved bank intermediated documents, experts concluded that small businesses would only adopt electronic documents once customs authorities, carriers, and ports stopped issuing physical paper. The review concluded that voluntary adoption by small businesses would not scale, and that progress depended on coordinated action by the government and large supply chain actors.

1.3 Research objectives and questions

The overarching aim of this research is to explore SME goods exporters' awareness, understanding, and experiences of Electronic Trade Documents (ETDs), alongside the perspectives of the trade intermediaries that support them. It is important to clarify that only goods traders are within the scope of this research, meaning businesses that exclusively export services are not included.

The specific research objectives that were set against this study included:

[7] Sources: Warren & Cranney, 2018; Guo et al., 2025; Ioannou, 2023/2025; ICC UK, 2024; Krebs, 2023

- to explore SME awareness and understanding of ETDs, including their knowledge of what can be digitalised and their engagement with available information sources
- to understand the perceived and realised benefits of using ETDs, and the specific value these benefits bring to SMEs (such as cost and time savings, speed of clearance, and access to trade finance)
- to identify and understand the barriers preventing SMEs from adopting ETDs, including implementation costs, cyber security concerns, and issues surrounding international legal recognition
- to explore the process of transitioning to paperless trade among SMEs already using ETDs, including the advantages realised and the practical challenges encountered
- to understand the role of freight forwarders and other trade intermediaries in supporting SMEs to adopt and use ETDs effectively
- to explore the potential impact that ETDs could have on the processes, profitability, and export behaviour of SMEs currently unaware of or not utilising the legislation.

Section 2: Methodology

2.1 Research design and sample

Ipsos conducted a total of 23 semi-structured in-depth qualitative interviews between February and March 2026. The sample comprised 15 Small and Medium-sized Enterprise (SME) goods exporters and 8 trade intermediaries. The interviews examined businesses' awareness, understanding, and experiences of Electronic Trade Documents (ETDs), alongside the perspectives of the intermediaries that support them in navigating international trade.

A targeted recruitment approach was utilised to identify eligible participants. In practice, this meant that rather than sampling businesses purely at random, the research team employed soft quotas to ensure a robust and diverse representation across different business sizes, industry sectors, and geographic regions within the United Kingdom. The SME sample was sourced via a recontact sample drawn from the Export Client Survey, a DBT-led survey of businesses that have engaged with DBT export support, ensuring participants were verified UK exporters. The intermediary sample was recruited using a combination of free-find recruitment methods and a list of contacts provided by the Department for Business and Trade (DBT).

Recruiting specialised trade intermediaries presented specific challenges during fieldwork, primarily due to the limited availability of time-poor senior decision-makers, particularly within ports and shipping companies. To mitigate these barriers and boost participation, DBT sent targeted reminder communications to their contact lists later in the fieldwork period. Alongside these reminders, the recruitment strategy employed flexible interview scheduling and involved sharing an official invitation letter during the recruitment stage. This letter clearly explained the research and helped validate its authenticity by providing both Ipsos and DBT contact details for reassurance.

Interviews lasted between 45 and 60 minutes and were conducted remotely via Microsoft Teams or telephone. To acknowledge the time committed to the research, Ipsos provided a 'thank you' payment to all participants, which also played a crucial role in securing participation from this hard-to-reach commercial audience. For SMEs, this ranged from £100 (for micro and small businesses) to £125 (for medium-sized businesses). Intermediaries received an incentive of £125. All incentives were paid either via bank transfer or as a charity donation, depending on the participant's preference.

The following table gives a detailed breakdown of the final achieved sample for all 23 interviews. While the research successfully achieved a diverse mix of business sizes and regions, it should be noted that the final SME sample featured a higher proportion of businesses within the Manufacturing sector. This skew naturally reflects the broader composition of the UK SME goods export market, as well as the heightened relevance of complex, multi-stage trade documentation to manufacturing supply chains.

SME:

Q4 Employee size	Target	Recruited
Micro (1-9 employees)	Min. 3	5
Small (10-49 employees)	Min. 3	6
Medium 50-249 employees)	Min. 3	4
		0
Total		15

Sector	Target	Recruited
Agriculture, Forestry And Fishing	Mix of those exporting	0
Mining and Quarrying		0
Manufacturing		8
Electricity, gas, steam and air conditioning supply		0
Water supply, sewerage, waste management		0
Construction		0
Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles		4
Transportation And Storage		0
Accommodation And Food Service Activities		0
Information And Communication		0
Financial And Insurance Activities		0
Real Estate Activities		0
Professional, Scientific And Technical Activities		0
Administrative And Support Service Activities		0
Public administration and defence; compulsory social security		0
Education		0
Human Health And Social Work Activities		1
Arts, Entertainment And Recreation		2
Other Service Activities		0
Total		15

Intermediaries:

Type	Target	Recruited
Freight forwarders	Mix	2
Ports and logistics providers	Mix	3
Trade tech providers	Mix	1
Trade finance providers	Mix	1

Carriers (Shipping & Air)	Mix	1
Customs Agents/Brokers	Mix	0
Total		8

2.2 Qualitative approach explainer

A phased approach to fieldwork was taken, with a short pause after the 5 initial interviews conducted to trial the recruitment process and interview materials. This allowed time for an informed decision to be made on whether adjustments were needed to the topic guides or recruitment approach before fieldwork progressed further.

Two distinct discussion guides were developed to steer the interviews: one tailored for SME exporters and another specifically for trade intermediaries. The semi-structured format ensured that core themes such as ETD awareness, perceived benefits, and barriers to adoption were consistently explored across the interviews, while allowing participants the flexibility to describe their specific operational processes and reasoning in their own words.

This approach made it possible to identify patterns and variations in how different types of businesses and intermediaries handle trade documentation, as well as the factors driving or hindering the transition to paperless trade. Furthermore, this qualitative design enabled interviewers to probe for granular detail, follow up spontaneously on complex points raised by participants, and explore how differing commercial circumstances and supply chains influence the appetite for Electronic Trade Documents.

2.3 How ETD awareness and capability were identified

Tailored recruitment screeners were used at the recruitment stage to ensure eligibility and to secure a diverse spread of participants based on their current capabilities and knowledge.

A key criterion in the screening process required all interviewees to be senior decision-makers. For SMEs, this meant individuals directly responsible for overseeing trade documentation and export shipments, such as Business Owners, Export Managers, or Operations Directors. For intermediaries, participants were required to hold senior roles with a strategic overview of their organisation’s services and support for SME exporters.

For the SME sample, the screener ensured a broad mix across business size, sector, and UK location. Crucially, the screener divided SMEs into three distinct groups based on their current ETD awareness and capability, allowing for comparative analysis during the research:

1. Current Users: Businesses currently using ETDs for some or all of their exports.
2. Aware Non-Users: Businesses aware of ETDs but who have actively decided not to use them.

3. Unaware: Businesses with no prior awareness of ETDs.

For the Intermediary sample, the screener targeted specific capabilities to ensure relevance. Intermediaries were screened to confirm that SMEs made up at least 75% of their UK client base, and that they offered services, advice, or platform support related to ETDs. A diverse cross-section of the trade ecosystem, including freight forwarders, ports, logistics providers, trade technology providers, trade finance providers, carriers, and customs agents was captured.

