

Redefining the global supply chain through digitalisation: Enhancing cross-border trade facilitation and trade competitiveness through the e-Bill of Lading

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A Customs bill of entry and the bill of lading (BOL) are among the critical and determinant documents that are used in the clearance of cargo and services that are internationally traded. The Customs bill of entry is used to clear goods and services on importation, passing through a country whilst in transit and on exportation. It is at the Customs border that merchandise are declared and cleared under the bill of entry while their movement along the global supply chain is under cover of a BOL. The use of a manual BOL is generally time consuming and resource intensive for border officials and the traders alike. Under a manual environment, the documentation for a single shipment can require up to 50 sheets of paper that are exchanged with up to 30 different stakeholders¹. According to the latest analysis advanced by McKinsey (2022)² the manual BOL accounts for between 10 and 30 per cent of total trade documentation costs.

This Blog discusses the importance of redefining the global supply chain through the digitalisation of the manual BOL. It begins by discussing the general features of the BOL. It then goes on to argue as well as demonstrating, that the adoption of the electronic-bill of lading (e-Bill of lading) generally results in complementing towards enhancing the cross-border trade facilitation and the overall trade competitiveness of countries.

Among many other complimentary linkages, improved cross-border trade facilitation positively impacts on the level of trade competitiveness of a country through enhancing

¹ Why digital standards matter in global trade; see <https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/the-multi-billion-dollar-paper-jam-unlocking-trade-by-digitalizing-documentation>

² The multi-billion-dollar paper jam: Unlocking trade by digitalizing documentation; see <https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/the-multi-billion-dollar-paper-jam-unlocking-trade-by-digitalizing-documentation>

the potential for attracting direct foreign investment, especially among emerging economies such as those in Africa. In an increasingly globalised trading environment where goods frequently cross borders several times as intermediate and final products, efficient and effective operational trade facilitation is key. It leads to the inclusive reduction in trade costs, and the faster movement of the goods across the borders which in turn is also generally good for enhanced trade competitiveness. On the whole, all these practicalities are good for regional integration and economic developments, as envisaged by a number of regional trade arrangements in Africa.

In the context of Customs border management, trade facilitation by functionality entails the whole range of border procedures and formalities. These may range from the use of the electronic exchange of cargo data, the simplification of border processes and the harmonisation of trade documents. Further to this, the provision of room for impartial administrative justice or administrative recourse in cases of appeals by the aggrieved importers and exporters so involved in the entire international trade supply chain is yet another critical aspect of a wider range of trade facilitation.

In Africa, the increasing demand and call for improved trade facilitation has often been directed at Customs administrations and the numerous border stakeholders who all together are representative of their respective governments. In effecting cross-border clearances for imports, transiting goods and exports, Customs authorities largely rely on the respective documentary evidence that is often attached in support of the type of clearance being sought. One such critical document that Customs rely on is a BOL.

A BOL is a legal document issued by a carrier (logistics company) to a shipper. It gives details about the type of goods being shipped, the quantity and their final destination. This is an exceptionally important document used in international trade to cover the goods as they move along the global supply chain. It contains the carrier's, shipper's and consignee's details, such as the contact details, addresses and respective company names as well as the 'notify party' details (to be constantly given updates on the shipment's progressive movement along the supply chain). Some of the critical information contained on the BOL includes, the terms and conditions of carriage, exclusive or unique BOL number as allotted by the freight forwarder or shipping entity handling the carriage of the cargo, the description of cargo, their weight, volume, specific shipping instructions, port of loading, discharge, the place of delivery or final destination, terms of payment (freight pre-paid or to collect), seal numbers, container number as well as the shipping marks and numbers.

In general, the BOL plays a number of significant roles in the international trade relative to the movement of the cargo in the global supply chain. It legally provides both the title or ownership of the cargo as well as being a source of evidence or proof of shipment. It further acts as proof of contract of carriage and gives the owner of the goods the legal rights to claim goods or right of disposal by transfer of ownership to third or subsequent parties.

Upon delivery of the goods, the BOL is given to the buyer or consignee to enable transfer of ownership and in the process allow the shipper to release the goods being supplied. The BOL is central to the various shipping processes as it provides evidence of the contract terms of carriage, acts as a receipt and acts as the title of goods (representing ownership). Despite all these important requirements, the BOL remains largely a manual document notwithstanding the increasing use of digitalisation in the global trading environment. Below are some of the persisting and alarming realities of a BOL:

- The world has changed dramatically, but the BOL remains relatively unchanged. Today, the BOL process is still reliant on the physical transfer of paper records and applies to roughly 40 per cent of all containerised trade transactions.
- The Original BOL requires many stakeholders to print, stamp and sign various paper copies first. This non-digital process is costly, takes time to execute and is highly susceptible to errors.
- The BOL is still reliant on the physical transfer of paper documents and the documentation process alone can take six hours or more across all stakeholders. Other vital trade documents like Customs Declaration require the paper-based BOL as a pre-requisite for their creation.

