

Bitcoin and Blockchain a Year Later

Where are they now?



When we featured bitcoin a year ago in the November 2016 Audit & Accounting Alert, the cryptocurrency was selling for \$600 per bitcoin and growing vigorously, despite a hack earlier in that year that cost investors \$65 million. Now the price has recently surpassed \$6,000, and despite significant obstacles and volatility, continues to be a major, if not as dominant a presence.

Technical challenges and competition have eroded some market share. Capacity restrictions have slowed processing time and increased fees, leading to an offshoot, Bitcoin Cash, to arise. Also, a number of other cryptocurrencies built on other blockchains, such as Ethereum, have entered the market.

Bitcoin and blockchain were described in earlier Audit & Accounting Alert articles as follows:

“Virtual currencies, such as bitcoin, offer a triple entry approach, signified by an underlying technology known as the “blockchain.” The blockchain is described by Ryan Lazanis of Xen Accounting in a recent Techvibes article:

The blockchain is a public, decentralized, distributed ledger that is capable of storing and confirming the transactions that pass through it. This means that the ledger is not owned nor controlled by any one party. Instead the control of the network, or protocol, is distributed among the network’s users. As transactions hit the blockchain, they are confirmed as true and accurate by the network’s users, called miners. If you see a transaction on the blockchain, the transaction has been confirmed and it cannot be reversed.

When two parties enter into a virtual currency transaction, the blockchain becomes the third party, independently holding a copy of the entry, thus completing the triple entry.”

Though countries like China and South Korea have banned bitcoin, Japan has embraced cryptocurrency and has picked up the slack. The United States has moved cautiously, with the SEC expressing concerns about initial coin offerings (ICO), rejecting two listing submissions this year, and filing charges on two questionable ICOs that were allegedly backed by real estate and diamonds.

Meanwhile, other emerging blockchain applications are successfully developing and expanding while attracting increasingly more attention and money. For example, last year we described the inroads the tiny country of Estonia was achieving in the blockchain arena. Estonians now have secure digital identities that they can use to access all their government records online. They can see all their health records in one place and know who has else has accessed them.

The same is true with tax filings and all other governmental interactions. Also, Nasdaq conducted a successful pilot test in Estonia of shareholder e-voting earlier this year.

Estonia is making digital identities available to the rest of the world through its e-Residency program. A Finnish based online bank, Holvi, offers European Union business banking services globally, incorporating the digital ID's established through the e-Residency system. The services will not be available to citizens of the United States until compliance with the foreign account reporting rules are worked out.

Similarly, IBM is working with a Swiss bank to develop a blockchain trade platform that will facilitate the trade finance process between major international banks. This endeavor follows the unveiling in March of the IBM Blockchain, a complete infrastructure that provides "Blockchain as a Service," built on the open source Hyperledger technology sponsored by the Linux Foundation.

There are indications that the United States may consider developing a digital identification system akin to the one in Estonia. In light of the enormous Equifax security breach, a Trump administration official indicated that a replacement for the arcane social security number identification system was being sought. Even so, the United States population is more than 200 times larger than that of Estonia. Developing a sufficiently robust and secure system of this nature will take time.

Separately, the US Treasury's Bureau of the Fiscal Service recently launched a pilot project using blockchain-based distributed ledger technology (DLT) to determine the potential for tracking and managing physical assets. A parallel pilot project will explore applying robotics to automating repetitive financial management tasks.

These examples are just a small sampling of governmental and commercial activities focused on the transformative blockchain technology. Along with IBM, Microsoft is a major player in this arena. In our last issue, we described Microsoft's Azure "Blockware as a Service" product that KPMG has employed as the foundation of its global cloud-based smart audit platform.

Further details can be found at [Bitcoin: Rise of Virtual Currency and its Downfalls](#) and [Disruption is now: How firms are keeping up](#)

(<https://www.cpajournal.com/2017/10/02/bitcoin-rise-virtual-currency-downfalls/>)

and (<https://www.accountingtoday.com/news/disruption-is-now-how-firms-are-keeping-up>)