

# Seizing the moment

**Unleashing the  
potential of trade  
digitalisation**

Improving liquidity  
Reducing risk  
Increasing profitability

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# Summary factsheet

**15% increase**  
in profitability

Transactions  
completed in **1 hour**

Data transfer in **1 min**

Berthing times reduced  
to **minutes**

**100% increase**  
in trade flow

**>800% reduction**  
in data requirements

**100% removal**  
of logistics paperwork

**80% reduction**  
in border waiting times

**30% reduction**  
in operation cost

**18% reduction**  
in shipping costs

**15–20% reduction**  
in costs

**15% increase** in  
on-time delivery rates

**\$3–400 saving**  
per transaction

Liquidity raised  
**7 days faster**

Land sales completed  
**in 24 hours**



# Overview

# Executive summary



**This seminal report unveils tangible evidence of the commercial advantages stemming from digital paperless trade transactions available today. Companies embracing this opportunity stand to gain enhanced liquidity, risk mitigation, cost reduction, simplified ESG reporting, ultimately driving improved profitability and broader market access.**

This report targets key decision-makers — specifically corporate treasury and strategy teams within companies, and policymakers in governments. It is tailored for CFOs and corporate finance teams, representing the linchpin for the scaling of trade digitalisation.

Outlined within this report is a version of paperless trade that extends beyond customs or trade facilitation, encompassing the entirety of the end-to-end trade system. The recent legal advancements, particularly the change in English law, have unleashed an unprecedented opportunity to digitalised trade at an extensive scale, transforming the entire ecosystem.

This report doesn't aim to serve as a comprehensive guide or provide an exhaustive list of detailed case studies. Instead, it offers a snapshot illustrating how companies can immediately enhance profitability and refine border policies during the shift towards a data-driven trading system. Our goal is to facilitate decision-makers' understanding of evolving market dynamics and showcase actionable changes available now. The report strives to encapsulate observed market trends and share invaluable insights gained from practical implementations.

Remaining agnostic to technology solutions, we refrain from asserting that any particular approach or commercial solution highlighted in this report is singularly ideal. Numerous providers offer diverse technological solutions, with ongoing developments. The emphasis lies in embracing available solutions and fostering healthy competition among providers, to enable healthy competition amongst providers so the market forms in which benefits can be offered and prices adjust accordingly.

The immediate imperative for governments globally is the removal of legal barriers to decrease trade costs and facilitate the scaling of solutions in every market. The risks of inaction are tangible — companies risk losing competitiveness unless they pivot to laws enabling digital transactions to maintain a competitive edge.

We stand at the brink of a transformative shift in trade, akin to the magnitude witnessed during the Android revolution. The current trading system is archaic, inefficient, and ripe for an overhaul. This report aims to capture the breadth and scale of the opportunity and, crucially, intends to spur action.

We would like to extend our thanks to all contributors whose insights have contributed to this report.

**Chris Southworth**  
Secretary General, ICC United Kingdom

# Call to action



**It's now or never to transform trade and capture the benefits of digitalisation and if not now, when? The trade system is antiquated and ripe for transformation. The Electronic Trade Documents Act has paved the way for unprecedented scale in reaping benefits. It is CFOs who are best placed to make the transformation happen and if not this group, who?**

This report unequivocally highlights an opportunity for CFOs to strengthen liquidity, reduce risk, and maximise profitability.

We are calling on all CFOs and corporate treasuries to act on the evidence in the report, review trade processes and coordinate action across the company to help us scale the benefits so everyone wins. The hard commercial evidence in this report shows that

any and all companies engaged in international trade can make significant profit and loss gains, not in two years' time, but right now.

Join our Corporate Digitalisation Taskforce by getting in touch with us at: [info@iccwbo.uk](mailto:info@iccwbo.uk) and you can be one of the first to derive real financial and competition benefits from the services that are now legal and very much available.



# Introduction

**Future trade will look very different to the way we trade today. Paper will be replaced by data, processes will be simpler, technologies like track and trace will be widespread and finance will transact in real time, in minutes not months. Supply chain trade data will flow in standardised formats across interoperable public and private sector systems and be integrated with sustainability data to give companies and governments full transparency on the shipment of goods and the ability to provide more accurate ESG reporting.**

Digitalising trade transactions is the first step to transitioning away from paper to a data driven trading system which enables companies to bear down on trade costs and access cheaper finance. In the short term, the opportunity for businesses is to review all trade processes within one joined up digital strategy across the business and implement an integrated plan to capitalise on all the benefits across the whole business. Such a strategy can aim for the removal of all paper-based systems and focus in on use and assurance of trade data in ways that monetise data as a significant commercial asset.

Working together, companies have a genuine opportunity to strengthen their collective bargaining power and demand of their service providers: freight forwarders, carriers, banks, insurers etc new digital services that exploit the new legal position, strip out unnecessary costs and re-calibrate supply chains to be more efficient cost effective and secure.

Longer term, the opportunity is to work with governments, ICC and international standards bodies to ensure your systems can interoperate with common global standards create a near seamless trade experience for you your supply chain and your customers and ensure that you are part of the efficient, accountable and secure trade network that is developing.

ICC's goal is to digitalise 60-80% of world trade by 2026 and establishing a fully interoperable legal, rules and standards environment. A recent Santander Barometer survey stated that 35% of international companies say paper and bureaucracy is a barrier to trade yet 45% say they are ready to use digital documents of title now the law has changed, with 65% saying they aspire to do the same. This is a clear indication that there is appetite for digital transformation.

The tools are there to enable that transformation — legislation, standards, treaties and technology — what has been lacking up to now is a clear statement of the business case for digital adoption. What follows addresses that lack in language that we hope and expect will bring this issue out of the technical or legal sphere and into broader commercial and governmental recognition.



## The legal environment

The UNCITRAL Model Law on Electronic Transferable Records (MLETR) is the global framework for handling documents of title in digital form. On 20 September 2023, the Electronic Trade Documents Act (ETDA) came into force enabling the legal recognition of documents of title to be handled in digital form, aligning English law to MLETR.

