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Blockchain and supply chain management

 *Blockchain is important and can provide many benefits to our organization. It is used to record transactions across many PCs, and it is difficult for it to be hacked into, or for someone to cheat the system. There are plenty of benefits provided by the blockchain for example it allows transparency, accurate asset tracking, and enhances licensing. The improvement of our security would benefit from a mechanism of this quality.*

**What is a blockchain?**

Blockchain makes it easier to identify when data is being tampered with. The mechanism behind blockchain is it’s responsible for duplicating transactions across an entire computer system on the blockchain. Every time a transaction occurs it gets recorded and added to all the systems in the blockchain. The property of distributed ledger technology is a cryptographic signature that resides within a blockchain. So, if anything gets changed it would indicate immediately that it was tampered with. For a hacker to successfully hack into a system they would have to change every block in the chain.

**History of Blockchain**

The discovery of blockchain was first originally brought up in the early 90s. In 1991 Stuart Haber and W Scott Stornetta brought up blockchain for the first time. Seven years later a computer scientist by the name of nick Szabo was working on a decentralized digital currency. Two years later a theory on cryptographically secured chains was published. In 2008 the model for the blockchain was developed by developers and then a year later the first blockchain as the public ledger for transactions was created. Around 2014 blockchain was split from the currency and blockchain 2.0 was created in this time and it referred to other applications beyond currency.

**Blockchain’s improvement to the supply chain**

There are a few ways that blockchain can improve the supply chain. A supply chain can be managed more efficiently under a blockchain. A supply chain will have complex networks of suppliers, manufacturers, auditors, and more. There are three other benefits blockchain can provide for the supply chain. The first is traceability. Traceability is the improvement of efficiency by mapping and visualization of enterprise supply chains. The second used case in the supply chain is Transparency. Transparency states that you must build trust and to do that you have to capture key data points. Third-party attestors can verify its authenticity once a blockchain is registered. Finally, tradeability, tradeability will redefine the conventional marketplace concept.

**Conclusion**

Blockchain has helped by keeping records of digital data safe from hackers. When it was first brought up in the 90s it was a breakthrough for organizations to capitalize on today. It has also played an important role in improving the supply chain. It has helped by making it more efficient, cutting the cost of the supply chain, and more.

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