CompTIA

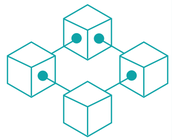
7 MYTHS ABOUT BLOCKCHAIN— BUSTED

CompTIA's Blockchain Advisory Council identified seven popular myths about the technology and analyzed the truth behind each one:

1 BLOCKCHAIN IS BITCOIN AND BITCOIN IS BLOCKCHAIN

FALSE

Bitcoin was the first widely known or adopted use case of cryptocurrency that was built on blockchain technology. Blockchain technology can be used for applications beyond the financial world. Blockchain is a type of distributed ledger technology, but not all distributed ledgers are effectively blockchains. For more information, see CompTIA's blockchain glossary at: **s.comptia.org/BlockchainTerms.**



2 BLOCKCHAINS ARE COSTLY AND INEFFICIENT

MOSTLY FALSE

This depends on the structure of the blockchain, e.g. permissioned blockchains are usually more cost-effective and energy efficient compared to alternatives. Many public blockchains leverage a consensus mechanism known as proof of work (PoW), usually associated with permissionless networks mining cryptocurrency. While PoW is less energy efficient, its design makes it the most secure blockchain consensus algorithm.

3 ALL DATA PUT ON A BLOCKCHAIN IS PUBLIC

MOSTLY FALSE

On a public blockchain, transactions are visible; however, identity is decoupled from the transactions. The parties in the transaction are represented by blockchain addresses (which look like a random string of characters). If the owners are careful, they will not be connected to any identifying information. Blockchains have evolved to the point where some files, such as legal documents, can be stored on-chain, but not to the point where it is practical to store large files, such as videos. In a private/permissioned blockchain, access is restricted and managed by an administrator like any internal system.

4 YOU NEED AN ADVANCED DEGREE TO WORK WITH BLOCKCHAIN

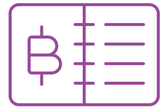
FALSE

To build on or use blockchain technology, there are many tools in the market to assist in leveraging the technology, and several blockchains allow you to develop applications in almost any contemporary coding language. Blockchain technology is becoming an important part of business/legal/commercial application design and planning.

5 BLOCKCHAIN IS BETTER THAN TRADITIONAL DATABASES

MOSTLY FALSE

To some proponents, blockchain has never met a use case it didn't like, but the individual use case will determine the best database. Blockchain has its pros and cons but may not be the best fit for a specific environment. CompTIA's blockchain decision matrix provides some guidance on choosing the appropriate database type. It's available at: **s.comptia.org/BlockchainMatrix.**



6 BLOCKCHAIN IS IMMUTABLE AND UNHACKABLE

MOSTLY TRUE

Blockchains greatly increase the difficulty for a bad actor to access or change information. While transactions committed to blockchain cannot be changed, blockchain applications are vulnerable at the points where data is stored off-chain, so all business-critical data should be stored on-chain. Like any computer system, blockchain applications are vulnerable to social engineering hacks (e.g., phishing or baiting to obtain a user's personal information), so industry standard best practices security measures (e.g., MFA) are just as necessary as with any other application.

7 ENTERPRISE BUSINESSES ARE NOT ADOPTING BLOCKCHAIN

FALSE

Fortune 500 companies across all sectors including banking, fintech, pharmaceutical, technology, agriculture, retail, and more are driving blockchain application development and adoption.