Documents of title include the:

- bill of exchange;
- promissory note;
- bill of lading;
- ship's delivery order;
- warehouse receipt;
- mate's receipt;
- marine insurance policy;
- cargo insurance certificate.

The ETDA enables 80% of bills of lading, 60% of global trade finance to transact digitally worldwide covering shipping, insurance, finance, commodities and every company using English law. English, Singapore and US laws are all aligned to MLETR enabling 80–90% of international trade transactions to be digital. This provides a legal environment at scale for the first time.

## The economic prize

In 2021/22, ICC United Kingdom and The Commonwealth published the benefits of digitalising trade transactions across 60 economies, large and small. The evidence was striking in terms of scale and benefit:

- 80% cut in trade transaction cost
- 50% reduction in the trade finance gap
- Cross border processing times cut from 25 days to one day
- 35% increase in SME efficiency
- \$9 trillion in trade growth across the G7
- \$1.1 trillion in trade growth across The Commonwealth, \$2 trillion if combined with customs digitalisation, double The Commonwealth trade target by 2030
- UK — £25 billion SME trade growth and, £224 billion in efficiency savings in the UK

## Business benefits

The business benefits are multiple. In a typical large corporate, there are up to nine teams who benefit including corporate treasury, technology, legal, strategy, compliance, procurement, customs, sustainability reporting. The opportunity for CFOs, corporate treasury and strategy teams is to coordinate action and foster a joined up dialogue across the company to capture the full extent of the transformative benefits on offer. Benefits include:

### Finance

- Cheaper borrowing and lending
- Lower interest rates
- Faster payment terms
- Improved liquidity
- Reduced risk

### Compliance

- Reduced fraud risk
- Reduced risk of loss, theft, or forgery associated with paper documents
- Speedier company authentication and verification times
- Greater transparency and improved supply chain relationships
- Reduced cost of meeting regulatory requirements
- Real-time monitoring and decision-making

### Efficiency

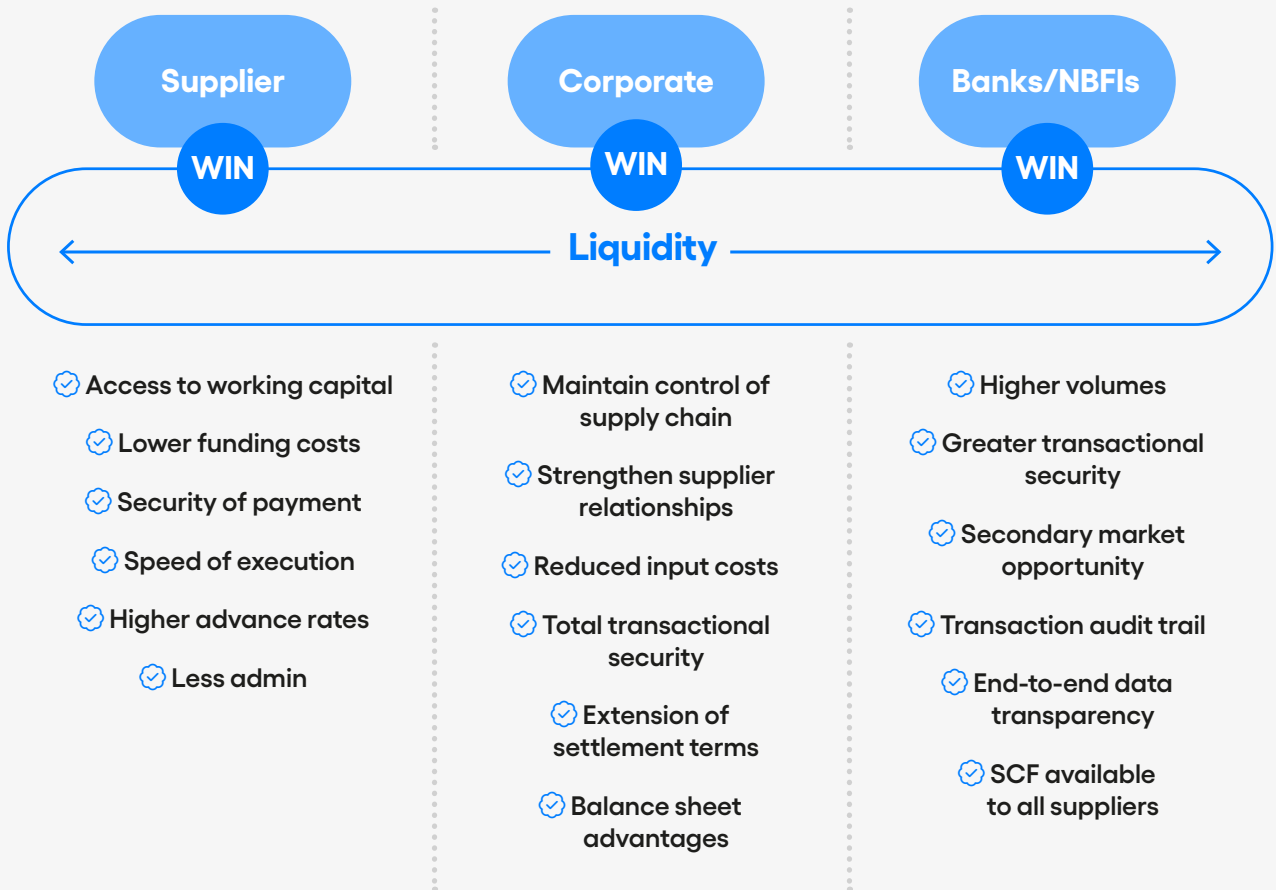
- Reduced administrative costs
- Reduced waiting times, border checks and faster crossover the — border processes
- Eliminating courier-related delays and printing processes
- Reduced delays and exposure to disruption
- Reduced intermediary costs — insurance, brokerage, demurrage fees
- Addressing bottlenecks
- Smarter resource allocation
- Increased security, enhanced trust and reliability

