## The Wild Wild West of Blockchain

How Aerospace can ride the blockchain revolution for increased efficiencies.

We have all been asked the question, "If you could go back in time and live in a particular era or decade, which would you choose?" If you're like me, you carefully weigh the pros and cons. The roaring 20s would offer great music, but also prohibition. In the Jurassic period, you could camp with dinosaurs, but that also means THERE WOULD BE DINOSAURS! After internal debate, I tend to land on **The Wild, Wild West**. Riding horses, shooting guns and exploring the undiscovered sounds like my kind of adventure.

We are at a point in time that resembles the Wild, Wild West when it comes to blockchain. Some articles liken blockchain to the internet in the 90s, but I prefer to live in a more sensationalized state of mind where coders are cowboys and the new gold is cryptocurrency.

Blockchain is not just Bitcoin or cryptocurrencies, it is so much more. Simply stated, the blockchain distributed ledger technology is a database of transactions that is shared and synchronized across multiple computers and locations – without centralized control. Blockchain databases can include certifications, loans, identities, logistics manifests – almost anything of value.

Often these transactions are routed through third-party intermediaries, making processing timeconsuming and expensive. Blockchain technology enables true data sharing by omitting the intermediary, dramatically speeding up multi-participant transactions and lowering costs, while ensuring all parties are protected.

With reductions in processing time and increased transparency and security, blockchain poses significant potential just like the gold rush offered prospectors the opportunity of unimaginable fortunes. Similarly, while not all prospectors found fortune, blockchain is not a good fit for every process or transaction. To help our teams determine if we've struck gold we ask these questions.

- Do I have a need to share transactional data?
- Are there multiple parties that are generating transactions to modify the database?
- Is there an absence of trust? Am I not willing to let another modify database entries?
- Would removing an intermediary expedite the process?
- Do interactions require the completion of a transaction?



We have been working with our customers and partners in the A&D industry ecosystem to identify and define how blockchain can best be leveraged in our unique sector. A couple of use cases our team is exploring include:

- Building trust and transparency in aircraft manufacturing and operations by leveraging blockchain to maintain secure certifications for parts, products, personnel and organizations.
- Increasing security and trust in a complex multi-tier supply chain with end-to-end data integrity and provenance.
- Simplifying contract management with collaborative "smart" contracts for a scalable system of record.

Even though it is not quite the frenzy of 1849, it's still exciting to see how blockchain technology can impact our industry. As Industry 4.0 rolls out across the plains of the aerospace and defense industry, we get the opportunity to slip on our cowboy boots, mount our horses and begin exploring the new frontier.

So the only question that remains is — when the dust settles, where will you be — on the Oregon trail without an ox or a passenger on the Transcontinental Railroad?  $\wedge$ 



## **Maggie Nelson**

As a member of SAP Aerospace and Defense Industry Business Unit, Maggie enjoys leveraging her experience as a helicopter pilot and a passion for amplifying the customer voice to help aerospace and defense companies imagine, define and drive their digital transformation strategies.