

THE WATERSHED MOMENT FOR ELECTRONIC BILLS OF LADING

**“DURING THE PANDEMIC, THE SHIPPING
INDUSTRY FACED NEW CHALLENGES
SUCH AS RISING COURIER COSTS AND
STAFF WORKING FROM HOME.”**



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The first commercial attempt of creating an electronic bill of lading (eBL) was in 1999. Yet over the past two decades, the industry has seen little to no uptake in eBL. In fact, every year 28.5 billion paper trade documents continue to be printed and couriered around the world.

The bill of lading has stubbornly resisted the transition to the digital age. There are good reasons for this. Paper documents have been used for centuries, simple physical possession is indicative of ownership and they are universally recognised globally. What's more, the use of physical trade documents is enshrined in maritime and trade laws around the world.

However, the game is changing. Three megatrends are pushing eBLs towards mass adoption.

BETTER LEGAL CLARITY

The first megatrend is more legal certainty in favour of eBLs and other electronic trade documents.

In 1996, the US enacted Section 230 of the Communications Decency Act, which provided immunity for internet platforms with respect to third-party content, so that such websites would not be held accountable as a publisher. This paved the way for Facebook, Google and Twitter to become household names.

Today given the lack of legislation governing electronic trade documents, eBL solutions must rely on rulebooks that must be approved by protection and indemnity insurers' club to be eligible for insurance coverage. All participants must sign into the

same rulebook. Just one missing partner in the transaction prevents the usage of an eBL solution. This is a classic cold start problem hindering mass adoption.

However, countries are beginning to update their laws to support paperless trade. The International Chamber of Commerce (ICC) has been promoting the UNCITRAL Model Law on Electronic Records (MLETR) to encourage countries to adopt new legislation to make digital trade documents as legally valid as their paper-based equivalents. Which is why government proposals in the United Kingdom to pass a bill to adopt MLETR, is significant. The UK has traditionally had an influence on international law, particularly those in common law countries.

This will make the adoption of eBL much easier as rulebooks will matter less, while legal interoperability between solutions accelerates adoption.

PAPERLESS IS HERE TO STAY

The second megatrend is the irreversible COVID-19 induced behaviour change towards paperless trade.

In 2013, when digital payment applications such as WeChat Pay and Alipay came on the scene in China, cashless quickly became king. Today the country leads globally by a large margin in mobile payments and there is little need for people to carry physical cash.

Similarly, during the pandemic, the shipping industry faced new challenges such as rising courier

costs and staff working from home. Consequently, the industry as a whole is embracing a move away from paper documents, which can be error prone, costly to handle and couriering them leaves a substantial carbon footprint.

According to McKinsey, digitising the bill of lading, which accounts for up to 30 per cent of trade documentation costs, could lead to cost savings for all stakeholders amounting to \$6.5 billion a year, as well as unlock \$50 billion in value for the ocean trade ecosystem. It predicts that the industry can adopt digital trade documentation in three to four years, reaching 100 per cent adoption by 2030.

Paper documents also pose significant risks for banks. Recently, Standard Chartered and OCBC Bank received a blow in their attempt to recoup losses from the collapse of commodity trader Hin Leong amid fraud allegations. The mis-delivery claims pursued by the banks arose after the paper bills of lading were not available at the time of discharge and letters of indemnity were used instead. Such a scenario, and the need for a letter of indemnity altogether, would be eliminated as banks adopt eBLs.

THE RIGHT TECHNOLOGY

The last megatrend is technology. In 1996, Webvan was founded to revolutionise the grocery industry by leveraging the then nascent internet to deliver a digital shopping experience. five years later it went bankrupt. In 2012, Instacart was founded with the same vision and subsequently thrived. The difference in outcomes

can be largely attributed to the mass adoption of a new computing paradigm – the smartphone.

Similarly, there have been eBL solutions as early as 1999 with the launch of Bolero, soon to be joined by Essdocs. While they have seen slow adoption so far, this is changing. With the emergence of blockchain technology, solutions can now be built that guarantee security, privacy, and uniqueness of the title ownership. The most tangible use case for NFTs is digitising the exchange and transfer of title of trade documents.

Of course, technology is never enough by itself. eBLs solutions must be designed with consideration of standards for the data and have inherent interoperability from the get-go. Therefore, the eBL standards from the Digital Container Shipping Association (DSCA) for container shipping, as well as from the Baltic and International Maritime Council (BIMCO) for bulk are crucial for the long-term adoption of eBL. To further accelerate adoption, DSCA has also partnered with eBL solutions to conduct technical interoperability pilots with customers, shipping lines and banks.

There is also another important consideration. DSCA and BIMCO's standards covers most of the types of eBL that can be issued. For mass adoption to happen, eBL solutions must address the holistic needs of maritime transportation in all its forms – container, bulk, and special cargo. Corporates and banks want comprehensive solutions and will not tolerate digitised solutions that only cover part of their businesses. This is the strategy for GSBN, an independent technology consortium for the shipping industry. It is already working with DCSA,

BIMCO and other standardisation bodies to make sure its blockchain infrastructure can support all types of eBL solution.

HARNESSING EBLs FOR A COMPETITIVE ADVANTAGE

It is one thing to recognise the emergence of a new paradigm like eBLs, but it's another one to capitalise on the shift to gain a decisive competitive advantage.

In the same way the arrival of the iPhone paved way for the App Store, eBLs will exist within an ecosystem of new digital solutions. Blockchain infrastructure with platforms like GSBN not only support eBL solutions but will also serve a variety of other solutions, some of which will be interconnected natively. For instance, last year GSBN launched a Cargo Release solution, which can be composed with eBL solutions through its platform.

This creates an opportunity for all parties to discover what additional value they can create together for their customers and gain a competitive edge at a time when margins are compressing. For shipping lines this could be around offering the best digital user experience for their customers. For financial institutions offering trade finance, it could be having the widest connectivity to complete supply chain data and title ownership for a full digital experience for both letter of credit and open account.

We will also see a variety of third-party application builders developing front-end applications on top of the blockchain infrastructure. Banks, for example, only want to deal with a single user interface adapted to their processes, which connects

to different solutions through platforms such as GSBN.

IGNORE EBLs AT YOUR OWN PERIL

With those three megatrends, we will see the industry quickly hit the tipping point for mass adoption of eBL. Best positioned to facilitate this are not-for-profit consortiums such as GSBN with the right business model for fostering collaboration. Over the next few years, we will see an explosion of new solutions and cooperation between unlikely partners.

Early adopters will be first to benefit from the cost savings, innovate and create new value for their business. No one wants to be a Blockbuster when a Netflix is taking over the screens. As with other technology paradigm shifts, those that are slow to adapt often find themselves irremediably trailing behind more clear-eyed competitors. Ignore eBLs at your own peril.

ABOUT BERTRAND CHEN

Bertrand Chen is the CEO of GSBN. Bertrand oversees the consortium's overall strategy, with a mandate to serve the best interests of the shipping industry at large. Previously he served as the Group Data Scientist for a global MNC. He started his career as a trader on Wall Street.

ABOUT GSBN

Global Shipping Business Network (GSBN) is an independent, not-for-profit technology consortium building a blockchain-enabled operating system to redefine global trade. The consortium was first founded by 8 global leaders in the global shipping industry accounting for one in every three containers handled in the world.

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