### Sustainability

- Greater supply chain transparency
- Improved consumer confidence and supply chain relationships
- Standardised data sharing and integration opportunities
- More accurate and cheaper supply chain and CSRD reporting
- Reduced ESG risk
- Enhanced operational resilience, mitigating vulnerabilities to external disruption
- Less waste and reduced use of paper

## Digital Treasury Benefits

Source: Arjit, 2023





# Implementation lessons

**There are many lessons to learn from the implementation of MLETR compliant legislation and attempts to create commercial digital platforms globally. The following is a summary of the practical lessons learned that will inform the next phase of the move towards digitalisation.**

## Mindsets

Whilst the trade system is antiquated, inefficient and costly, it is not broken. There's a crucial need to enhance education and awareness among decision-makers regarding the potential for trade to become more cost-effective, expedient, and streamlined. Emphasising the benefits of digitalisation is vital, as it enables companies to mitigate ESG reporting risks and fosters simplicity in their operations.

## Coordination failure

International trade is a dynamic network where progress relies on collective efforts between governments and industry, across jurisdictions and among companies. Our evidence shows how this can happen in practice and how there is still plenty of efficiency and shareholder benefit to be accessed.

The ICC can provide the neutral environment in which such collaboration can safely happen. The ICC Digital Standards Initiative provides an impartial convening mechanism at international level and the Centre for Digital Trade and Innovation provides this at national level. Corporate treasuries and strategy teams have the same function within companies. Those positioned to achieve the most significant advancements will likely be those prepared to engage in collaborative efforts, employing a multi-stakeholder, systems-based approach to address the issue of fragmentation.

## Legal reform

Too many governments still don't understand the difference between customs digitalisation and wider ecosystem digitalisation in delivering a paperless trading system nor the urgency to unlock trade growth. Businesses are practical and will likely use the laws that enable them to remove cost and operate more efficiently. Legal teams have an important role to play in advocating to national governments to reform and align laws to MLETR. The risk is that governments that don't remove legal barriers will get left behind and become uncompetitive.

## Interoperability

Digitalising trade transactions is only the first step. The real benefits of digitalisation come from common standards enabling information to flow in standard data formats across public and private sector systems. Multiple standards are hampering the ability for governments and companies to implement interoperable systems. The FIT Alliance is a step forward to standardising formats across finance and shipping but more needs to be done to establish singular standards across all areas of trade.

## Bottlenecks

Momentum is building but bottlenecks remain. Goods trade is handled by carriers with the risk underwritten by insurers. More needs to be done to engage ship owners and insurers to ensure shipping doesn't become the bottleneck to realising the benefits of digitalisation. Similarly, finance and information regulators need to support the transformation and provide clear guidance to enable trade digitalisation.

## Public utility architecture

In the wake of TradeLens, WeTrade, Marco Polo and Contour folding up, new thinking is emerging on the need for impartial, public utility architecture built around a combination of public law, a reliable systems framework, open-source code and interoperability framework. Architecture that co-exists with commercial providers to provide more choice in the market.

## Implementation capability

International trade by definition involves more than one jurisdiction. While we are seeing an increasing number of industry-led forums working with governments to reform laws which is a welcome step forward, the capability to implement and scale up benefits worldwide is severely limited. More thought needs to happen in this space as to what the most efficient way is of achieving the implementation of interoperable laws, rules and standards at scale, across all jurisdictions.

## Skills

The shift to digital trade demands a new skillset. Continuous training and skill development are paramount to ensure the workforce is prepared for the digital landscape's evolving demands. The ICC Certificate on Digital Trade Strategy is a step forward in basic provision but companies and governments will need to invest in upskilling workforces to capitalise on the potential to make trade cheaper, faster and simpler.

## Workforce

Traditional trade processes are antiquated and bureaucratic and make little sense to younger generations who are digital natives. It is unlikely the younger generation will tolerate the inefficiency and bureaucracy that exists in trade today. Digital transformation is one way to attract and retain talent.

## Data security and privacy

Whilst the threat of cyber-attacks is increasing, there is little evidence to suggest that this is specific to trade. A robust approach to data security is as necessary for trade as it is for all other areas of the digital economy. Too often the shift to digital trade is also seen without considering the risk inherent in a paper-based trading system which is not inconsiderable and arguably far larger than any risk presented by operating in a digital environment.

## Data sharing

More education is required in this space. Trade transaction digitalisation is not about sharing more data with any more parties than currently see the data in a transaction. The only difference is that the transaction process is in digital form using secure technology.

## Small- and medium-size enterprises (SMEs)

SMEs are unquestionably the ultimate beneficiaries of digitalisation. However, we need to think strategically how we achieve this goal. It is not realistic to expect change and transformation of the whole trading system by just focusing on this group. The question is how quickly can we reach tipping point where trade digitalisation becomes the norm and how quickly can this goal be achieved. An initial focus on top tier companies with large global supply chains in the sectors shipping the highest value and largest volume of goods is likely to reap faster results than a broad-brush approach. This can work in parallel with broad engagement with SMEs.



# Next steps

It is encouraging to see so much progress being made but more work needs to be done to build up our collective knowledge and understanding of how to implement the benefits of changes in law. For our part, we will focus efforts where we think we can add the most value over the next 12–18 months including:

### **Multilateral leadership**

Continue to support ICC and the UK government in making the case for legal reform and removing barriers to trade digitalisation through the United Nations, G7, G20 and ecommerce negotiations at the World Trade Organization.

Support the removal of legal barriers and an aligned approach to implementing legal frameworks across The Commonwealth.

Continue to share case studies, insights and lessons learnt with the international community.

### **Corporate Digitalisation Taskforce**

Work intensively with large corporates in priority sectors to accelerate the digitalisation of global supply chains (in the UK, these sectors include automotive, commodities, food and drink, pharmaceutical and retail).