2.4 Analytical approach

Rolling analysis was undertaken throughout the fieldwork period. Findings from the interviews were collated and examined using a hybrid approach to thematic analysis. This method combined both deductive and inductive reasoning. Initial coding structures were deductively informed by the core research objectives, Rapid Evidence Review, the broader policy context of the Electronic Trade Documents Act, and the specific structure of the interview topic guides. However, the research team also employed an inductive approach, allowing new and unexpected themes to emerge organically directly from the raw interview data. This ensured that the final analysis captured both the anticipated policy questions and the authentic, unprompted realities of the participants across the qualitative data.

This included comparing the perspectives of small and medium sized enterprises against those of intermediaries, as well as analysing differences between micro, small, and medium enterprises. While this method ensured that the final insights accurately reflected the complexities of the UK export landscape, it was also necessary to acknowledge the limitations regarding generalisability. As with all qualitative research, the sample sizes for specific subgroups were small, meaning the findings were not statistically representative of the entire market. Furthermore, the recruitment approach introduced potential biases. Because the business sample was drawn from the Export Client Survey, participants had previous contact with government services. This prior engagement, combined with self selection bias, meant that the participants were potentially more aware of or invested in trade policy than the wider business population.

Section 3: Current Experiences of Trade Documentation

3.1 Overview of current exporting processes

The research identified a highly varied landscape regarding how UK SME goods exporters managed their trade documentation. The processes employed were heavily dictated by the size of the business, the volume of exports, the destination markets, and the internal IT infrastructure available to the firm. Typically, SMEs were responsible for generating foundational commercial documents, most notably commercial invoices and packing lists. Depending on the specific product and destination, they were also required to obtain complex compliance and regulatory documents, such as Certificates of Origin, phytosanitary certificates for plant-based goods, or dangerous goods declarations. However, the responsibility for generating the actual transport and customs documents such as Bills of Lading, Airway Bills, and export customs declarations was almost universally outsourced to third-party logistics providers, couriers, or freight forwarders. This division of labour allowed SMEs to focus on their core commercial activities while leaving the highly technical border processes to specialists.

The balance of documentation processes across the SME landscape was best described as a "mixed economy," leaning heavily towards basic digital formats rather than fully integrated advanced Electronic Trade Documents (ETDs). Very few SMEs possessed the capability or the capital to utilise blockchain-secured, advanced ETD platforms. Instead, their working definition of "digital" typically involved generating static PDFs or Excel spreadsheets and emailing them to clients or intermediaries which typically do not fall under the remit of a recognised ETD. This approach provided a comfortable middle ground, allowing businesses to move away from physical paper trails within their own offices without requiring significant investment in new, unfamiliar trade technology software.

Quote: "In the majority of cases, the best capability they have is a PDF document. They do not yet have the capability to issue electronic records in modern transport management systems."

Trade Tech Provider

At one end of the spectrum, micro-businesses and sole traders relied heavily on user-friendly courier portals (such as Royal Mail's 'Click & Drop' or FedEx Shipping Manager) to manage their international shipments. These platforms allowed SMEs to pre-save crucial recurring information, such as EORI numbers, product weights, and digital signatures, which automatically generated the necessary CN22 or CN23 customs declarations. This basic digitalisation was highly accessible and solved profound practical challenges for smaller operators. For instance, it allowed micro-businesses to rapidly scale up their export volumes during periods of high demand without being overwhelmed by administrative burdens, and it

provided vital accessibility benefits for business owners who previously struggled with the physical demands of handwriting repetitive customs forms.

"I've got terrible handwriting [and I am also] dyspraxic and the amount of effort I used to put to make sure that these forms were legible... disability accessibility, it really helped."

SME, Micro, Arts, Entertainment and Recreation, England - North West

At the other end of the spectrum, mid-sized manufacturers utilised sophisticated Enterprise Resource Planning (ERP) systems, such as SAP or Microsoft Dynamics 365, to automate the creation of their commercial documents. For these larger SMEs, master data such as country of origin and tariff codes was pulled automatically into PDF invoices, significantly reducing the need for repetitive manual data entry. Furthermore, several SMEs reported moving away from physical shipping documents entirely by utilising "telex release" mechanisms. By emailing scanned documents to release goods online, these businesses established a highly effective digital workaround that saved them considerable time and courier costs, even if it did not utilise a formal ETD platform.

"We switched from like sending paper documents to telex release because that made sense and that A, save time, B, avoided things going missing, but also saved a fortune in DHL costs sending packets of paperwork around the world."

SME, Small, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England - London

3.2 Challenges with paper documentation

While many SMEs had successfully digitised their internal document generation, the reliance on physical paper within the broader international supply chain continued to create significant friction. The research highlighted several acute pain points associated with traditional paper-based documentation, primarily revolving around time, cost, security, and the compounding impact of human error. Specifically, participants noted that this friction was frequently driven by foreign customs authorities in the Middle East and Asia demanding wet-ink originals, couriers losing physical documents in transit, and overseas parent companies requiring paper records for corporate governance

The most frequently cited challenge was the severe delay caused by minor administrative errors on physical documents. In a paper-based system, a typographical error could not be quickly amended online; it required the entire chain to restart. Intermediaries operating at major UK ports noted that a simple mistake on a physical certificate such as a mistyped container number could halt a shipment entirely. The original document then had to be

physically mailed back to the country of origin to be re-issued, triggering a cascade of supply chain bottlenecks, unhappy end-customers, and costly port storage charges.

"Sometimes there is a finger error on documentation where they've mistyped a container number and that will be a big challenge because that original needs to be sent back to origin and new sets of documentation needs to be done again and that can cause quite a few delays."

SME, Medium, Manufacturing, England - Yorkshire and The Humber

The physical movement of paper also introduced a high risk of loss and fraud, which had significant impacts on time-sensitive exports. Because physical documents were occasionally lost in transit by couriers, overseas partners were left unable to clear goods through customs, resulting in stressful and costly delays. Financial intermediaries also noted that physical documents required costly safe-custody arrangements, such as secure vaults, and were generally more susceptible to basic forgery than secure, encrypted digital transmissions.

"When you've got the reliance upon a paper document, it can get lost... We had a situation recently with a carnet... the courier lost the pouch... our partners in Chicago couldn't actually get their hands on the goods physically and do the customs process... And this was for an illuminated trail for a Christmas show. So it's all very kind of stressful."

SME, Small, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England - London

Furthermore, the research identified the phenomenon of the "weakest link" in partial digitalisation. An SME might successfully digitise the vast majority of their commercial documents, but if the destination country or receiving still required a physical, negotiable title document (such as a wet-ink Bill of Lading), the entire transaction was delayed. This reality severely limited the return on investment for SMEs considering digital upgrades, as the speed of their supply chain was ultimately dictated by its slowest, paper-based component.

"You may achieve the speed for say 90% of those documents, but the remaining ones until you get them through the normal post channel... you are not able to proceed... [while] the weakest link remains fully digitised."

