

# Strong link in Blockchain for s

**BLOCKCHAIN IS THE NEW BUZZWORD** in the industry. **CARGOTALK** takes experts views on how blockchain can transform the supply chain management (SCM) and the challenges of blockchain for logistics and supply chain companies that need to be watched out.



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Currently past the Technology Trigger phase of the hype cycle, blockchains are now positioned somewhere after the peak of inflated expectations which has plethora of benefits for each party involved in the process. Traceability and transparency would be improved with robustly secure business networks on blockchain with ease of paperwork processing, identify counterfeit prod-

ucts along with internet of things and real time tracking with an electronic platform where all the myriad documents related to a shipment could be housed. A relatively recent trend in logistics is fictitious pickups. These occur when con artists show up at a shipper's dock, provide fabricated insurance documents, DOT numbers for trucks, and pickup documentation. It is argued that blockchain could help prevent these kinds of thefts. Moreover, it enables equal visibility of activities. But one should be aware as new products and services are evolving based on blockchain transactions, as there are currently no regulations on how the transactions should be written. Although auditability and transparency are promised benefits of blockchain, highly regulated industries may need to develop new rags for blockchain. Information-sharing regulations will be altered to protect companies as well as their investors and their customers. Laws will need to be enacted that govern blockchain's smart contracts.



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Blockchain technology is being adopted by several global organisations for managing SCM data and information. The current way of managing information across the supply chain with different players in the supply chain using different systems that get

updated at different timelines (and not necessarily real time) tend to have issues related to accuracy, duplication, etc. Blockchain, by nature of its technology, provides transparent, integrated and seamless view of the same transaction across the supply chain. It has obvious advantages for global air freight industry and by its very nature for all players in its value chain. Frequently discussed challenges such as EDI, transaction updates, message templates, message errors, manual data entry errors, etc will become things of past with complete adoption of this technology. However, given its limited availability and cost of adoption, the penetration of the technology is slower than it should be. As the technology becomes cheaper and more available, more companies might voluntarily adopt this technology.



## HIGHLIGHTS

- It enables equal visibility of activities and reveal where an asset is at any point in time, who owns it and what condition it's in.
- Its distributed ledger transactions are likely to necessitate changes to industry regulations governing financial reporting as well as auditing processes.
- It has obvious advantages for global air freight industry and by its very nature for all players in its value chain. Frequently discussed challenges such as EDI, transaction updates, message templates, message errors, manual data entry errors, etc will become things of past with complete adoption of this technology.
- Single biggest challenge will be to get the government regulators on the right side of this technology.
- A well-structured blockchain network can provide local producers with a decentralised platform for sharing and exchanging skills, resources and products without relying on third parties.
- Operating on the blockchain needs extensive programming skills so the companies needs to train their staff before or hire new staff with relevant skills.

# supply chain industry



**AMAR MORE**  
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**Cargo Award winner 2017**

Blockchain technology acting as a digital distributed ledger can certainly bring about a transformational change in the way global supply chains are operating in today's world. This is simply because it works on

the principle of maintaining a secure transaction ledger, wherein the role of each participant is defined, leaving no scope for deception or malpractice. While transparency across the supply chain is one of the key advantage of placing a blockchain system, there are several other advantages resulting from the crossover of blockchain technology and the supply chain. A well-structured blockchain network can provide local producers with a decentralised platform for sharing and exchanging skills, resources and products without relying on third parties. Blockchain inherently provides security, authenticity, and clarity required to address supply chain challenges.



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Blockchain primary usage started in finance sector for maintaining encrypted ledger of transactions between sender and recipient with assurance of safety and track flow of data. Similarly taking same basic principle in future of DSC (digital supply chain) currently with so much digitisation under process at every stage, blockchain technology will ensure transaction safety / transparency and trust at various level of SCM. Blockchain technology along with DSC will integrate various intermediaries which will lead to minimising cost of governance, cost of interacting with various platform/organisation in supply chain ecosystem more accurately and in real time. Current challenge for blockchain technology is system integration at various level, which causes high investment cost. People still are unaware of potential benefit through information sharing at real-time.