### **Trade Digitalisation Taskforce**

Work with banks, industry and government to reduce the cost of capital, prevent fraud, reduce anti-money laundering and know your customer bureaucracy and scale up of digitalisation as a solution to export growth.

### **Centre for Digital Trade and Innovation (C4DTI)**

Continue to work with government and business organisations to promote interoperability, programme alignment, test solutions and build business cases where needed and provide more research into barriers and opportunities.

Prioritise focus on digitalising trade corridors with the highest value and volume of UK trade including with Belgium, France, Germany, Ireland, Netherlands, US, ASEAN and Asia Pacific.

### **Digital assets legislation**

Work with the Law Commission of England and Wales and government to introduce new legislation to enable the growth of digital assets.

Trade digitalisation is a collaborative endeavour. We all need to take action for everyone to benefit. Within our capacity, we will continue to support and work with whoever wants to work with us to make trade digitalisation a success.





# Case studies

## Case study selection criteria

The case studies covered in this report have met, in part or in full, a simple criteria:

- 1** A commitment to promote open, interoperable systems
- 2** A clear statement of the digitalised document or business process they were testing
- 3** A clear statement of the benefits of digitalisation benchmarked against the equivalent paper process
- 4** Benefits attested to by the end user, not the intermediaries or service suppliers
- 5** An indication of how the case studies would scale and interoperate with some commentary on next steps.

In practice, not all of the criteria have been achievable for all the parties involved in the timeframe required and we have relied to a good degree on good will to deliver this report. Nonetheless, the case studies in the report collectively make the initial case for digitalisation and put into perspective some of the macro-economic figures earlier in the report.

Interoperability is a key principle that underpins this report. Without it, the systems that are created will not serve the international trade community to best effect. There are several ways of achieving interoperability: through point-to-point API integration, through the open permissionless approach of Trade Trust or via standardised commercial propositions. We are agnostic about how it is achieved.



SECTION ONE

# Importing/exporting to the UK

This group of cases studies have a UK nexus and were designed to put into practice the provisions of the Electronic Trade Documents Act 2023.

#### CASE STUDY 1

## Fruit importer 15% more profitable

**Melon & Co, a UK SME fruit importer, used an e-bill of lading to improve supply chain efficiency. The project was in collaboration with government as part of the Ecosystem of Trust programme. The technology partners were Octosense and Contained Technologies.**

By avoiding the conventional use of freight forwarding agents, the cost was significantly reduced from £49.50 per customs entry to a single software cost of £500 per month. This translates to an annual saving of approximately £174,000, 10–15% of Melon & Co's pre-tax annual profit. The approach also reduced the generation time of a

Goods Vehicle Movement Service (GVMS) reference number from four hours to four minutes.

Longer term, the project has laid the groundwork to creating a more transparent and compliant digital supply chain, which is expected to minimise border checks, save time, and ultimately, foster better relationships with shipping carriers, enhancing the entire supply chain's efficiency and compliance with regulatory requirements. The initiative paves the way for improved food safety and consumer confidence, while also aiming to reduce waste and enhance commercial efficiency.

#### CASE STUDY 2

## Sugar trader completes transaction in one hour and doubles trade flow

**Abercore, a UK SME sugar trader used an e-Bill of Exchange to streamline the trade financing of a transaction sourcing sugar from Pantaleon in Nicaragua. The intention was to speed up and de-risk the cash settlement process. The technology partners were Mercore and Enigio.**

Document exchange was completed within less than one to two hours compared to the normal two to three weeks reducing administrative costs and improving resilience through fewer delivery delay risks. In the first transaction, the document creation and final electronic signature reception were completed within less than an hour on 16th February 2023, from 22:24 to 22:43. The second transaction, initiated on 10th March 2023 at 21:27, was completed by the next morning at 07:37, marking a time to execution of less than 11 hours.

The third transaction on 3 May 2023 showcased a time to execution of less than two hours, with the document created at 11:00 and the final electronic signature received by 12:56 on the same day. This resulted in Mercore providing the related finance within one business day following the e-Bill of Exchange being executed, rather than having to wait (typically two to three weeks) for a paper equivalent.

The trade finance and cashflow achieved by Mercore for the benefit of the underlying corporate customers, Abercore and Pantaleon, are clear. Quicker settlement means financing of subsequent transactions is easier leading to more trade and growth. Longer term, there is clear potential for broader application within the trade finance sector with potential for better and cheaper access to trade finance for the SME sector.

## CASE STUDY 3

## Construction company cut costs 15–20%

**Permavoid (Polypipe), a leading UK-based supplier of engineering and construction goods, undertook a shipment of green-roof components from the UK to Singapore using an e-bill of lading and a digital promissory note. The project was delivered by the DLT4 consortium, comprising Arqit Limited, Imperial College London's AESE Laboratory, Database of Native Assets Ltd, with AG Midgley Ltd providing project coordination and legal advice provided by Watson Farley Williams.**

The use of a secure electronic bill of lading demonstrated the opportunity for an estimated 15–25% cost reduction in comparison to an average £120 in administrative cost per shipment. Eliminating courier-related delays and related processes,

transacting digitally demonstrated a substantial time-saving advantage, expediting processes by approximately 10-12 days, thereby enhancing overall operational efficiency and time to revenue. The unique combination of Internet of Things devices and NFTs secured by a quantum-secure 'seal' using a symmetric key agreement, provided the cyber security framework and reliability characteristics in accordance with the UK's ETDA, UNCITRAL's MLETR and Singapore's ETA.

This pilot illustrates the benefits of cross sector collaborative working to deliver interoperable systems across the whole supply chain. It also demonstrates the opportunities which the ETDA presents for future developments such as 6G and wider access to trade finance.