SME, Micro, Manufacturing, England - East of England

Destination-specific regulations frequently forced UK SMEs back into these paper-based processes, regardless of their internal digital capabilities or preferences. Several participants highlighted the Middle East—specifically the UAE and Egypt—as regions that strictly mandated original, wet-ink documents. This created a highly fragmented and frustrating

process for exporters, who had to maintain dual operational systems: a streamlined digital process for modernised markets, and a cumbersome, manual postal process for others.

"Egypt definitely. They still want original documents. So you know, we still get that as a requirement that we have to post it to the embassy or the chamber to get the originals back."

Freight forwarders

The cumulative impact of challenges relying on physical paper documents was a significant drain on SME resources and profit margins. The administrative burden of navigating fragmented, paper-heavy customs requirements particularly following the UK's exit from the European Union led some SMEs to actively reject smaller B2B orders. The cost of customs clearance and documentation friction frequently wiped out the profit margin on lower-value shipments. For micro-businesses, the sheer complexity and "information void" surrounding international tax codes and paper requirements created anxiety regarding compliance, leaving them fearful that a single documentation mistake could result in devastating fines or the loss of their business.

"Custom charges are around about €120 per shipment and we will get orders sometimes for €400... you suddenly lost money on every order. So we effectively reject a lot of orders from Amazon because it doesn't make sense to send them."

SME, Medium, Manufacturing, England - Yorkshire and The Humber

"It's a very scary world customs and it's kind of a bit of a... once parcels turn up there, you don't really know what goes on and you only find out about it if you've done something wrong, by which time it's too late."

SME, Micro, Arts, Entertainment and Recreation, England - North West

3.3 The role of intermediaries in current processes

The research showed that intermediaries, ranging from freight forwarders and customs agents to trade tech platforms and banks, played a central role in the UK SME export ecosystem. There was a clear division of responsibilities: SMEs generally provided the basic commercial data, while intermediaries executed the regulatory, customs and transport documentation required to move the goods across borders.

Intermediaries reported that over the past two decades, SMEs had reduced their internal logistics expertise as a cost cutting measure. Consequently, export documentation tasks were frequently assigned to accounts or warehouse staff who lacked specific training in international trade compliance. This changed the role of the intermediary from a standard service provider

to an educator and guide, requiring them to spend more time assisting their SME clients through the export process.

"The people that are booking the jobs with us don't have necessary training. So it could be somebody that's in the accounts team, it could be in a warehouse... I think it's just a cost cutting exercise. I don't think people value a logistics manager anymore."

Freight forwarders

To avoid the requirements of international trade documentation, many SMEs chose to operate on an "Ex Works" (EXW) basis. Under this model, the SME's responsibility ended at their factory gate, and the overseas buyer's distributor or freight forwarder assumed responsibility for the export documentation, logistics and customs clearance.

When discussing whether this reliance on third parties was a positive or negative aspect of their operations, many participants viewed it as a highly beneficial and necessary trade off. While businesses acknowledged that paying intermediaries to handle customs was expensive, they considered it entirely worthwhile. Outsourcing provided a known, predictable cost that allowed them to make clear commercial decisions on exports without the need to hire dedicated internal customs experts or establish foreign offices to manage overseas taxes. While this reduced the administrative workload for the exporting business, it also removed them from the decision-making process regarding the adoption of Electronic Trade Documents, as they were no longer the party handling the shipping paperwork.

"The logistics supplier takes care of most of it for us. That's the reason why we use them."

SME, Medium, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England - East of England

From the intermediary perspective, managing SME client documentation presented its own challenges. Trade technology providers noted that SMEs lacked the IT resources, personnel and capital to research and integrate ETD platforms. Furthermore, SMEs had cybersecurity concerns regarding digital fraud and data ownership. This required tech providers to spend time educating clients on digital concepts, such as encryption and private keys, before software adoption could be discussed.

"They lack resources. Right. You need a person in the organisation to take over the digital trade project... to navigate through the available information... SMEs simply don't have that luxury."

Trade Tech Provider

"There is a lot of digital fraud going on... concerns about managing their business electronically is on a very high level. Where is the data? How is it secured? Can they move data and documents on their behalf even though they don't realise that?"

Trade Tech Provider

Financial intermediaries specifically (banks) and trade finance providers faced the challenge of disconnected platforms. While banks provided their own portals for clients to upload documents, they struggled to offer SMEs a complete digital solution for banking documents because there was no single, shared platform. A UK bank might accept an electronic Bill of Lading from several software providers, but if the customs authority in the destination country did not recognise that specific platform, the digital process stopped, making the technology unworkable for that specific trade route.

Despite these challenges, intermediaries acted as the main drivers for digital adoption. Freight forwarders reported that global shipping lines were charging higher fees for the use of paper Airway Bills and requiring electronic submissions. As intermediaries adopted these digital standards, they then passed these requirements down the supply chain to their SME clients. However, intermediaries from both logistics and finance noted that for ETDs to be adopted widely, the government needed to act as a "central actor" to connect different systems such as establishing a centralised digital identity registry and a unified trade portal. While the UK could unilaterally mandate digital submissions for domestic HMRC customs clearances to force a change in business behaviour, participants noted this domestic action would ultimately need to be paired with international diplomacy to ensure these digital documents are legally recognised by foreign border authorities.

"The shipping lines for example that we use. There's no other way to submit a bill of lading now it's got to be electronically... they actually enforced it."

Ports and logistics providers

"As long as adoption of electronic trade documents is a matter of choice, it goes slow... Why should I spend time and energy on bringing something new into my organisation if there is no mandate?"

Trade Tech Provider

Section 4: Awareness, Understanding and Perceptions of ETDs

4.1 Levels of awareness and understanding

The research revealed that direct awareness of the Electronic Trade Documents Act 2023 was extremely low among small and medium sized enterprises. Most business owners and export managers interviewed had never heard of the legislation before being invited to take part in the research. In several cases, participants admitted to searching for the term online before their interview to understand what the discussion would cover. Even among businesses that exported goods daily, the specific legal changes regarding digital trade documents had not reached their radar. They viewed exporting as a practical task rather than a legal framework, meaning they only paid attention to changes that immediately stopped their goods from moving.

"So when I got emailed about the research, I googled it. So the only bit I know is what Google told me. Right. But none of our factories and none of our transport companies have ever mentioned it."

SME, Small, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England - London

When SMEs did possess some awareness of digital trade concepts, their understanding was usually driven by a mandate from a logistics partner rather than government communication. For example, some businesses knew they had to submit customs information digitally simply because their chosen courier removed the option to use paper forms. These businesses did not associate this change with new national legislation or the concept of ETDs. Instead, they viewed it merely as a new website portal they had to use to print their shipping labels. Their understanding of digital trade was limited to uploading or emailing a PDF or excel sheet or filling in an online form, there was little understanding of whether these systems would fall under the remit of Electronic Trade Documents, many of which do not.

"I do not think I am familiar with that phrase, but I was aware that there is a legal requirement for my customs forms to be digital... probably an email from Royal Mail saying, okay, it is now a requirement for you to fill in the customs form digitally. So I had been like, okay, brilliant, that is a change. Off I go."

