Blockchain enabling Transparency in Supply Chain

Blockchain the technology that underpins Bitcoin has provided an alternative currency for monetary exchange. This is achieved by shifting the trust provided by the financial intermediaries to 'machines'. The machine enabled trust in digital information exchange has wider business applications wherein Blockchain is also referred to as Distributed Ledger Technology (DLT). More recently the technology found its application for supply chain use cases.

Why use Blockchain technology in supply chains?

The growing consumer awareness, increasing regulatory pressure and, changing business dynamics has raised the bar on the level of transparency that businesses provide and have in their supply chain network. This has led business to digitalize their supply chain to foster transparency which is limited even in some matured supply chain networks. In this drive towards digitalization, Blockchain is being evaluated as one of the potential technology to enable transparency in the supply chain.

How can Blockchain technology enable transparency in the supply chain?

At its core, Blockchain works on distributed database principles such that data is available to all members of the business network. Blockchain does not stop with the distribution of data; the technology promises authenticity of the data through the use of advanced data encryption and data validation algorithms. This improves the availability and quality of the information exchanged in the supply network — the key for businesses embarking on the transparency journey. Moreover, the use of smart contract feature of Blockchain can automate certain business transactions that can enhance transparency and trust in trading partners relationship. For instance, online payment for the supplier can be triggered when acknowledgement of the goods is received.

Is Blockchain able to solve the transparency problem in the supply chain?

Blockchain is only the enabler to achieve the end goal — Transparency. This cannot be achieved without healthy participation from supply chain network members to share information. One way to encourage this participation is through finding a favourable response for members in the supply network to the question — 'What's in it for me to use Blockchain?'. This requires finding the right use case and designing the system such that benefits of adopting Blockchain are fairly distributed and not inclined primarily towards the dominant partner in the network.