

The logo for Hunton & Williams, featuring the firm's name in a serif font. The ampersand is stylized and smaller than the other letters. The background of the entire page features a light blue circuit board pattern with various nodes and connecting lines.

BLOCKCHAIN

A Valuable Business Solution

By Scott Kimpel and Mayme Beth Donohue, Hunton & Williams LLP

As Bitcoin turns nine this year, its underlying technology, blockchain, is emerging as a disruptive force across industries and throughout our financial system. While cryptocurrencies are blockchain's most well-known application, businesses and governments around the world are actively implementing a wide variety of blockchain solutions to improve efficiencies, enhance customer experiences and lower transaction costs. Blockchain's impact should not be underestimated as a passing trend, but rather viewed as a tool with great potential.

Nearly \$5 billion was invested in blockchain-related companies in 2017 through venture capital and initial coin offerings (ICOs). The financial sector and FinTech companies are also driving the growth of blockchain technology. As more and more money is devoted to exploring blockchain's profitable applications, potentially game-changing solutions are evolving broadly throughout the economy. Manufacturers, retailers, energy companies, health care providers and governments (to name just a few) are all investing in blockchain and testing its potential.

It has been said that blockchain will do for the transaction of assets what the internet did for communications, and the current breadth of applications supports this comparison. Blockchain is being used to track the movement of products around the world as a supply chain management tool, which also has significant implications for product and food safety. By tracking the movement of products from source to consumer on a blockchain, some companies have reduced the time it takes to isolate the source of a defective product or food from a week to just seconds. Tracking the supply chain of products also allows consumers and end users to verify the authenticity of rare or expensive products almost instantly.

In addition to supply chain management, blockchain is a valuable resource for conducting transactions within many types of markets. The same structures that allow for cryptocurrencies and tokens to be issued and traded on a blockchain also allow for the trading of securities, energy and other commodities without the need for central intermediaries. For example, energy companies are developing blockchains that facilitate peer-to-peer renewable energy trading generated by individual households. Similarly, consumer rewards and customer loyalty programs can issue and allow for trading of rewards points among a customer base.

These are just a few of the many examples of how blockchain is already changing the way companies do business. Like most emerging technologies, the private sector's development of blockchain is outpacing the regulatory and legal regimes that impact it. Various regulators around the world have already asserted jurisdiction over this technology, often at cross purposes with one another. Given the fluidity of the current regulatory guidance related to blockchain's many applications, it is important to carefully identify the potential legal risks of implementing blockchain solutions. Blockchain presents an attractive alternative to many antiquated business processes and the long-term success of blockchain's applications will depend, at least in part, on how companies engage with regulators and lawmakers during these exciting early years of blockchain's development.

Scott Kimpel is a partner, and Mayme Beth Donohue an associate, in the corporate practice of Hunton & Williams LLP. Scott leads the firm's working group on blockchain and distributed ledger technology.