## CASE STUDY 4

## Engineering company reduces data requirements >800%

**Fort Vale, a UK-based manufacturer, effectively implemented an e-AWB and for its shipment of foot valves from Burnley to Singapore, removing the whole chain of paper. The technology and logistics partners were LogChain, NG Transport, Woodland Group, BT (Rune) and EES Freight Services.**

The project led to a 100% removal of logistics paperwork, 85% reduction in adjacent and associated paperwork, 89% reduction in processing time (manpower), eight times reduction in data required and automated intelligence-derived border compliance.

This pilot showed the benefit of alignment with the Digital Economy Agreement signed between the UK and Singapore and the involvement of government agencies in both jurisdictions.

“ This is the first fully digitalised movement of goods under the UK’s new Electronic Trade Documents Act (ETDA), which will transform and simplify the process of exporting from the UK to the world. We are already working to expand this pilot across Southeast Asia and we will work with all partners to realise the benefits of paperless trade, which is great for both business efficiency and the environment.” — Martin Kent, His Majesty’s Trade Commissioner for Asia Pacific

“ Fort Vale are extremely enthusiastic and excited by the prospect of successful digital trade transactions. As an organisation, Fort Vale exports around 90% of its products worldwide. A significant number of our key accounts are based in Singapore and as such, the opportunity to be part of this historic moment was something not to miss. Fort Vale see the benefits of security, efficiency, cost savings and reduced risk of delays as real positives not only for our organisation, but as a contribution to frictionless trade between the UK and Singapore as a whole.” — Graham Blanchard, Global Sales & Marketing Director, Fort Vale

## CASE STUDY 5

## Retail company saves two days on trade transaction

**Matalan Retail Ltd purchased a consignment of clothing from a garment supplier using an e-promissory note. The objective of the transaction was to prove that the financial document in a documentary collection could be successfully created and handled in digital common law format as opposed to using paper originals or a digital contractual law framework. The partners were Enigio and Lloyds Bank.**

The results saw documents arriving two days earlier than they would have, reducing the overall time taken by the transaction. The project also removed the need for couriering paper documents between the bank and the trader on two occasions resulting in further reduction of time, cost and risk in the overall transaction.

Apart from its clear strategic contribution, this case provides a good illustration of how digitalisation generates immediate cost, time and risk reduction to a trader which, when scaled to more general application, can have significant P&L implications to those choosing this basis of transacting.

“ We are proud to have played our part in Lloyds Bank first ever transaction under the ETDA. We welcome this move to digitisation as it will allow us to trade with our suppliers faster, more seamlessly and in a more sustainable way.” — Ed Collier, Head of Financial Reporting & Control, Matalan



SECTION TWO

# Digital transactions across other jurisdictions

This group of case studies have no direct UK connection but illustrate the efficacy of digitalised trade processes where companies use English, Singaporean or other MLETR-compliant law.

#### CASE STUDY 6

## Oil major reduces berthing time to minutes

**ExxonMobil Asia Pacific Pte Ltd shipped liquid chemicals from Singapore to Thailand with VLK as the vessel owner, supported by VLK's Protection and Indemnity Club. The project utilised an e-bill of lading made interoperable by the TradeTrust framework. The transaction was conducted by the industry players in partnership with Singapore's Infocomm Media Development Authority (IMDA). The technology provider was BunkerChain.**

The transaction reduced the vessel berthing time from three hours to minutes, directly reducing the associated costs (terminal and vessel costs) for ExxonMobil, using an e-bill of lading. Marine Vessel Pass (MVP) which is tied to the vessels' International Maritime Organisation (IMO) number, created a Digital Passport for Ships on the e-bill of lading, ensured that the digital identity used in the signing was onboarded and verified by S&P Global Market Intelligence.

This transaction, utilising the underlying TradeTrust framework, demonstrated interoperability across different systems without the need to develop inter-system connectivity protocols such as APIs as well as established the interoperability between digital and paper-based processes. The e-bill of lading was legally supported by statutory law without the use of any contract law or rulebook and was used in a non-MLETR jurisdiction i.e. Thailand.

**“ This pilot is part of ExxonMobil's efforts to increase our supply chain resiliency through digitalisation of business processes. We welcome frameworks like TradeTrust as an important part of our journey towards digitalisation. Such frameworks increase efficiency and cost savings while maintaining high standards and trust, and we hope that this successful trial will lead to increased interest from industry to adopt similar standards.”** — Mr Low Say Lim, Asia Pacific Logistics and Distribution Manager, ExxonMobil Asia Pacific

#### CASE STUDY 7

## Bank and tech firms demonstrate interoperability

**Lloyds Bank, Enigio and CargoX worked together to demonstrate how the digital creation, assurance and exchange of an e-bill of lading can be managed between two independent electronic trade document providers in a way that can deliver a more interoperable system. The project involved the transfer of a standardised e-bill of lading, approved by the International Federation of Freight Forwarders (FIATA).**

The project proved the ability to transfer an original document between platforms without breaking the chain of trust needed to fulfil the commercial and legal functions of a bill of lading. This demonstrates that different, commercial platforms can enable traders to undertake digital transactions without needing to worry about the technology being used at the other end of their transaction. The project shows that interoperability can be scaled up to provide more user flexibility and assurance and reduce the need for digital to paper conversion.





## CASE STUDY 8

# Food exporter improves efficiency by 80% and cuts cost by 30%

**COFCO Industrial Food shipped a container of canned food to Singapore-based food distributor Yit Hong from Xiamen to Singapore, utilising a TradeTrust-enabled e-bill of lading. The transaction was conducted in partnership with Singapore's Infocomm Media Development Authority and the Beijing Two Zone Office. The technology provider was AEOTradeChain.**

The shipment was enabled by the TradeTrust framework to ensure that the digital trade documents were authenticated, provenance tracked and digitally processed to mitigate fraud

risks. The participating companies estimated that the document processing efficiency of COFCO could be improved by over 80% and their business operation cost reduced by over 30% via such a decentralised approach to trade digitalisation.

