

BLOCKCHAIN TECHNOLOGY: Is it beneficial to international trade?

If so, will the benefits continue and if not, will it be harmful?

The general foundation of Blockchain Technology began with public transaction ledgers of the cryptocurrency also known as "Bitcoin". It's intriguing to know this fad of traceability for a currency not recognized by many countries is now becoming mainstream into an array of businesses including regulated banking, medical, food safety, security and supply chain. MasterCard, Merck, Walmart, Facebook, Louis Vuitton, Coca-Cola amongst so many other household company names in various industries are exploring and implementing blockchain technology. The traceability from a written idea to end consumer including everyone along the supply chain can be ensuring there's no breach in a contract/s. A blockchain is a growing list of records, called blocks, which are linked using cryptography. Each block contains a cryptographic hash of the previous block a timestamp, and transaction data. By design, a blockchain is resistant to modification of the data.

One of the most notable companies implementing blockchain technology is Walmart, reporting gross revenue of over \$500 billion dollars for 2018. They highlighted an E. coli outbreak in romaine lettuce that recently affected more than 200 people and salmonella in products such as eggs and breakfast cereal. When investigating where the breach happened, it took almost 6 weeks under their previous practice to find the source of the outbreak. By using blockchain technology they are able to identify the source within minutes. By storing the information digitally, a supplier can see which farms are infected and quickly stop the supply to restaurants and consumers. Direct suppliers will be required to conform to Walmart's standards

and “enable end-to-end traceability” back to farms by Sept. 30, 2019. While Walmart hasn’t released what this means for everyone along the supply chain, be sure this will include temperature reporting along the way.

Luxury goods maker LVMH, of the famous Moet Hennessy Louis Vuitton brand is adopting blockchain technology. Their gross revenue for 2018 was \$53 billion dollars; under the brand you will find high end wines, spirits, cosmetics, clothing, jewelry and selective retailers in Asia, Europe, Middle East and the Americas for the international travelers. One of the biggest obstacles for luxury brands is forgeries and knock offs being sold at exorbitant rates. While many consumers are not interested in purchasing, some don't know and other who know exactly what they are doing by purchasing replicas. Alarming, the world consumers spend about \$460 billion per year in trade mark infringed goods. Adopting blockchain technology will allow brands, retailers and consumers the ability to authentic their products through scanning the identification tags on a single platform.

Another notable breach disrupting global trade was Maersk having reported revenues of \$39 billion dollars for 2018 encountered an estimated cost of over \$300 million dollars through a cyber-attack in 2017, worldwide damages likely exceeded \$10 billion. Owning their own cargo ships, port terminal and freight forwarding operations delayed trade for Maersk and thousands of companies worldwide for almost 10 days. With containers arriving into ports around the world every 15 minutes or so, the cyberattack put Maersk amongst other companies frantically attempting to figure out where is their cargo. As you can imagine, after the effects of such a depilating act, Maersk had to find solutions to prevent the attack from ever happening again. On August 9, 2018, IBM and Maersk launched their global blockchain-enabled shipping solution

“TradeLens,” and its dataset is reportedly growing at a rate of close to one million shipping events a day. While they are attempting to sell the platform globally receiving some backlash, let’s not forget it was Maersk who changed the chassis supply chain industry.

Let’s go through an event that happened with Customs & Border Protection issuing penalties for late PMS filings in 2012. While details in the CFR outlined the requirements for PMS payment, CBP’s CATAIR didn’t reflect the requirements and software providers didn’t implement into the software. Resulting in over \$1 million dollars of penalties issued, US Customs Brokers footed the bill and/or took the time to investigate the findings. This took months for everyone along the supply chain brokers, filers, CBP, associations, law firms and software providers to figure out the source of the problem and corrective actions needed. Thankfully enough, CBP recognized their share of the problem and canceled all penalties applicable to the findings. With blockchain technology, milestones can be set up and when there is a breach, an alert will automatically advise the responsible party for corrective action and moving forward implementations.

Similar to global auditing services, ISO 9000 and ACE, blockchain technology is here to stay. It will be beneficial to international trade giving quicker and more transparency in the supply chain. Being able to identify breaches quickly will enhance the who, what, where, when and why allowing corrective action implementation. Insurance companies will be able to identify the parties responsible for any disruption/s and put them accountable for their share of the action/s. With larger entities implementing blockchain technology in every sector including real estate, estate planning, food, insurance, banking, social media, alcohol, medical, retail, trucking, governments, international trade amongst so many others dominating the global market share. it