Kanai spoke to Port Technology International about TradeLens, the blockchain-based supply chain initiative jointly managed by A.P. Moeller-Maersk and IBM, and how it can evolve global trade, in particular in India.

BEGINNING WITH BLOCKCHAIN
Historically, organizations in our industry have maintained numerous one-to-one connections to have the confidence that their goods will move smoothly through their supply chain.

Blockchain enables confidence in a traceable, integrated networked system, rather than just those individual connections. Organizations today in many industries no longer remain competitive by only operating inward-looking solutions, no matter how well systems and business processes are integrated. Effective supply chain management has an increasing reliance on external relationships in the physical and digital spaces as the supply chain ecosystem has evolved digitally.

A platform strategy integrates these partners through a many-to-many relationship. A step-change from the point-to-point or linear information and process flows finally allows companies to take actions quickly and decisively with increased transparency for all who need it. Blockchain combines the upsides of the platform business model with decentralized control of platform operations to reduce handoffs, improve efficiency and drive innovation in financial transactions, Customs authority interface and customer solutions.

CODES, STANDARDS AND BLOCKCHAIN
The global trade shipping industry needs to constantly innovate to make the international shipment of goods more efficient, more cost effective and introduce more process standardization to leverage digital technologies. Airport and port codes provide a clear example of this. Many people can name the code for their closest airport off the top of their heads. In India, BOM for Mumbai International, for example. But if you ask shipping professionals for the code for the port of Nhava Sheva, your answers will vary even from carrier to carrier and exporter to exporter.

Standards are one element that allows system to system communications to work properly and advance the maritime sector. Blockchain is another element, it enables increased trust, trust in documents and information workflows — something the industry has lacked to this point. What’s needed is a mechanism for sharing information timely, correctly and securely, and blockchain fills the bill by answering these three essential criteria:

• Visible in that the information is there, it is timely and easily accessible.
• Secure so that you control who sees the

TRADELENS AND INDIA
BLOCKCHAIN, PROGRESS AND OPPORTUNITIES

Bimal Kanal, Director of TradeLens, Indian Subcontinent
information you share—no invoices in competitors’ hands.
• Flexible in that you can parse out the facts and figures you need easily.
• People often incorrectly compare blockchain to a database, but blockchain is much more than that. It is a way of allowing parties in the supply chain to work together in a trusted way, it fosters the collaboration between teams that need to be collaborating but are not today.

TRANSPARENCY AND DANGEROUS GOODS
Blockchain’s power is the openness and visibility it enables as a digital ledger where transactions of various types (i.e not only monetary) between parties are recorded and secure. In the maritime industry, with so many parties involved in a single transactional move of a container, we need to increase collaboration even at times with our competitors who are involved in a stage of the cargo movement. Specifically talking about ports and container terminals, how can blockchain improve operations?

A good use case for ports and terminals is the need for transparency in complex, manual, paper-based processes. A good example is dangerous goods documentation to focus on efficiency and protecting the safety of port workers and cargo.

For example, digitizing complex dangerous goods documentation with its multiple information handoffs between participants – customers, suppliers and infrastructure owners enables better version control, traceability, change validation, data integrity and minimizing re-work to ensure validation all data points to verify documents on container contents.

OPPORTUNITIES IN INDIA
India has tremendous opportunities to grow its interior markets. Digitizing supply chains and using blockchain represent a significant way to transform the country’s supply chains to improve efficiencies and competitive advantage. Leveraging data from upstream transportation documents can pave the way for better Customs processes, enabling their ability to identify risk profile containers, improved duty collection and increasing the velocity of Customs clearance of ‘safe’ cargo.

As Indian trade continues to expand, blockchain will be the catalyst for more efficient processes in both Customs and transportation infrastructure e.g. crowded ports, trucking capacity, etc. as identified in research we did on Indian customs processes.

The Government of India is supporting digital solutions to improve efficiency and cost-effectiveness of logistics to grow India’s business. In the current Covid 19 scenario, blockchain is being adopted for electronic bills of lading solutions and document exchanges that traditionally required people to hand over paper documents. With most workers in some form of lockdown, this is one challenge that has an existing digital solution.

In addition, India’s banking sector is progressing which will facilitate TradeLens in its continued development of an eBill solution for complex transactions that currently exist in international trade.

PROGRESS SINCE LAUNCH
Since TradeLens was launched in December 2018, we have achieved commitments from five of the top six global ocean carriers that handle over half of the global containerized trade. Additionally, over 100 ports and terminals are active, publishing and consuming data from the platform daily. Engagements with 15+ Customs authorities globally have resulted in improved outcomes such as paperless Customs clearance pilots for export processes. We are currently piloting paperless import Customs clearance processes and blockchain based document validations for certificates of origin and halal certificates for example.

TradeLens will be releasing its eBill of Lading product. The bill of lading is one of the last documents to be digitized at scale worldwide, because of the legal and other peculiarities involved with this document. Having a truly digital, end-to-end eBill solution will be another step towards a digitized supply chain.

The inclusion of the TradeLens eBill product allows for all documentation needs to be captured within a single platform, both seaway bills and currently straight original bill of lading are available on the platform.

Combining this digital documentation with workflow automation across multiple parties in the Supply Chain will generate strong efficiencies through an end-to-end paperless trade platform.

We envision tremendous innovation ahead as the TradeLens marketplace will grant approved third parties to build applications built on top of the TradeLens data sets.