The participants are aiming to promote more trade digitalisation pilots involving a wider range of industry participants and more complex use cases such as trade financing with the pilots focusing on promoting the decentralised digitisation of transferable documents such as e-bill of lading.

CASE STUDY 9

## Trade finance provider raises liquidity seven days faster

**TradeFlow Capital, an SME trade finance provider, undertook a digital transaction using an e-bill of lading to raise liquidity against a shipment duration of seven days. The technology providers were XDC Trade Network, Propine, TradeFinex and YodaPlus utilising the TradeTrust framework.**

The digital presentation of the eBL to the trade finance provider enabled them to raise liquidity for the transaction seven days quicker than they would otherwise have done thus significantly improving the overall cash flow generated by the transaction. This project represents a new technological means of verifying trade finance documentation and the generation of liquidity in trade corridors.

Longer term, this type of approach will be explored further with an emphasis on its capacity to deliver generic cashflow benefits to the SME market.

“The digital evolution is undeniable. This transaction signifies a monumental leap towards a fully digitalised trade ecosystem, aligning with initiatives like the ICC Digital Standards Initiative and e-letters of credit.” — John Collis, Chief Revenue Officer, TradeFlow

CASE STUDY 10

## Buyer receives bill of lading in under a minute

**Nitron Group, a leading trader of fertilisers, used an e-bill of lading to complete a complex international transaction involving six counterparties. The technology provider was Secro.**

Odfjell Tankers AS transported liquid fertiliser between North America and Chile, with the entire shipping process managed through agents at both load and discharge ports. The e-bill of lading, compliant with the Singapore Electronic Transaction Act, was drafted, approved, signed, and issued within hours.

The six parties involved were onboarded onto the digital system within four business days,

streamlining a typically complex process without significant legal or compliance burdens. No letters of indemnity were required reducing cost and risk and the buyer received the original e-bill of lading less than a minute after the transfer of ownership was initiated. The same document was also used to meet local Chilean import requirements.

This is a clear case of where digitalisation of a paper process enables many parties to a transaction to base their decisions on the same document/data. This transformed process will be accessible to all traders opting to transact under the law of MLETR compliant jurisdictions such as England and Singapore.

## CASE STUDY 11

## Scrap metal company cuts transaction time by over 50%

**Maptrasco, Jindal Stainless, scrap metal traders, together with their respective banks, DBS Bank and ICICI Bank, successfully completed a TradeTrust-enabled interoperable electronic Bills of Lading backed, Letter of Credit Transaction between Singapore and India. The e-bill of lading was issued by A.P. Moller Maersk.**

The transaction involved five parties, working across three proprietary systems, all enabled with the TradeTrust framework to digitally verify and transfer the title of the interoperable e-bill of lading. It was conducted in partnership with the National Institute for the Transformation of India, Singapore's Ministry of Trade and Industry, Infocomm Media Development Authority and Enterprise Singapore.

The shipment involved a trade of scrap metal from Miami to Gujarat, with New York law as the governing law of the e-bill of lading. The live transaction was completed in 10 working days as opposed to an average of 25 to 30 working days if completed via paper with the processing of the e-bill of lading being completed in under five minutes end-to-end. A paper-based bill of lading would have ordinarily taken 16.4 hours on average to be fully processed. The Seller, Maptrasco, estimated a savings of \$300–\$400 for the transaction.

Beyond the tangible benefits accrued during the transaction, the use of an interoperable e-bill of lading removed the need for complex technical integration and legal agreements to be signed between the various companies across the trade. This was a great example not just of technical collaboration between three different technology providers but between the beneficial cargo owners at either end, the carrier and the banks providing trade finance for the deal at both ends. Further transactions are planned to involve different banks and more client pairs of the participating bank.

**” As one of the largest Indian importers of scrap as a raw material, Jindal Stainless is proud to be part of this project for interoperable eBLs powered by the TradeTrust framework. The eBL eliminates the time-consuming and manual process of the physical movement of paper bill of lading (BL). It's a groundbreaking initiative to improve working capital through speedy release of goods at the port. With eBL, we usher in an era of digitalised international trade, leading to efficient trade financing and better time and cost utilisation.”** —Anurag Mantri, Executive Director and Group Chief Financial Officer, Jindal Stainless



## SECTION THREE

# Delivering paperless trade across the whole trade ecosystem

This group of case studies illustrate best practice examples of customs and trade facilitation digitalisation such as faster customs clearance, cargo handling, e-payments, e-airway bills and eATA Carnets. The opportunity is to ensure these initiatives now interoperate with new developments on electronic transactions and finance to deliver a paperless trade ecosystem across the board.



CASE STUDY 12

## Air cargo partnership reduces goods waiting times 80%

**A partnership between BT Cargo Community Systems, Woodland Group, Singapore EES Freight, Singapore Airlines, Worldwide Flight Services and LogChain enabled the use of an e-airway bill to digitalise an end to end transaction between the two jurisdictions. The technology providers were BT and Nexshore.**

The objective was to enable the exchange of data of a cargo from Heathrow to Singapore and enable seamless transfer of the cargo between truck and plane. The project enabled effective pre-clearance of the cargo resulting in an up to 80% reduction in waiting times so that goods were released for onward transport much quicker.

The project also delivered a 70% efficiency improvement of the cargo reception process. The cargo movement was more transparent and visible in real time to all parties interested actors in a way that would not be possible using paper.

This project was deliberately designed to be consistent with IATA's ONE Record system for the standardised management of airfreight documents. This approach is thus immediately ready for scaling across the industry.

CASE STUDY 13

## Chamber of commerce reduces customs processing times

**A UK camera company needed to move camera equipment temporarily from the UK to Belgium via Heathrow to enable it to fulfill a contract. The equipment was moved by EFM Global, an international logistics consultancy, using an e-ATA Carnet issued by Business West in partnership with the British Chambers of Commerce, UKNATACO and UK and Belgium customs authorities.**

The project enabled the company to reduce the time taken for customs processing of import/export vouchers associated with the traditional

ATA Carnet system. This was the first time an e-ATA Carnet was used and will hopefully replace the need for the traditional paper version. A digital cloud-based solution removes the risk of paper documents getting lost or destroyed which can result in substantial customs duties and fines being paid by the user as well as significant delays.