SME, Micro, Arts, Entertainment and Recreation, England - North West

When looking for information on how to navigate export documentation, SMEs relied heavily on their immediate network rather than official government channels. Many participants stated that government websites were difficult to navigate and often lacked practical, step by step instructions for their specific products. As a result, businesses turned to their local Chambers of Commerce, their freight forwarders or even their direct competitors on social media forums. Small business owners frequently shared advice with one another online to figure out new tax

rules or digital portal requirements, effectively crowdsourcing their compliance strategies because they felt a lack of clear, accessible guidance from official sources.

"Speak to your local chamber of commerce. They have helped me more than googling... for me the local chambers are invaluable for small businesses."

SME, Micro, Manufacturing, England - England - East of England

"I am sort of relying on other people also doing the research and sort of bits of information they pick up, sharing it, which, you know, technically a lot of these people are my competitors, but we are sort of all figuring it out together."

SME, Micro, Arts, Entertainment and Recreation, England - North West

4.2 Perceived benefits and impacts

For the businesses that had adopted some form of digital documentation, the most widely realised benefit was a significant increase in speed and operational efficiency. By moving away from handwriting forms or waiting for physical documents to be stamped and posted, staff freed up hours of their working week. When examining how these efficiency gains interacted with the barriers of digitally immature markets, the research found that businesses generally viewed the trade off as a net positive. Because the majority of their export volume went to modernised markets that accepted digital files, the overall time saved made the transition highly worthwhile. However, the occasional requirement to produce wet ink paper documents for specific countries significantly diluted the perceived value of digitalisation.

Businesses expressed frustration at having to maintain dual operational systems, using automated digital processes for most of the world while keeping manual, paper-based routines on standby for certain regions. This friction meant that while digital documentation was viewed as a strong operational improvement, the persistent need to accommodate the weakest link in the global supply chain prevented it from being universally seen as a complete game changer.

"It just makes things a lot easier because it is done a lot quicker and it is electronic, it is all there. There is no paperwork and it is kind of just done... basically it cuts the work in half."

Ports and logistics providers

Another major benefit experienced by SMEs was the environmental impact and the reduction in physical storage space. Several businesses highlighted that moving to digital documents aligned with their internal sustainability goals and the ethical expectations of their customers. Furthermore, digital documents provided an unexpected but profound accessibility benefit for some users. One sole trader explained that having a digital system removed the physical

barrier of handwriting complex customs forms, which had previously been a major struggle due to a learning disability.

"It is obviously a lot greener because we are working with less paper. It is more efficient because it is more instant in terms of getting it to the customer. So we can actually move product faster."

SME, Small, Manufacturing, England - Yorkshire and The Humber

"Whenever there are issues or whenever I request or our customers request any supporting documentation, it is certainly easily accessed... once the electronic documents have been generated, they are all there in the cloud, so even if whoever is not around, they are easy enough to find as well."

SME, Micro, Arts, Entertainment and Recreation, England - North West

However, the perceived benefits of digital trade documents varied greatly depending on the specific sector and the destination markets of the business. Companies exporting standard retail goods to modernised markets like the United States saw immediate improvements in speed and cost. Conversely, businesses operating in highly regulated sectors, such as alcohol or chemical manufacturing, felt that digital documents offered very little benefit. Because their specific products required physical health certificates or wet ink signatures for customs clearance in certain Middle Eastern or Asian countries, these businesses still had to pay for expensive couriers to send paper documents alongside their digital files. For these sectors, the promise of a cheaper and faster digital process was not realised.

"I have sent them, say, packing list, commercial invoice and declaration of origin. I have then got to post by courier those same documents because they need to physically hand them over to their customs authority... it is just crazy."

SME, Medium, Manufacturing, England - Yorkshire and The Humber

While the government and financial institutions often highlight better access to trade finance as a primary benefit of Electronic Trade Documents, this was rarely mentioned by the SMEs themselves. Most of the small businesses interviewed did not use complex trade finance products like letters of credit. They preferred simple payment terms or upfront payments. Therefore, the financial benefits they cared about were direct cost savings on courier fees and administrative time, rather than unlocking new lines of credit from banks.

4.3 Intermediary perspectives on SME readiness

Intermediaries, including freight forwarders and trade technology providers, generally perceived their SME clients as being unprepared for a full transition to Electronic Trade Documents. They noted that small businesses simply lacked the spare capital, the dedicated IT staff and the technical knowledge required to research and install new digital trade platforms. Intermediaries observed that SMEs were entirely focused on their day-to-day survival and making sales, leaving them with no capacity to learn about new digital trade laws unless they were forced to do so.

"I think it is scalability, to be honest... to try to create the processes to trade on electronic documents that take into account all these different sorts of variables when you are only looking in one narrow area of the market, I think that kind of [thing] can be quite a challenge for them."

Ports and logistics providers

"I do not think enough people know if I am honest... the smaller companies basically like the SMEs, a lot of them probably would not know as much... I think it is just purely lack of awareness."

Ports and logistics providers

Because of this lack of readiness, intermediaries reported that they rarely received inquiries from SMEs specifically asking about Electronic Trade Documents or the new legislation. Instead, the inquiries they received were highly practical and often driven by panic. SMEs frequently contacted their freight forwarders to ask basic questions about what information needed to go on a commercial invoice, which tariff codes to use, or why a specific parcel was stuck at a border. Intermediaries felt they had to act as teachers, guiding small businesses through the absolute basics of international trade before they could even begin to discuss complex digital trade platforms.

Intermediaries were careful to distinguish between different levels of digitalisation. They noted that basic digital solutions, such as electronic signatures or courier portals, are actually simpler than paper versions and require very little upskilling; the primary barrier for these tools is simply a lack of awareness. However, for advanced Electronic Trade Documents that require secure platforms or blockchain integration, a genuine gap in technical capability remains. In contrast, the intermediaries themselves were actively engaging with these advanced systems. Driven by mandates from global shipping lines to submit electronic Bills of Lading, freight forwarders typically contracted specialised trade technology providers to access secure ETD platforms. However, their own adoption experience was frequently frustrated by a lack of

interoperability between these competing software providers, leading to fears of costly 'double entry' across disconnected systems.

"What information needs to go on the particular document? Do they need a certificate of origin for a particular country? I do not know if you know what commodity code is. Do we need to put that on the invoice?... they do go through and ask what is actually required."

Ports and logistics providers

"I think it is also knowledge in a sense that some SMEs will come to us and ask questions that are just like standard [for the intermediary], but it kind of blows their [the SMEs] mind. Oh my goodness, I never knew that."

Ports and logistics providers

Finally, technology providers noted that a major barrier to SME readiness was a deep fear of digital fraud. Because small business owners were not familiar with concepts like data encryption or blockchain, they were highly suspicious of putting their sensitive commercial data onto new platforms. Intermediaries found that they had to spend a significant amount of time reassuring clients that digital trade documents were actually more secure than sending paper through the post. Until this fear of cyber security was addressed through better education, intermediaries felt that SMEs would remain hesitant to adopt fully digital processes.

