Separating the Value from the Hype:

THREE TECH TRENDS BUZZING IN THE SUPPLY CHAIN MARKET

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Life Sciences Cloud

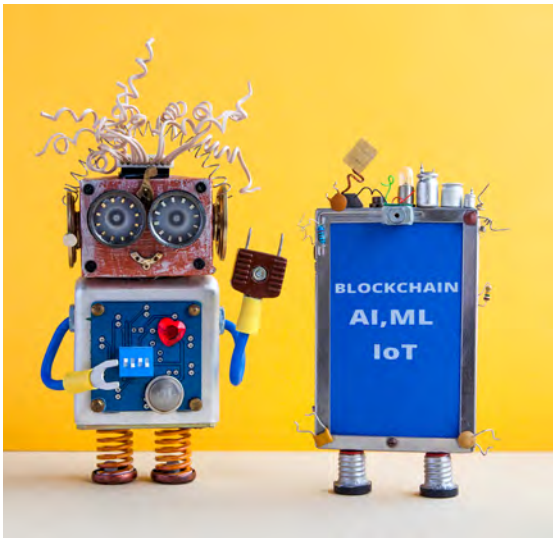
Companies around the world are looking to digitally transform supply chain capabilities to holistically improve business performance, becoming more customer-centric, partnership-oriented and industry-minded. With that transformation comes the need for technology to scale in parallel. Legacy enterprise resource planning (ERP) systems are rich with data, and the ability to feed this data into entirely new systems, for example, a digital network platform, will enable applications for next generation technologies that support this transformation.

As these applications take shape, what do business leaders need to know about the latest technology advancements' true potential to disrupt business processes as it relates to ERP? Here are three technology trends that executives and IT decision-makers overseeing supply chain transformation should be keeping an eye on – along with some helpful tips for evaluating worthwhile investments and understanding best use cases.

Blockchain

Blockchain was thrust into the spotlight as the underpinning technology behind cryptocurrency. Since then, it has been positioned as a general-purpose solution for many problems it is not necessarily suited for. Specifically, its features are best suited for applications that have a need for complete visibility into transactional data for all participants, immutability, and non-repudiation. In a nutshell, it is perfect for parties that don't know or trust each other. Given its specific benefits and costs, it is best to carefully consider blockchain's most applicable use cases for your company's specific given business objectives before making an investment in a blockchain solution.

There are a handful of use cases in pharmaceutical supply chain that may be good candidates for blockchain technology. For example, the FDA is working with partners on a blockchain solution to support the track and trace of drugs through the supply chain as part of regulatory efforts to improve drug safety. This is a novel use case for blockchain given the highly sensitive transactional data that is shared about medications making their way up and down the pharma supply chain, which helps to ensure there is a carefully tracked and encrypted record affirming every medication battle's integrity and pedigree.



Data Analytics with Artificial Intelligence (AI) and Machine Learning (ML)

The supply chain management market is on pace to exceed $19 billion by 2021, according to Gartner. This is driven by the huge amounts of data collected as more connections across all segments of the supply chain are established. Within the pharma supply chain, for example, TraceLink processes hundreds of millions of serialization events on its ecosystem of more than 275,000 members from across the supply chain.That's an incredible amount of data.

Artificial intelligence (AI) and machine learning (ML) will enable businesses to detect patterns they didn't even know existed. AI in the supply chain is still in its early stages, but when trained, AI can help businesses mine data lakes to answer questions, solve problems and chart the course for future success. With AI's ability to optimize data analytics, businesses will soon be able to achieve full end-to-end visibility into each product's journey through the supply chain.

AI can also help forecast future consumer needs of critical products so businesses can set production plans accordingly. This will be of critical importance when the next hurricane hits, for example, to help ensure a region is fully prepared with enough supplies and medications to get by in times of need.

Internet of Things (IoT)

According to a report from Forrester, total spending on IoT technology is expected to increase to $435 billion by 2023. This increase in spending is largely driven by the track-and-trace sector, serialization in the pharma supply chain and the ongoing digitalization of the supply chain industry.

IoT provides data from sensors that are connected to the Internet at different critical moments. IoT data is not always necessary – particularly when devices are gathering information from disparate sources and are not connected through a centralized digital network in a way that renders the data useful for improving product integrity or business operations.

With that said, when it comes to high-value medications for example, particularly with more personalized medications that are being uniquely developed for specific patients, IoT sensors tracking the temperature and condition of these medications as they are stored and transported can be incredibly important. Delivery timing and quality assurance of these custom medications is absolutely critical. In short, the stakes are higher, both from a financial standpoint and a patient safety standpoint.

In closing, new advances in technology and digital solutions are rapidly transforming the supply chain. There is enormous value in breaking down data silos and being able to connect and exchange disparate pieces of information on one network platform. This is already starting to take shape and in the coming years, all levels of the supply chain; from manufacturers and wholesale distributors, to end users and everyone in between will be able to leverage these advanced technologies to increase efficiency, transparency and safety across the board.

About Tracelink

TraceLink is the world's largest integrated digital supply network, providing real-time information sharing for better patient outcomes. To learn more about TraceLink, visit www.tracelink.com or follow the company on LinkedIn and Twitter.

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Senior Vice President of Engineering John Hogan leads product design, development, and testing of TraceLink products and solutions, ensuring the seamless processing and tracking of high-volume, highly distributed events, and facilitating shared customer value up and down the supply chain. He joined TraceLink in January 2018 from Boston-based cybersecurity startup Barkly, where he served as VP of Engineering and was responsible for product development and DevOps building out the company's unique approach to endpoint protection. At TraceLink, he is instrumental in helping grow and manage a rapidly expanding team that is building products that benefit customers worldwide.