The project was a success which the British Chambers of Commerce will now build on and aim to roll out across other local chambers of commerce.

CASE STUDY 14

## Firewood manufacturer cuts shipping costs by 18%

**Cue the BBQ, a South African charcoal and firewood manufacturer, revolutionised its shipping operations through the adoption of digital automation compliance technology for its weekly UK shipments of 8–12 containers. The technology providers were BT (Rune) and Azarc.**

The project markedly improved real-time tracking, leading to a 15% increase in on-time delivery rates and a 50% reduction in client inquiry response times. Furthermore, the company observed a 50% enhancement in compliance accuracy and an 80% decrease in the time taken for processing import documentation. This fully automated transition resulted in substantial cost efficiencies for Cue the BBQ, notably up to 18% in end-to-end shipping cost savings, primarily due to reduced penalties and optimised operational processes.

In particular the digitally automated custom clearance part of the process saw a per transaction cost reduction of 75% for Cue the BBQ.

This case study illustrates how both regulatory and commercial requirements can be met by the same technology solution, assuring data for both public and private sectors and addressing the persistent delays in UK border clearance.

**“ Cue The BBQ is a fast-growing SME, adopting digital automation technologies at this stage in our growth, assures us compliance and cost savings”**



SECTION FOUR

# Wider opportunities for financial innovation

MLETR compliant laws have a wider application than just trade. The following case studies provide examples of where the ETDA has unlocked broader financial innovation to drive economic growth illustrating the transformative potential and evolving economic landscape in the UK. Our recommendation to treasury departments and ministries with MLETR compliant laws in place i.e. the UK is to explore the full range of applications. In particular, local government, national government procurement as well as export and development finance.

#### CASE STUDY 15

## Housebuilding company completes multiple land sales in 24 hours

**Vistry Group, a UK housebuilding company used an e-promissory note in the purchase of land on which they intended to build new houses. The project partners were Enigio and Lloyds Bank using the ITFA Digital Negotiable Instrument (DNI) Framework to generate a digital promissory note in a form such that it was easily transferable via assignment between parties. Transactions were concluded with three housebuilders and their counterparties.**

The objective was to prove, using live transactions, that contractual law instruments could be used as substitutes for traditional paper promissory notes and bills of exchange. The time between the creation of initial documents and payment was reduced from one to two weeks to 24 hours. The costs and risk associated with the couriering of documents were also reduced by a minimum of three times or eliminated completely.

This provides a good example of how the opportunity created by the ETDA can extend to other types of transactions beyond trade.

“ I have worked with promissory notes and similar trade finance instruments for a number of years and they are a very useful way of optimising capital employed on large projects. However, I have always found the process of putting the note in place rather dated and time-consuming, especially when dealing with multiple parties or more complex arrangements. The move to an electronic process which Lloyds Bank have instigated is therefore extremely welcome and a game-changer for me personally and for our business partners and their representatives. I have used the new process on two large transactions in the past month and both have gone extremely smoothly, taking at least a week off of the lead-time that I need in order to get everything in place. The Lloyds Bank team have been excellent in helping us to make the most of this development and I look forward to working with them on similar deals in the future.” — Keith Mitchell, Senior Treasury Manager, Vistry Group





CASE STUDY 16

## Improving government liquidity

**T3i Partner Network, a UK startup, is establishing a domestic e-bills marketplace to enable local government to streamline inter-local government finance transactions, reduce cost, improve liquidity and create the opportunity for local government to access financial markets to fund local enterprise and growth.**

T3i Partner Network is at the helm of operationalising the eBills Marketplace, working closely with established Money Marketplaces, Instimatch, Munix, and Centralised Security Depository (CSD) Infrastructure providers.

The aim is to firstly facilitate short-term lending among UK Local Authorities through a structured eBills system, enabling peer-to-peer lending and borrowing, reducing the dependency on intermediaries and lowering the cost of financing. Then to extend the eBills platform to the

corporate sector, allowing corporate borrowers to leverage eBills for securing financing from a diverse range of lenders.

As the eBills platform is extended a mechanism for banks, development banks, and government agencies to guarantee eBills, enhancing their credibility and market acceptance will be introduced. This will allow for eBills in trade and supply chain finance, facilitating both buyers and sellers in the trade ecosystem to secure financing through e-promissory notes and e-bills of exchange.

This initiative will create a facilitation mechanism between investors and borrowers that is currently absent from the market.



# The future environment

There is a \$10 trillion market opportunity for everyone to benefit from if we work together to digitalise trade. Whilst the trade system is complex with multiple actors, there are successful examples of interoperability from which to learn. These include the standardisation of shipping containers in the 1950s, creation of ATM banking infrastructure in the 1960s, Apple and Microsoft combining to standardise operating systems in the 1990s, open banking in the 2000s and the Android revolution in the 2010s. Transforming and modernising trade to be data, not document, driven is the next big opportunity.

There are early indications of an emerging consensus that the following four foundations will help unlock the economic opportunity.

### Public law

National laws aligned to MLETR will open up the opportunity for more choice and innovation in the market.

### Reliable systems

A globally trusted, reliable system will establish more certainty in the market. The dialogue facilitated by the UK Centre for Digital Trade and Innovation is a stepping stone to building the global consensus required. A common conformity model delivered by the ICC Digital Standards Initiative is the long-term solution.

### Common standards

Singular, common standards will enable governments and businesses to adopt interoperable data formats enabling information to move freely across platforms and systems.

### Interoperable, open source code

A free, public utility, open-source code interoperability framework available to everyone, as is being developed by TradeTrust in Singapore, will reduce barriers and open up more choice in the market for companies wanting to design and build their own systems should they want to.