Section 5: Experiences and Barriers to Adoption

5.1 Experiences of ETD adoption

Reflecting the awareness and understanding challenges explored previously, many of the businesses interviewed had either not used any form of Electronic Trade Documents or were using what they considered to be relatively basic digital documents. Basic digitalisation involved generating static electronic files, such as a PDF commercial invoice, and emailing them to a client or uploading them to a courier website. In contrast, more complex Electronic Trade Documents utilised secure, encrypted platforms to legally transfer the ownership of negotiable documents, such as an electronic Bill of Lading (a legal document issued by a carrier acknowledging receipt of cargo).

The research found that the use of these more complex systems was rare within the sample. Only a small minority of the fifteen interviewed businesses had adopted these advanced platforms. Consequently, the findings regarding complex adoption reflected an in-depth case study approach of these specific businesses, and their rationale is covered in detail throughout this section. Furthermore, it was important to note that many participants bypassed this adoption process entirely by outsourcing their export administration to freight forwarders.

Triggers and implementation

For the businesses that had transitioned to digital documentation, the triggers for adoption were a mixture of natural business evolution, internal operational goals and external pressures.

For many small and medium sized businesses the transition to digital portals was driven by their reliance on major couriers. As their businesses grew over the past decade, they integrated with the online shipping tools provided by their logistics partners. Rather than making a conscious strategic decision to adopt electronic trade documents, these businesses simply used the digital platforms supplied by carriers because it was the standard operational process required to ship their goods. Consequently, generating electronic documents became an inherent part of their everyday logistics routine from the very beginning.

"It is just the way we have always been... we started with the portal shipping with DHL and FedEx pretty quickly in 2017, 2018. So we have always used electronic documents from that perspective."

SME, Small, Manufacturing, England – East of England

Alongside the natural evolution of logistics platforms, some businesses reported that external partners actively drove their transition. For instance, technologically advanced distributors in markets such as Australia and New Zealand pressured certain exporters to provide electronic documentation to align with their modernised import systems.

Beyond partner influence, another significant external catalyst for some businesses was the global pandemic. When office staff were forced to work remotely, the traditional process of physically printing, stamping and posting trade documents became impossible. This sudden operational shock forced these specific businesses to adopt digital signatures and electronic document sharing simply to keep their supply chains moving.

"We were in the height of COVID. Our export coordinator was working from home. So the ability to be able to print and stamp and send was much more compromised. Once the opportunity came, it created its own. Would it not be better if we did not have to do all this?"

SME, Small, Manufacturing, England – Yorkshire and The Humber

The implementation experience depended entirely on the level of digitalisation a business attempted. For those adopting basic digital workarounds, the IT changes were minimal. Micro businesses using standard courier portals simply created an online account and uploaded their company letterhead. Mid-sized manufacturers integrating new PDF document templates into their existing Enterprise Resource Planning software (a central system used to manage day to day business activities) reported a smooth transition. Because these basic changes were handled by existing internal IT staff, they required almost no financial investment.

However, the research revealed that even when businesses successfully implemented digital document generation, a lack of trust in international border processes meant they often duplicated their work. To create a safety net, some businesses uploaded their digital documents to their freight portal but still printed physical copies to place inside the shipping boxes. They did this to ensure that if a foreign customs officer rejected the digital file, the physical paper was immediately available to prevent the goods from being detained.

"That needs to be provided in parallel with those in the box as well. But it has to be both, of course... we want seamless transitions with our shipments. So we will, if in doubt, do everything."

SME, Small, Arts, Entertainment And Recreation- England - South East

5.2 Reasons for non adoption

Decision making factors and initial reactions

A small subset of businesses were aware of Electronic Trade Documents but had actively decided not to adopt them. For these businesses, the primary decision making factor was a perceived lack of return on investment. They felt their current paper or email based systems worked perfectly well for their specific volume of trade. They assumed that adopting a more complex Electronic Trade Document platform would require a significant upfront financial investment and a complete overhaul of their internal software. Because they did not

experience any severe delays with their current methods, they could not justify the financial or operational disruption required to upgrade their systems.

"We did not really have the investment to introduce this new type of thing. We are happy with what we have got. We did not think that we needed to do it at that moment in time."

SME, Medium, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England – East of England

When the concept of legally recognised Electronic Trade Documents was explained to businesses that were previously unaware of the legislation, their initial reactions were pragmatic. They did not express opposition to digital trade, but they questioned its relevance to their specific operations. Many felt that unless a major international client or a key logistics partner explicitly demanded the use of a secure digital platform, they had no proactive desire to change their working habits. However, they universally agreed that if a major buyer mandated the use of digital documents, they would comply immediately to protect their sales revenue, provided the software was not prohibitively expensive.

5.3 Key barriers to digitalisation

Capability, awareness and cost implications

When discussing the barriers to adoption, it was vital to separate a lack of awareness from a lack of technical capability. Intermediaries frequently suggested that small businesses suffered a severe skills gap, assuming that their clients lacked the technical expertise to adopt digital trade platforms. However, the research indicated that intermediaries often inferred this skills gap based on their general observations of small businesses struggling with basic customs rules, rather than direct conversations about digital software.

"I think from the actual SME side of it, they do not know what is needed or how to get it. So if they knew how easy it was to do, they would do it themselves."

Freight forwarders

For simple digital solutions, the barrier was almost entirely a lack of awareness rather than a lack of skill. Small businesses simply did not know these digital options existed. However, for more complex Electronic Trade Document platforms that required blockchain integration or secure private keys, a genuine resource gap did exist. Small businesses lacked dedicated logistics managers to research, procure and manage these advanced systems.

While basic digitalisation was cheap to implement, the financial implications of adopting more complex Electronic Trade Documents presented a major barrier. Although some trade technology platforms offered free access, the perception of high costs remained widespread. Small businesses operated on tight profit margins and feared that integrating secure digital trade systems with their existing software would incur expensive monthly subscription fees or

require them to hire external IT consultants. Furthermore, intermediaries operating at major ports feared the administrative cost of double entry. If a new digital trade platform did not automatically sync with existing customs software, intermediaries worried they would have to pay their staff to type the exact same shipment data into two separate databases, destroying any efficiency gains.

"The only disadvantage is you would have to maintain that database. Will this be in addition to that or will it replace your previous customs entry? If you had to have two systems that you would be working on, it is just double entry."

Freight forwarders

Legal recognition abroad

A major barrier for UK exporters was the lack of legal recognition for digital documents in destination countries. The UK Electronic Trade Documents Act only provided legal cover within the UK jurisdiction. If a business exported goods to regions with strict, traditional customs regimes, local border authorities still legally demanded original paper documents featuring wet ink signatures and physical stamps.

Furthermore, this barrier extended beyond foreign customs officers to corporate governance. Some UK businesses were owned by foreign parent companies. Even if UK law accepted an Electronic Trade Document, the foreign parent company was audited by their own national tax authorities, who might still legally demand traditional paper records. This meant the UK subsidiary was forced to maintain paper documents simply to satisfy the corporate governance laws of their parent company overseas.

“Because we are owned by a company in India, they are bound by whatever the laws are in India. Just because the UK government has made it a law, there is nothing to necessarily say that this would be accepted in India, but they still need to meet their compliance with their bank and whatever the regulators are in India."

