The Blockchain in Transport Alliance (BiTA), established in August 2017, has not only picked up considerable traction as a forum for promotion and education, but also encouraged the development and adoption of blockchain applications in the supply chain industry.

Thousands of companies are applying for membership, and industry leaders such as UPS, Google and Uber Freight are already a part of our movement, which means the momentum is only increasing as technology producers connect with market partners.

BiTA’s 400-plus members are participating in discussions with the goal to create and adopt industry standards for blockchain applications and bring about its commercialization.

A core belief at BiTA is that a market is only as strong as its educational foundation, which is why industrywide, enthusiastic participation is key to extracting the full potential of benefits that blockchain technology promises.

**GLOBAL SUPPLY CHAIN INVITATION**

Shipper supply-chains are impacted by their ability to get access to data from across the freight landscape. Blockchain technology may provide a chain of custody and usher in a world of full transparency.

This provides BiTA member companies with the opportunity to create new business offerings, channels, and commercial outcomes as transactions go from being strictly analog to digital.

For many members, the adoption of blockchain standards opens up new markets and creates new revenue streams.

Innovation is the heartbeat of any emerging technology and startups are frequently the drivers, which is why BiTA invites startups to participate as full members that can collaborate, partner and network.

**PROOF OF DELIVERY DOCUMENTATION**

OpenPort is a Hong Kong-based multinational logistics technology provider using blockchain technology to solve one of the biggest challenges in the modern supply chain – the cash flow problem.

At the heart of the problem OpenPort is using blockchain to address is the paper-based Proof of Delivery (PoD) system of record-keeping.

They have developed a blockchain-enabled Proof of Delivery (PoD) by using OpenPort’s smart contract platform to determine exactly what was delivered, when, and by whom.

Currently, payments to shippers of B2B goods are backlogged by days and even weeks due to the wait for PoDs and the disputes that arise from the delay, which then has a knock-on effect on transporters’ payments.

The system requires too much working capital for businesses to scale effectively.
OpenPort intends to use its blockchain-enabled PoD – available from any transporter – to drive increased cash flow and liquidity in the supply chain.

The immutable data in the blockchain PoD creates a low-risk situation for financial providers to provide favorable invoice factoring to transporters, and on goods value to shippers, moving the payment cycle from weeks to days.

Preliminary findings indicate benefits in a number of ways including enhanced security and trust using a validated, consensus-driven and immutable public ledger, simplified payments and clearance processes using smart contracts, and vastly increased cash flows from faster payments.

EMPLOYEE DIGITAL RECORDS
Learning Machine Technologies is a global provider of blockchain-based records and has developed blockchain-based credentials for the digital identity of heavy equipment operators in the supply chain.

In conjunction with MIT Media Lab, an interdisciplinary research laboratory at the Massachusetts Institute of Technology, Learning Machine Technologies has developed ‘Blockcerts’, an open standard for anchoring academic achievements, which licenses certification records to the blockchain in a manner that is operator-owned and vendor-independent.

With Blockcerts, operators own private copies of their digital records, which they can share with anybody they choose—like a prospective employer.

That individual or company can then verify the authenticity of the records with the click of a button, without having to consult the organization that issued it.

Preliminary findings indicate Blockcerts saves time and money during the employment application process while providing a high level of certainty that documentation has not been forged or tampered with during the applicant screening process.

It’s been found that operators feel much more in control of their data via their tamper-proof records and convenient peer-to-peer sharing platform.

FINANCIAL TRANSACTIONS
Triumph Business Capital is a Dallas-based financial institution providing invoice factoring and freight payment solutions to trucking companies, freight brokers and staffing agencies.

Their blockchain use case centers on using blockchain to streamline the freight payment system to take advantage of the lessons learned from the 30-year-old Electronic Data Interchange (EDI) process – a computer-to-computer exchange of business documents in a standard electronic format between business partners.

Triumph has focused its early blockchain initiative on improving back-office functions like treasury, invoicing, collection, and payment, and believe that blockchain technologies that use a shared ledger for systems integration will be more efficient and transparent than EDI since both parties have visibility to the same information.

