

TECHNOLOGY IN TRANSPORTATION: THE KEY TO SUCCESS

EDI, API, ELDs and Blockchain ... these are well-known terms to the early adopters of supply chain technology (such as 3PLs) seeking differentiation in the logistics industry.

WHAT TECHNOLOGIES ARE TOP OF MIND?

EDI, or Electronic Data Interchange, is considered one of the first widely used platforms that allows shippers and 3PLs to exchange data effectively and reliably. Even though this technology is as old as the mid-1960s, many companies still count on it. It is a proven process that employees understand and works for their business. EDI transmits information in minutes, which for many, is fast enough. It is still the current choice of many retailers, distributors and warehouses worldwide.

WHAT ARE APIs?



APIs are regarded as a more robust method of information interchange over EDI technology, touting increased flexibility and speed (seconds instead of minutes). Time is money so this was a definite upgrade. This new and improved way of communicating isn't without its drawbacks, though. APIs are burdened by high implementation costs, an initial sharp learning curve for their users, higher security risks, and incompatibility with Legacy systems.

More recently, we saw the emergence of API, or Application Program Interface. APIs were introduced in 2000, and became well-known with their introduction by Salesforce that year (API Evangelist – History of APIs).

Josh Bergling is Choptank Transport's director of business intelligence. He has been in the process of building a customized CRM system for the award-winning logistics provider. "The use of APIs complements Choptank's core competencies because of the added value to our customers and carriers through real time information," says Bergling. Generally, the transportation industry has been slow to change the way it operates. Drivers are still using paper logs to record pick-ups, deliveries and drive time (but not for long with the



Josh Bergling, Director of Business Intelligence
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"In an industry with unpredictable rates and extreme volatility, we're quickly able to aggregate market data from multiple sources to make strategic business decisions."

—Josh Bergling, Director of Business Intelligence, Choptank Transport

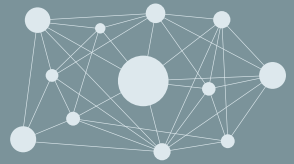
ELD mandate.) The hesitation to embrace innovative practices is probably due to the mechanics of so many separate moving parts associated with every shipment. No one was on the same page. Times have changed, however, and there is an exciting movement toward a collective thought process within the industry that is predicted to be a game changer.

With so many emerging technologies on the horizon, such as driverless trucks and robotic warehouses, people will always be an important component in the supply chain. The most notable changes will be in the processes themselves.

Blockchain & Transportation

Another burgeoning technology is blockchain.

Blockchain as it relates to transportation is, according to the Blockchain in Trucking Alliance (BiTA), “one of the most significant developments for the industry since the creation of the Internet.” The world and the industry are just beginning to realize the implications that blockchain will have on a multitude of applications within the trucking and logistics world. Commonly used processes and documents such as BOLs, EDI, ISO and Ascii will be standardized and utilized for greater efficiency, transparency, security and instant validation. Blockchain has been referred to as the building block of one single truth for all shared data to reference.



“Shippers, carriers and 3PLs benefit because APIs allow real time data flow. Order tendering, load tracking, carrier qualification and payment processing are just a few core business processes which have already gained supernatural efficiency throughout the industry.”—Josh Bergling



ADVANTAGES OF TECHNOLOGY IN TRANSPORTATION

There will be fewer possibilities of human error and transactions will move a lot faster. From the moment the need of the shipper is anticipated, to the load being automatically booked, to the paperwork being ‘magically’ transmitted, the time it takes to move freight will seem lightning fast in comparison to today’s methods.



As these new technologies see refinements, things like theft and OS&Ds will become a rarity since everything will be monitored and tracked from inception to completion. Electronic logging device (ELD) manufacturers are positioned to integrate track and trace services into their devices to provide even more solutions to their carrier customer base.

WHO IS DRIVING THE NEED FOR NEW TECH?

So who is really driving the need for modernization and improvement in the industry? Is it the logistics providers, the manufacturers and retail stores, or is it the solutions/technology providers themselves? The answer is, all of the above. Each one, according to a collaborative report from L&T Infotech and eft (EyeForTransport), thinks they are the leaders in innovation.



One point that everyone agrees on is that no matter what role a company plays in the supply chain, technology is perceived as a key differentiator.

A GLIMPSE INTO THE FUTURE

"I think the future of transportation technology will give us fully integrated solutions with capacity to send, receive, and interpret data in real time, providing complete transparency to decision makers," says Bergling. "The evolution of integrated solutions is leveraging the power of blockchain for smart contract implementation. We are ready and excited to embrace it."



WHAT IS A "SMART" CONTRACT?

According to eft, "Smart contracts are contracts that can execute automatically based on the fulfillment of certain conditions," noted the report. "Given the amount of complex paperwork in the supply chain, there is the potential for creating smart contracts in many areas for speed, trust and security to name a few."



And let's not forget the Internet of Things (IoT). The connection between so many devices, combined with blockchain technology processing so much monetary data and other transactional information, will work together with customer's CRMs and TMS systems to create a truly new world in logistics.

Possible applications for new technologies in the supply chain include:

- Automation of key processes
- Smart contracts may replace the need for excess paperwork, i.e. customs documentation and bill of lading.
- Predictive applications – aggregating historical data, both transactional and analytical creating transparency and an enhanced ability to make informed business decisions
- Advanced APIs – transferring information in real time across multiple platforms and companies
- Unparalleled security relating to documents, goods, and currency
- Maintenance reporting and quality control



If you are looking for a logistics provider and want to make sure they are using the latest technology to offer cost savings and process improvements, you may want to ask them a few quick questions.

- Do they currently use a transportation management system (TMS)?
- Do they follow a set of Standard Operating Procedures (SOPs) for every step of the transaction?
- Do they offer the latest in track and trace technology?
- What monitoring technology do they offer to provide complete visibility into each and every one of your shipments?

If these are tough questions for your salesperson, contact Choptank Transport.