SME, Small, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England - London

Interoperability and global supply chain inequality

Another significant barrier to adoption was the lack of interoperability across the global trade ecosystem. Trade technology platforms currently operated in isolated silos, meaning a digital document generated on one software system could not always be opened or verified by a different system used by an overseas bank.

Crucially, businesses also raised concerns about global supply chain inequality. While a UK business might possess the technology to use a complex Electronic Trade Document platform, their suppliers in developing nations often did not. Participants noted that factories in regions

with intermittent electricity could easily fill out a basic Excel template and email it, but mandating the use of a complex, secure digital platform could technologically lock those developing nation suppliers out of the supply chain entirely.

"Every single one of our factories, even if they are in the most developing part of the world, and we have got factories in Bangladesh that only have electricity three days a week, they have still got access to Excel to produce our formatted shipping documents. Whereas if you are going to move on to an electronic version that then requires access to something more complicated, it may be harder."

SME, Small, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, Wales

Finally, a persistent cultural resistance to change hindered digital adoption. Many small business owners and veteran logistics workers had spent decades perfecting their paper based compliance routines. Because international trade carried financial risks regarding lost goods or customs fines, these individuals were reluctant to abandon a paper system they trusted for a digital system they did not fully understand. This generational preference for established routines meant that unless digital adoption was strictly mandated by the government or major shipping lines, a segment of the market would always choose to maintain the status quo.

"Stay with your current system if it is working. If it is not, review and maybe move to digital if you think that is best. But I guess the old adage is if the world is not broken, do not mend it."

SME, Medium, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England – East of England

Section 6 - The Role of the Ecosystem and Future Outlook

6.1 Influence of direct supply chain partners

SME decision making and the role of intermediaries

The research demonstrated that small and medium sized businesses rarely adopted new trade technologies in isolation. Their decision making was often reactive and influenced by the demands of their direct supply chain partners. Because small businesses lacked the internal resources to proactively research digital trade laws, they relied on their buyers and suppliers to dictate the terms of engagement. Participants universally agreed that if a major international client demanded the use of a specific electronic platform to process an order, the small business would comply immediately to protect their commercial relationship and secure the revenue. Conversely, if their buyers were content to receive traditional PDF invoices via email, the exporting business felt no urgency to upgrade to more complex Electronic Trade Documents.

"I would say that was fine. Tell me what to do and I will do it. We would just adapt to it. And as long as we did not have to pay thousands of pounds for it, then we would do what we could to keep the sales going."

SME, Micro, Manufacturing, Scotland

Freight forwarders and customs agents played an influential role in shaping the digital habits of their clients. The dynamic between intermediaries and small businesses were not always consistent. In some instances, intermediaries simply followed the lead of their clients, processing the paper or digital files the exporter provided. However, many intermediaries actively pushed their clients towards digitalisation to make their own internal operations more efficient.

Because small businesses had steadily reduced their internal logistics expertise over the past two decades, intermediaries frequently acted as educators. They spent significant time guiding their clients through the setup of digital courier portals and explaining customs requirements. By embedding their clients into these digital systems, intermediaries effectively forced small businesses to abandon paper-based routines, acting as the primary engine for digital adoption at the grassroots level.

"We have supported them in that process and we have guided them and given them templates and forms as to how to complete that. So essentially now when the courier collects from our customer, they have got all the information upfront so they know exactly what is there for the customs process."

Ports and logistics providers

Peer support networks

When seeking practical advice on navigating complex international trade regulations, micro businesses and sole traders frequently turned to their peers for support. The research highlighted that small business owners used social media platforms and online seller forums to navigate sudden changes in international tax laws or digital portal requirements. This created an ecosystem where competitors actively helped one another to understand cross-border regulations, effectively crowdsourcing their compliance strategies to survive in a volatile global market.

"I am relying on other people also doing the research and sharing bits of information they pick up, which technically means a lot of these people are my competitors, but we are all figuring it out together."

SME, Micro, Arts, Entertainment and Recreation- England – North West

6.2 The broader trade ecosystem

The impact of carriers and customs authorities

Beyond direct clients and freight forwarders, the broader ecosystem played a critical role in either accelerating or blocking the transition to paperless trade. The most powerful drivers of digitalisation were felt to be major global shipping lines and aviation authorities. Intermediaries reported that organisations such as the International Air Transport Association (a global trade body representing airlines) were actively penalising the use of physical paper. By charging significantly higher document processing fees for physical Airway Bills compared to electronic versions, carriers created a direct financial penalty for remaining analogue. In the maritime sector, several major shipping lines simply refused to accept physical Bills of Lading, leaving exporters and forwarders with no choice but to adopt digital systems.

"The shipping lines for example that we use, there is no other way to submit a bill of lading now, it has to be electronically. They actually enforced it."

Ports and logistics providers

While shipping lines pushed the market forward, customs authorities frequently acted as the primary bottleneck. The research found that the success of an ETDs depended entirely on the technological readiness of the border authority receiving it. Trade technology providers noted that when foreign governments mandated the use of electronic customs portals, adoption skyrocketed overnight. For example, when Egypt introduced a mandatory digital customs system, technology platforms saw thousands of global suppliers onboard within weeks.

"When it is mandated by somebody, it goes very fast. We were doing one thousand onboardings per week of different organisations. So organisations that have impact and they have leverage, they are the crucial ones to speed up the adoption."

Trade tech providers

However, when customs authorities lagged behind, the efficiency of the digital supply chain was significantly hindered. Intermediaries operating at major UK ports noted that Port Health authorities (the regulatory bodies responsible for checking animal and plant imports) still demanded original, physical paper certificates. This created a bottleneck where the digitalisation of commercial documents did not translate into faster border clearances. Even if a business successfully used digital software to generate and transmit their commercial invoices, their goods were still detained at the border waiting for a separate physical health certificate to arrive in the post. Consequently, the requirement for paper regulatory documents negated the speed and efficiency benefits gained from digitalising the commercial side of the transaction.

The role of financial institutions

Banks and trade finance providers were identified as another important but cautious player in the ecosystem. While the government envisions Electronic Trade Documents unlocking cheaper and faster trade finance for small businesses, technology providers noted that banks were risk-averse. Financial institutions required absolute legal certainty before accepting digital documents as proof of ownership. Furthermore, some intermediaries noted that banks struggled to verify the digital identities of small businesses. To unlock the flow of trade finance, participants suggested that national governments needed to create centralised digital identity registries, allowing banks to instantly verify small businesses and confidently process their electronic documents.

"The banks will also need to do a much better job in finding ways how to make access to financing easier and simpler. And within that, it is also how the banks will accept electronic presentation of data and documents. How do we manage digital identities?"

Trade tech providers

6.3 Future outlook and critical mass

Reaching a critical mass

When looking toward the future, intermediaries agreed that the recent legislative changes alone were not a strong enough encouragement to drive rapid digitalisation. Because small businesses were naturally hesitant to change systems that already worked, trade intermediaries argued that the current voluntary framework would result in a slow transition. To accelerate adoption and reach a critical mass, one trade technology provider estimated that once a quarter of global trade was conducted using fully integrated electronic documents, the remaining market would adapt to survive. However, intermediaries agreed that reaching this

tipping point quickly required strict mandates from national governments and major logistics providers, rather than relying solely on the proactive goodwill of small business owners.