# Centre for Digital Trade and Innovation (C4DTI)

C4DTI is an ICC United Kingdom-led, global initiative based at Teesside University established with support from the Tees Valley Combined Authority. We are an industry-led, government-supported public private partnership that works with the ICC Digital Standards Initiative, foreign governments, business groups, companies and international partners to digitalise UK trade. We are agnostic to technology and advocate for open, interoperable systems (laws, rules, standards).

## Our vision

Our vision is a modern, digital trading system that is cheaper, faster, simpler and more secure and sustainable for all companies. An environment where data, not documents, is used effectively and trade transactions happen in real time. Where risk is reduced, finance is cheaper and more accessible, borders are frictionless, systems and processes connect and information flows in common, standardised formats across jurisdictions. An environment that enables trade and sustainability data to combine and provide more transparent and green supply chains.

## The challenge

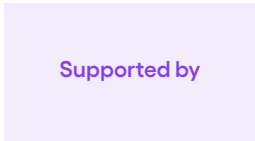
Across much of the world, the trading system suffers from antiquated laws and a lack of standardisation. Systems are fragmented and processes are unnecessarily paper-heavy making trade inefficient and costly, especially for smaller companies.

For companies using English law this is changing fast. The Electronic Trade Documents Act 2023 has removed all legal requirements to handle documents of title on paper enabling companies to transact digitally under public law for the first time. The challenge is to scale up trade digitalisation across public and private sector systems, borders, trade corridors and global supply chains to reap the economic benefits.

## Our mission

Our mission is to accelerate and scale up the digitalisation of UK trade. We deliver this mission through a wide range of practical services and opportunities:

- 1 Campaigns to promote the benefits of digitalisation and adoption of international standards.
- 2 Education and training to support companies to digitalise trade ecosystems.
- 3 Research to provide thought leadership and identify potential barriers and solutions to digitalisation.
- 4 Market infrastructure to ensure the digital trade is able to function effectively and able to innovate.
- 5 End-to-end cross-border supply chain pilots to test the application of international frameworks, the functionality of standardised systems, processes and technology solutions.
- 6 A dedicated corporate digitalisation taskforce to scale up the benefits of trade digitalisation across global supply chains.
- 7 Legal assistance to support low to middle-income countries to remove requirements for the use of paper commercial trade documents and align legal systems.
- 8 Multilateral engagement to ensure international alignment and coordination.
- 9 C4DTI Digital Trade Conference and Awards to promote international best practice.



# The Barclays-ICC- Department for Business and Trade Taskforce



Department for  
Business & Trade

The taskforce is a 12-month project initiated by Barclays and working with ICC and the Department for Business and Trade to support UK trade growth through improved access to finance and promote digitisation of trade and establish the UK as a leader of digital trade.

Launched at the House of Lords in 2023 by the UK's minister for exports, Lord Offord, the taskforce will produce a set of policy recommendations to government covering a range of key areas including:

- Smart regulation
- AML/KYC bureaucracy
- Fraud prevention
- Trade digitalisation
- International cooperation

Subsequently, the government will furnish a written response to the taskforce, delineating the recommendations earmarked for implementation, their progression, prioritisation, and avenues for additional support from the taskforce and its stakeholders.

The taskforce collaborates closely with the Shutting Fraudsters out of Trade project and the Centre for Digital Trade and Innovation. Its meetings occur quarterly and are inclusive, welcoming participation from all ICC members.

# ICC Digital Standards Initiative

The ICC Digital Standards Initiative will be a Global Knowledge Partner to C4DTI and provide the framework for open, interoperable trade.



The ICC Digital Standards Initiative (DSI) aims to accelerate the development of a globally harmonised, digitised trade environment, as a key enabler of dynamic, sustainable, inclusive growth. We engage the public sector to progress regulatory and institutional reform, and mobilise the private sector on adoption, implementation and capacity building.

## Key priorities include:

- Unifying digital standards efforts across alliances, industry forums, standards development organisations, companies, and government agencies
- Advocating for legal harmonisation and the adoption of the UNCITRAL's Model Law on Electronic Transferable Records
- Enhancing access to coherent standards that will accelerate the digitisation of trade-related processes across sectors and borders
- Modernising the rules for trade to enable all supply chain actors to adapt to an interoperable world
- Seeding digitisation with all stakeholders from private sector and public sector to build the case for change and drive adoption

[dsi.iccwbo.org](https://dsi.iccwbo.org)



# Acknowledgements

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# Corporate Digitalisation Taskforce

Launched in September 2023 to promote the digitisation of trade and tackle the issues faced by the current system, including inefficiencies, cost, and complexity.

## The taskforce has four main objectives:

- 1** Digitalise trade transactions across global supply chains by 2026
- 2** Help realise the benefits of digitalising supply chains for corporates
- 3** Remove all paper-based documentation and transition to effective use of data
- 4** Target priority sectors include food/drink, pharma, retail, automotive, commodities

**Taskforce members include some of the largest and most successful UK brands such as BirdEye, Diageo, Glencore, GSK, BT, and RioTinto.**

## Issues for the corporates

Over reliance on paper is not efficient or sustainable to the environment

Trade transactions taking too long

Legal and digital systems, processes and platforms do not connect and interoperate



Get in touch at [info@iccwbo.uk](mailto:info@iccwbo.uk) to find out more



# #WeAreICC

**ICC is the world's largest business organisation representing 45 million companies with 1 billion employees in over 170 countries.**

The International Chamber of Commerce is the only business organization with UN Observer Status and acts as a leading voice for business at the UN, G7, G20, World Trade Organization and other major international institutions.

ICC United Kingdom is the representative voice for ICC in the UK and provides a mechanism for UK industry to engage effectively in shaping international policy, standards and rules. We are the leading voice on digital trade ecosystems, act as the ICC representative to The Commonwealth and Co-Chair the B2B Cluster for the Commonwealth Connectivity Agenda.

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