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**VAIBHAV VOHRA**  
**Face of the Future 2017 & Managing**  
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Blockchain is great tool which uses a distributed database system holding records of events/transactions occurred in a series of blocks which makes it tamper-resistant. The technology can transform the SCM in the following way:

- ▶ **Complete Traceability**
- ▶ **Enhanced Transparency**
- ▶ **Better Security**
- ▶ **Cost optimisation**

However, there would be two major

challenges for companies to watch out for, i.e. ecosystem is still in its development stage and everyone who needs to avail the blockchain technology needs to engage their horizontal and vertical supply chain partners too. Secondly, operating on the blockchain needs extensive programming skills so the companies needs to train their staff before or hire new staff with relevant skills. Therefore, high re-skilling cost.



# Removing blocks in blockchain



**HARPREET SINGH MALHOTRA**  
Chairman & Managing Director  
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With blockchain, the ledger is secured because each new block of transactions is linked back to previous blocks in a way that makes tampering practically impossible. As it is decentralised, it does not depend on any single entity (like a bank) for safekeeping. The nodes connected to the blockchain network get updated versions of the ledger as new transactions are made. The multiple copies of the ledger are the 'truth' about every transaction made so far in the blockchain. If we compare supply chain and blockchain together,

we surely find that supply chain has become complicated. We can also use the term cumbersome because it takes days to make a payment between a manufacturer and a supplier, or a customer and a vendor. Contracts must be handled by lawyers and bankers, which means extra cost and delay. Products and parts are often hard to trace back to suppliers, making defects difficult to eliminate. Whether for industrial equipment, consumer goods, food products, or digital offerings, supply chains have headaches a-plenty. Friction in supply chain is a big problem. There are

too many go-betweens. There is too much to-ing and fro-ing. The rise in uncertainty stops supply chains from working well. Suppliers, providers and clients must deal via central third-party entities, instead of directly with each other. Blockchain could be the answer to many of these issues. However, it goes much further than a hackproof way of holding and exchanging money. In-depth transformation of supply chains will not happen overnight. However, supply chains can already start using blockchain for small portions of their operations.



**AJIT JANGLE**  
COO, Last Mile vertical  
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The use of blockchain technology is going to transform the supply chain industry immensely as it involves multiple vendors for every transaction.

By having blockchain technology in use we can share information in a selectively visible fashion, so that only the authorized person can see the data and manage the flow of goods, flow of money and the flow of information with complete trust. Also one of the biggest issues that companies face at present is tracking and tracing of goods before, during and

after shipment. The distributed ledger capability of block chain provides buyers and sellers with increased visibility and control from shipment to receipt, which ultimately reduces the risk of fraud. By embedding blockchain across applications and network, we can transform supply chains that are smarter, faster and more transparent from sourcing all the way through from shipment to receipt.

Blockchain technology is incredibly elastic. It can be modified in different ways, to adjust in different

processes, network node architectures, and participants. At present it is difficult to generalize about blockchain for business in a way that is universally true.

Challenges like bad data quality, error handling, creating the vast network, linking the physical goods with blockchain, visibility to different parties depending on specific requirement and most importantly setting up of a common interface when so many companies are involved considering the cost factor. ▶

## Offering tips to 'floor' clients

**RITESH JAIN, CHIEF EXECUTIVE OFFICER**, Lamba Techno Flooring Solutions & India Cargo Award winner 2017, talks about flooring practices used in India and abroad.



**What difference do you see in the flooring industry in India and in a foreign country?**

Logistics in other parts of world and the element of civil engineering which comes through the storage space created, that too specific to our flooring industry and mostly high-end flooring solutions, are used as against normal saw cut floor like 'jointless' floor.

An ideal floor would be perfectly flat and level and have no joints. Jointless floors are floors constructed in large panels typically 50 m square

without intermediate or control shrinkage joints.

**What is jointless flooring and its benefits?**

The word 'jointless' can be misleading, as there is a practical upper limit to the area of concrete that can be placed in a single continuous operation. No joints are sawn, but steel fibres incorporated into the concrete

mix control the width and distribution of cracks caused by shrinkage. A benefit of jointless floors to the building user is the opportunity of having relatively large areas of floor with no joints. Normally it is a steel fibre reinforced concrete with a higher dosage of steel fibres say 30-45 Kg/m<sup>3</sup> depending upon the design, with higher thickness of slab say up to 200 to 225 mm.

### TRIVIA

The company has constructed North India's first jointless floors for an area of 9000 m<sup>2</sup> at Palwal (HR) of panel size of 30X 24 M for M/s. Knorr Bremse to a tolerance of FM2 as per international standards of TR-34 from UK concrete society