"As long as adoption of electronic trade documents is a matter of choice, it goes slow. Why should I spend time and energy on bringing something new into my organisation if there is no mandate? For me the tipping point would be around twenty five percent of the trade is electronic. Then you will have the snowball effect."

Trade tech providers

Long term industry predictions

While the legislative framework alone was not an immediate catalyst, the long-term outlook for digital trade documentation remained positive due to natural industry evolution. Intermediaries noted that some resistance to digitalisation stemmed from a preference for established, paper-based routines among veteran logistics professionals who had successfully relied on these methods for decades. However, as the workforce naturally evolved, the industry was seeing an influx of newer employees who entered the sector accustomed to digital and automated systems. Participants anticipated that this gradual shift in workforce expectations would eventually support the normalisation of paperless trade over the next five years, even in the absence of strict mandates.

"I think it will change dramatically in five years again as the old school retire. The new ones that are coming on want to save time, want to find a way of doing things quicker and embrace modern technology."

Ports and logistics providers

Looking ahead, participants predicted that the trade documentation landscape would become integrated and largely invisible to the end user. Rather than logging into separate, complex government portals, small businesses would likely access digital trade tools directly through their existing accounting or inventory software. Software providers were expected to build interoperable modules that automatically generated and transmitted legally compliant Electronic Trade Documents in the background of standard commercial transactions. Ultimately, participants viewed the complete digitalisation of international trade as inevitable.

"I think it will be a game changer in the future. I definitely think it is the future. It is a bit like electric cars. It is going to happen. It is just going to take time."

SME, Medium, Wholesale and Retail Trade; Repair Of Motor Vehicles and Motorcycles, England – East of England

Section 7: Use of Support and Government Role

7.1 Current use of advice and support

Awareness and trusted sources of information

The research revealed an absence of awareness regarding existing government support specifically for digital trade. When asked if they knew of any grants, training programmes or official initiatives designed to help businesses transition to Electronic Trade Documents, participants stated they did not. However, this lack of awareness regarding digitalisation contrasted with their engagement with broader government export support. Several participants highlighted the Department for Business and Trade as a trusted resource for general market guidance. In practice, this broader support included receiving advice on foreign tariffs, assistance with securing overseas manufacturing licences, and information regarding active product demand in specific international markets. Because they were unaware of specific digital initiatives, businesses that had adopted digital tools did so through their own independent research or at the prompting of their logistics providers.

In the absence of targeted government campaigns for paperless trade, small and medium sized enterprises relied on a fragmented network of trusted advisors for operational compliance. The most frequently cited sources of practical support were local Chambers of Commerce or intermediaries, who provided one to one guidance on complex export rules and digital portals. Meanwhile, micro businesses and sole traders often felt disconnected from official channels. Instead, they relied on peer support networks, using social media and online seller forums to crowdsource compliance advice and share updates on changing international regulations.

"Speak to your local chamber of commerce. They have helped me more than googling. For me the local chambers are invaluable for small businesses."

SME, Micro, Manufacturing, England - East of England

7.2 Expectations of government intervention

Information, training and international diplomacy

Participants expected the government to take a much more proactive role in educating the market. Small businesses expressed frustration at having to piece together regulatory changes from news articles or competitor forums, requesting that the government could collate the most up-to-date information and guidance in the form of accessible updates and practical training sessions on how to use digital customs forms and foundational commercial documents. Because SMEs typically outsource complex B2B transport documents (such as Bills of Lading) to freight forwarders, their desire for government training was squarely focused on the day-to-day administration they handle internally, such as commercial invoices and commodity codes.

"The biggest thing we are calling out for, is information. Quick, fast information. I want to see more things like that where you get a brief summary of [how] this has changed, this is now the new requirement, this is how you go about it."

SME, Micro, Arts, Entertainment and Recreation- England – North West

While domestic training was viewed as important, participants stressed that the most vital role for the UK government was diplomatic. Because the UK Electronic Trade Documents Act only applied domestically, businesses expected the government to actively negotiate global trade agreements that secured the legal recognition of digital documents abroad, convincing foreign customs authorities to remove their requirements for physical paper and wet ink signatures.

Perspectives on financial incentives

When asked if the government should provide financial incentives to encourage the adoption of Electronic Trade Documents, opinions were sharply divided. Some participants felt that grants or tax incentives would be helpful to offset the initial costs of purchasing new software or hiring IT consultants. However, other participants strongly opposed the idea. They argued that digital trade documents inherently saved businesses time and money, meaning the commercial benefits were already a sufficient reward. These participants believed that public money should not be wasted on rewarding businesses that were simply resistant to change, suggesting that funds would be better spent on building better support infrastructure.

"Why should you incentivise people in order to surmount their suspicions when there are no grounds for their suspicions? If you did incentivise them, I would say, well, we were not resistant to that, but we would like that sweetener as well please. Absolutely not. Spend the money on something else."

SME, Small, Arts, Entertainment and Recreation- England – South East

7.3 Recommendations for accelerating adoption

Centralised platforms and digital identity

The most prominent recommendation from small businesses was the creation of a single, centralised government portal for international trade. Participants expressed frustration at having to visit multiple websites to gather the various digital certificates required for a single shipment. They requested a unified platform where a business could simply type in their commodity code and destination country to automatically generate a definitive checklist of the required digital documents.

Furthermore, while SMEs themselves rarely prioritise trade finance, financial intermediaries and technology providers viewed it as a major untapped benefit. To unlock the benefits of digital trade finance, technology providers recommended that the government establish a

centralised digital identity registry. Respondents thought by integrating verifiable digital credentials into existing government company registries, the government could provide banks with the legal certainty they needed to confidently finance small business exports.

"I think it would be a lot easier if the government had everything in one portal. You could say, right, what is the commodity code of what you are exporting? We put in that commodity code and then it gives a checklist of you need this, this, this, and then links to each section so you can pull all your documents in one go."

SME, Micro, Manufacturing, England – East of England

Mandates and holistic business reviews

Trade technology providers and intermediaries argued that voluntary adoption campaigns would never achieve critical mass, instead they recommend that the government make the use of Electronic Trade Documents mandatory for all customs clearances. Recognising that small businesses might resist sudden mandates, one intermediary suggested a softer approach to outreach. They recommended that the government offer holistic business health checks rather than narrow seminars focused solely on digital documents. By sending trade advisors to discuss broader strategies for opening new markets and increasing profit margins, the government could naturally introduce Electronic Trade Documents as a tool to achieve those commercial goals.

"Make electronic submission of data and documents mandatory for customs clearance. If you want to speed up adoption of electronic trade documents, first ensure that if you are shipping in or out of the UK, you need to supply electronic data and documents."

Trade tech providers

"I think if customers had the opportunities to actually meet with a trade advisor who could come into their business and give them a health check and incorporate electronic trade documents within a range of different discussion points. I am not sure my customers would give much time just to sit on a webinar around electronic trade documents. It needs to be looked at in the round."

