

“The mission of the Wyoming Blockchain Coalition is to educate Wyoming citizens about the power of blockchain technology to cut costs, streamline administrative processes and spur entirely new businesses in Wyoming.”

David A. Pope, CPA CGMA

Executive Director of the Wyoming Blockchain Coalition



What is Blockchain Technology?

Blockchain is a new form of database technology that enables multiple parties to share a single “golden copy” of data and trust that it is valid, owing to a breakthrough of computer science that enables the computers of multiple users or organizations to reach consensus about the state of their shared data without the need to reconcile their own copies.

What is Bitcoin?

Bitcoin was the first application of blockchain technology. It is a decentralized payments system that records the ownership and transfers of a token (called a bitcoin) on payments system fully integrated with the token (called a blockchain) that is operated by thousands of computer nodes located around the world.

Bitcoin is a marvel of computer science. Protected by the laws of math, no one has been able to hack the bitcoin protocol—yet—despite a huge hacker’s bounty (as high as \$137 billion in November 2017). Hacks have happened on applications related to bitcoin, but the underlying protocol has remained secure. Since the first bitcoin was “mined” on January 3, 2009, the network has been functional 99.99186% of the time despite having no system administrator.

Are Blockchains Secure? How Do They Work?

Security is always relative. Computer science experts view blockchain systems as relatively more secure than traditional computer networks. Blockchain systems are decentralized and protected by encryption, while traditional systems are centralized and the information stored inside their firewalls is rarely protected by encryption. Bitcoin has spurred advances in IT security generally because owners have a big economic incentive to secure their data.

How do computers in a blockchain network stay in sync, despite there being no central authority? A consensus algorithm—which is a multi-step method for determining majority rules—allows independent computers to agree on the order of all events recorded on the network. Then, each computer interprets that data in exactly the same way, so that after each event, every user sees the same thing.

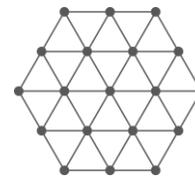
Computer System Architecture Comparison

Traditional: *Centralized, Not Encrypted*



- Single point of failure
- Attackers have an obvious place to attack
- Strong firewall, but data behind it is rarely encrypted
- Need to create separate disaster recovery back-ups

Blockchain: *Decentralized, Encrypted*



- No single point of failure
- If a node goes down the network continues unabated
- Heavy use of encryption to protect data
- Each node has full back-up copy of data; high resiliency



Wyoming Should Be Attracting This Ecosystem

Wyoming's advantages to attracting this ecosystem to domicile in Wyoming:

- ✓ Favorable LLC and corporate laws
- ✓ Strong academic support from UW
- ✓ Strong privacy protections
- ✓ Tremendous bandwidth in Cheyenne area
- ✓ Zero corporate income or franchise taxes

Blockchain Applications to Wyoming

- Allowing Wyoming **LLC registrants** to register on a blockchain. Wyoming led the way when it passed the nation's first LLC law in 1977, and it can again be first by offering the ability to register LLCs on a blockchain. This could attract meaningful business into Wyoming, as today 2/3 of new companies that register in the U.S. are LLCs—and new users of LLCs (such as for autonomous cars and other Internet of Things (IoT) devices) could be attracted to efficiencies enabled by blockchain-registered Wyoming LLCs
 - **Ranchers and coal producers**, for example, guaranteeing their customers certified Wyoming products by allowing them to track their Wyoming origin on a blockchain
- Reducing Wyoming's **healthcare** costs by eliminating information duplication via a blockchain
 - Creating a registry of **mineral rights and leases** and a tracking system for royalty and severance payments on a blockchain
- Tracking **government** documents and automating compliance with public-records retention laws using a blockchain
- Improving the transparency of Wyoming **campaign finance** by using a blockchain
- Other industries positively impacted by adoption of blockchain technology include **accounting, financial services, legal services, land title, licensing and permits**, and many others

Why Are Companies So Interested in Blockchain?

Banks, healthcare companies, logistics companies and governments are embracing blockchain technology with zeal. More than 26,000 blockchain projects were started in 2016 alone, according to Deloitte's analysis of data in the code repository GitHub.



COST SAVINGS



DE-DUPLICATION OF RECORDS



AUTOMATION OF ADMINISTRATIVE TASKS

Blockchain Ecosystem Landscape: Fast Facts

Capital Raised via Start-Ups:

Since 2012
650+ equity deals
 have closed over
\$2 billion

Capital Raised via Utility Tokens:

Since January 2016
250+ ICOs
 have closed for well over
\$ 2 billion

\$243 billion

= market value of ecosystem as of November 20, 2017

>26,000

= number of blockchain projects started in 2016 alone

Sources: CB Insights, CoinMarketCap.com and Deloitte

