

Blockchain in IoT

The number of Internet of Things (IoT) devices is exploding with over 23 billion devices currently active. That number is projected to increase significantly, nearly doubling over the next three years. While the IoT is unlocking significant value in many industries, it is also introducing new vulnerabilities into enterprise and government networks.

Blockchain, or Distributed Ledger Technology (DLT), represents a new way to combat these vulnerabilities. At a high level, Blockchain technology represents a way to create trust among unknown entities by creating a consensus through a shared ledger. All participants hold the ledger and agree on its contents enabling financial and business transactions.

Blockchain and IoT can intersect to create secure IoT solutions for enterprises and governments. A few example categories of solutions are data assurance (verification that data is sent by a recognized device), IoT interconnectivity (trust between IoT devices owned by different entities, for example a car and city infrastructure), IoT Data Integrity (ensuring that the data travelling in an IoT network is valid and secure), and supply chain.

IoT devices will always represent a diverse landscape due to the complexity of use cases and the requirements of sensors (low power, inexpensive, compatibility, etc.), so the key to winning in this market will be players providing an overlay solution based on Blockchain or other secure technology.

References:

<https://www.statista.com/statistics/471264/iot-number-of-connected-devices-worldwide/>
www.cisco.com/go/blockchain
www.cisco.com/go/iot

Questions:

1. How can Cisco Services position itself for success with Blockchain or other IoT secure solutions? What is the market size and where will value be created?
2. Is there a potential advantage to owning the networking component of a Blockchain in IoT use case? How could this advantage be monetized? If not, what are other viable technology approaches to ensuring IoT data integrity?
3. Which industries are most viable for a Blockchain in an IoT security use case? Describe the risk factors.