Preliminary findings indicate that blockchain technology has the potential to reduce the cost of capital, provide better visibility into cash flow, and reduce the frequency of short pays, resolve discrepancies faster, shorter processing times and higher degrees of verifiability.

MEMBER CHALLENGES
Blockchain technology can be best described as a digital ledger that uses blocks of information linked and secured by cryptography.

This means that once data is entered into a blockchain it cannot be modified.

BiTA believes that not only should an industry trust the data being entered into a blockchain, an industry must first address the decades-old problem of cleaning up disparate legacy data systems before data is added to any blockchain technology.

In the rush to commercialize blockchain technology, some industry participants have done so without regard to data standards and interoperability.

This could render proprietary blockchain solutions as unstable and unsustainable if there isn’t interoperability between competing technologies.

THE FUTURE
BiTA sees the future of blockchain technologies in three phases. Education, Case Studies, and Early

1. Adoption (2018-2020):
   - Industry-wide education on use cases outside of crypto-currency
   - Development of industry-wide standards and application to specific use cases
   - Early adoption within innovative startups and pilot programs at large corporations with extensive resources
   - Regulatory authorities develop auditing and compliance practices.

2. Growth 2021-2025:
   - Early adopters and standards activity provide greater clarity and minimize uncertainty, driving widespread adoption.

3. Maturity (2026 and beyond):
   - Blockchain technology is widely adopted and considered an integral part of the supply chain ecosystem.

BITA STANDARDS COUNCIL
Industry standards developed by BiTA are managed via the BiTA Standards Board of Management and are intended to create a common framework in order to assist members and industry participants with their organization’s decision to develop and adopt blockchain technology.

The Standards Board has established three technical committees addressing the following topics:
   - Data Formats: Focused on format templates and standard fields for invoicing, asset location, payments and contracts
   - Blockchain Interoperability: Focused on interoperability across different blockchain platforms
   - Financial Compliance: Focused on ensuring adopted blockchain solutions will pass financial audits.

To build upon these initiatives, BiTA
members will create a forum and develop a dialogue around blockchain technology in the supply chain from a thought leadership panel of influential entities.

For some industry alliances, the objective is to produce blockchain technology together, but BiTA has larger members that act as the technology developers, and our role as an enabler, rather than a producer means we are agnostic about software platforms.

We believe that our organization’s structure and approach is crucial to unlocking what blockchain has to offer, which, according to a Deloitte finding from May 2017, is a market that will support 10% of global GDP due to its transformative nature.

For logistics and transportation, with companies such as OpenPort, Learning Machine Technologies, Triumph Business Capital behind the wheel, blockchain will have a bigger impact, and will truly shake up this $8 trillion industry.

ABOUT THE AUTHOR
Prior to joining FreightWaves and BiTA as Chief Analytics Officer, Croke was Vice President of Data Products at Spireon where he headed up the development of new high-frequency telematics data products in the trucking, passenger automotive and insurance markets.

Croke also ran Lancer’s long-haul truck insurance business after spending many years as Vice President of Omnitracs Analytics (formerly Qualcomm) where he developed Data Science technologies including machine learning, complex business rules engines and data analytics for transportation companies.

Croke was one of the original founders of Atlanta-based FleetRisk Advisors (purchased by Qualcomm and now called now Omnitracs Analytics) and has 35 years of experience in data analytics, transportation, supply chain management, mining and insurance risk management.

ABOUT THE ORGANIZATION
BiTA was formed by experienced tech and transportation executives to create a forum for the development of blockchain standards and education for the freight industry. Our goal is to bring together leading companies in the freight technology industries that have a vested interest in the development of blockchain technology. BiTA membership is limited to companies that are in the supply chain ecosystem and have an interest in blockchain applications. BiTA has no direct commercial interests. Our requirements for membership are to complete and submit an application which will be reviewed by our membership committee.

ENQUIRIES
BiTA U.S.A.
David Bradford, 1500 Chestnut St, 106., Chattanooga, TN 37405, U.S.A.
Tel: +1 (423) 883 6890
Email: dbradford@bita.studio