Ports and logistics providers

Advice to peers

When asked what advice they would give to peers considering the transition to digital trade documents, participants were overwhelmingly encouraging. They advised other business owners not to let a fear of the unknown prevent them from upgrading their systems. Their primary advice was to speak to a freight forwarder or a local Chamber of Commerce to understand the basic requirements, and then to simply try the software, reassuring their peers that generating digital documents was ultimately much easier and more secure than managing physical paperwork.

"I would definitely go and explore what needs to happen to get into electronic documents. We are all really busy and it is really easy to ignore process improvements because we just do not have time to find the information that we need. So definitely do not dismiss it because there are benefits to be gained by it."

SME, Small, Manufacturing, England – Yorkshire and The Humber

Section 8: Conclusion

8.1 Summary of findings by audience group

Small and medium sized businesses

SME's viewed international trade documentation through a practical lens rather than a strategic or legal one. For these businesses, exporting was an operational hurdle to clear in order to secure revenue. Because they operated on tight profit margins and lacked dedicated logistics teams, their approach to documentation was reactive. While many embraced basic digitalisation using standard courier portals to save time and improve accessibility, the adoption of more complex, secure Electronic Trade Documents was rare. Ultimately, small and medium businesses relied on outsourcing their export administration to third party logistics providers. They cared about digital trade if it made their immediate processes faster, cheaper, or was mandated by a key client.

Trade intermediaries:

Intermediaries including freight forwarders, customs agents, and trade technology providers, operated as the engine for digital adoption within the UK export market. Because their small business clients lacked technical expertise, intermediaries acted as educators, guiding exporters through the setup of digital portals and explaining international customs rules. Intermediaries were motivated to adopt digital documents to improve their own internal efficiencies and to comply with mandates from global shipping lines. However, they faced structural frustrations, struggling with a lack of interoperability between different software platforms and fearing that fragmented government systems would force them into costly double entry of customs data.

8.2 Summary of findings by ETD adoption stage

For businesses that had successfully adopted digital trade documents, the transition was viewed as a success. The primary triggers for adoption were the operational shocks of the global pandemic, natural business evolution, and mandates from logistics carriers. These businesses experienced immediate benefits, including reduced courier costs and faster document generation. However, their adoption was often incomplete. Due to a lack of trust in foreign border authorities, many of these businesses still printed physical copies of their digital documents to place inside shipping boxes, creating a paper safety net to ensure their goods were not detained at foreign ports.

A distinct group of businesses were aware of more complex Electronic Trade Documents but actively chose to maintain their traditional paper or email based routines. Their reluctance was driven by a cost benefit analysis. They believed that their current systems worked for their specific volume of trade and feared that upgrading to secure platforms would require

expensive monthly subscription fees and disruptive IT overhauls. This group exhibited a cultural resistance to change, adhering to the mentality that if a system was not broken, it did not need fixing.

The largest segment of small and medium businesses remained unaware of the Electronic Trade Documents Act or the broader push towards paperless trade. Their lack of awareness stemmed from a reliance on freight forwarders to handle their export administration, which effectively removed them from the decision making process. When the concept was explained to them, these businesses were not ideologically opposed to digital documents, but they felt no proactive desire to adopt them. They agreed that they would only transition to more complex Electronic Trade Documents if a major international buyer or their primary courier explicitly mandated it.

Section 9: Key considerations and implications for DBT

To ensure these findings translate into actionable policy, the following considerations outline how the Department for Business and Trade (DBT) can leverage its position. The recommendations distinguish between areas DBT can influence directly in the short term, and those requiring longer-term cross-government or international collaboration.

International diplomacy and legal recognition

DBT should consider making greater use of its diplomatic network to champion the international acceptance of ETDs. Aligning with the findings of the Rapid Evidence Review (RER), participants who had adopted digital tools confirmed that digitalisation saves time and money. However, the magnitude of these savings is severely limited by the "weakest link" in the supply chain, such as a destination country or overseas parent company still legally demanding wet-ink paper. Because domestic legal reform alone is insufficient, advancing initiatives like digital trade corridor pilots and securing government-to-government agreements are essential long-term, international levers required to eliminate these global bottlenecks and make paperless trade a reality.

Standardisation and avoiding "walled gardens"

DBT should consider working across technology providers to ensure interoperability across the market, rather than building or promoting specific commercial software platforms. The research found that a key barrier to adoption is that trade technology platforms currently operate in isolated silos. Because digital documents generated on one system cannot always be opened or verified by another, intermediaries feared the administrative cost of "double entry" having to manually type the exact same shipment data into multiple disconnected databases. To prevent the market from further fragmenting, DBT can use its convening power in the medium term to establish industry consortia and working groups. Collaborating with tech providers to agree on common data standards will ensure digital solutions remain open, consistent, and accessible for businesses.

Centralised guidance and the Single Trade Window

DBT should consider advocating for and contributing to cross-government initiatives that unify the user experience, such as a single, centralised government portal. Participants expressed deep frustration over fragmented information, widely calling for a unified platform that outlines exactly how to comply with digital trade documentation requirements. While DBT can provide better immediate guidance in the short term, delivering a true "Single Trade Window" requires extensive, long-term collaboration with HM Revenue and Customs (HMRC) and other departments to fundamentally streamline how trade data is collected.

Reframing the narrative and acknowledging real-world operations

DBT should consider pivoting its messaging to focus on the proven, tangible benefits of digitalisation such as faster processing, enhanced security, and reduced courier costs while targeting capability interventions at the intermediaries who handle the paperwork. SMEs view trade documentation as a compliance hurdle rather than a strategic opportunity. They heavily rely on outsourcing to freight forwarders because it provides a predictable, known cost and removes the administrative burden. Consequently, SMEs are highly sceptical of abstract promises that digital trade will instantly increase their profits, fearing instead that adopting new software will simply increase their administrative workload. To boost direct uptake in the short term, DBT must design policy that reflects this real-world operation.

Industry-driven change and strategic mandates

DBT should consider working closely with other Government Departments and industry partners to explore making digital processes mandatory, such as making certain customs documents electronic by default to drive widespread change. The research highlighted that voluntary adoption is slow partly due to cultural resistance and a prevailing "if it isn't broken, do not fix it" mentality. Intermediaries noted that rapid change only occurs when it is required, such as global shipping lines demanding electronic Bills of Lading. Beyond government rules, the responsibility for driving everyday use falls to large logistics providers and freight forwarders who work directly with SMEs. However, to overcome this widespread reluctance to change in the medium-to-long term, the government should also play a role in enforcing these shifts.

The Department for Business and Trade

The Department for Business and Trade is an economic growth department. We ensure fair, competitive markets at home, secure access to new markets abroad and support businesses to invest, export and grow. Our priorities are the Industrial Strategy, Make Work Pay, the Trade Strategy and the Plan for Small Business.

Legal disclaimer

Whereas every effort has been made to ensure that the information in this document is accurate, the Department for Business and Trade does not accept liability for any errors, omissions or misleading statements, and no warranty is given or responsibility accepted as to the standing of any individual, firm, company or other organisation mentioned.

Published by Department for Business and Trade
29 June 2026