Digitalisation of the BOL has been slow and difficult to date, as various stakeholders are involved in the process, all of whom have different interests, needs, and systems – and must be approached individually. The adoption or use of an e-Bill of lading is important for international trade and the trade facilitation – trade competitiveness nexus.

An e-Bill of Lading is the manual version which has been digitalised or transformed into an electronic version. There are numerous benefits that are associated with the use of an e-Bill of lading. Added to retaining the same essential information as the manual version, the e-Bill of lading comes with the added advantages to international trade in the form of improving on the speed, protection and real-time sharing of accurate information about the cargo as it moves along the supply chain. The

information becomes user-friendly as it can easily and instantly be transferred to other users and players present in the supply chain.

Given that an e-Bill of lading is paperless, it means that it can easily be produced or created by digitally capturing the usual data into the system followed by authentication through the use of electronic stamps and signatures. The resulting processed data becomes the information which can easily and immediately be shared as goods are transferred from one party to the other. The use of the e-Bill of lading greatly reduces the usual manual data re-entry tendencies followed by time consuming iterative verifications of the information. In essence, upgrading the manual BOL to an e-Bill of lading extremely reduces human errors resulting in data that is generally accurate.

The use of the e-Bill of lading cuts on cost of administration (retrieval of any properly filed document within the system is at the single press of a computer button) and storage of manual documents in their physical existence is no more as softcopies will be saved in the computer system. Searching of documents and records are made tenable through the use of a number of search variables such as of e-Bill of lading numbers, assigned reference numbers, product information, destination, consignee, and the consignor. From this same wealth source of electronic information, which is easily accessible and readily available, periodic reports can easily be generated while some analytical information and critical decisions can be arrived from the secure and reliable historical information that is being kept with each day of business.

The e-Bill of lading format is such that correcting or making amendments is made more simple without causing costly delays which under the manual environment would result in incurring huge demurrage costs or charges. This virtue also allows for the exchange of processed data or information, and the title to be done instantaneously. Accessibility of the data or information is possible at any given time for immediate result as this will be done on-line. It can also be accessed from anywhere as long as there is internet connectivity and the enabling gadgets such as mobile phones, web browsers and laptops.

To eliminate the inescapable postage costs under the manual bill of lading, the paperless e-Bill of lading further brings in an element of enhanced security. The level of security increases with the use of sophisticated or complex information communication technology systems. Use of disruptive technologies, such as blockchain, guarantees that data, processed data and information can neither be tempered without trace nor manipulated or changed without necessary approval.

Various international bodies have estimated the effect that digitalisation would have on global trade when properly embraced:

- The International Chamber of Commerce (ICC) projects that paperless trade could create US\$267 billion of additional exports across G7 countries, compared to base forecasts, by 2026.
- The ICC notes that the use of paper-based processes places an extraordinary burden on small and medium-sized enterprises (SMEs) seeking to trade internationally – and digitalisation would help close this trade finance gap.
- According to the World Economic Forum, the current trade finance gap, or the amount of requested trade finance that is rejected, is estimated at US\$1.5 trillion globally, with SMEs suffering the most.
- According to the World Economic Forum, the current trade finance gap, or the amount of requested trade finance that is rejected, is estimated at US\$1.5 trillion globally, with SMEs suffering the most.
- Digitalising the BOL, which accounts for 10 to 30 per cent of trade documentation costs, could unlock more than US\$15.5 billion in direct benefit to the shipping ecosystem and up to US\$40 billion in increased trade (McKinsey, 2022).

The benefits of digitalisation of the BOL in reshaping cross-border trade as well as the global trade supply chain are numerous. Adopting an e-Bill of lading could lead to direct cost savings for all stakeholders, amounting to US\$6.5 billion a year. Carriers could realise up to US\$2.1 billion in benefits such as more direct interaction with shippers, and streamlined and digitalised workloads, leading to cost savings. New digital capabilities could also lead to new revenue stream for carriers, for example, through improved customer journeys. A further US\$6.9 billion in value could be unlocked for the broader trade ecosystem. Ultimately, greater digitalisation could enable US\$40 billion in global trade by 2030 (McKinsey, 2022).

The BOL plays a major complimentary role in Customs cross-border clearances. The World Trade Organization (WTO) reports that implementing the TFA could increase global trade by between US\$750 billion and US\$1 trillion a year. On the other hand, the use of an e-Bill of lading could save US\$6.5 billion in direct costs and enable between US\$30 billion and US\$40 billion in new global trade volume

(McKinsey, 2022). The effective implementation of the WTO Trade Facilitation Agreement will mostly produce wide-ranging economic benefits, especially in emerging and developing countries.

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