Why finance executives should care about blockchain

Businesses must prepare as the digital ledger for cryptocurrency and wide swaths of documentation gains mass acceptance.

Blockchain, to invoke a Churchillian turn of phrase, often seems to accountants like a riddle wrapped in a mystery inside an enigma. The technological aspects of it are tough enough to understand without a computer science degree. But where it really gets perplexing is its potential: Some argue that it could completely transform finance and auditing, while others are decidedly more circumspect regarding its impact.

So maybe it's not surprising that blockchain awareness and understanding vary significantly: A 2017 blockchain survey by Deloitte found that nearly 40% of surveyed senior executives have little or no knowledge about blockchain, while other executives place it among their company's highest priorities for 2017. It's unusual for something that so many consider so important to be such a mystery to so many others in the same field.

While it's understandable that financial executives would cast a cautious, even skeptical, eye at blockchain, finance departments in all fields—not just those related to investment and banking, for example—need to get up to speed on the technology. "Most people assume that to the extent big companies are active in blockchain, they are financial services firms," said Deloitte LLP Managing Director David Schatsky. "But the survey confirms that there is significant activity in health care, technology, media, and telecommunications, and in consumer products and manufacturing."

What is blockchain?

So what do CPAs need to know? Let's begin with the basics.

First, blockchain is a digital ledger of economic transactions that is fully public, continually updated by countless users, and considered by many impossible to corrupt. It is a list of continuous records in blocks.

A blockchain database contains two types of records: transactions and blocks. Blocks hold batches of transactions. The blocks are time-stamped and link to a previous block. The blocks cannot be corrupted because the transactions cannot be altered retroactively.

It is also possible to program the blockchain to record transactions automatically. The monetary value of those transactions is usually measured not in U.S. dollars, or any other standard centralized currency, but in cryptocurrencies—that is, digital currencies that are not controlled by a central bank. Think of blockchain as the rails that bitcoin and other cryptocurrencies ride on. (To learn more about blockchain, check out these articles by Harvard Business Review and PCMag.)

Why should you care?

Here are five reasons finance executives should care about blockchain and its potential:

1. **Blockchain is much more than bitcoin.** While many people in finance departments might mistake the mysterious and often volatile bitcoin for blockchain, they are two very different

things. While invented to help transact bitcoin, blockchain is the digital global ledger that not only records cryptocurrency transactions, but also provides a home for documents of all sorts. "Everything from property deeds, to birth records, to money such as bitcoin and various alt-coins, resides on a blockchain backbone," said John Callahan, Ph.D., chief technology officer with Veridium, a company that specializes in advanced security technology. In fact, he described blockchain as "part of the iceberg beneath bitcoin."

2. **Blockchain could reshape the business of record keeping, and business itself.** Learning all you can about blockchain "is a worthwhile investment of time for finance professionals," said Jon Raphael, CPA, chief innovation officer at Deloitte. "As scalable applications are deployed—and if they live up to their potential—blockchain will profoundly change how records are kept and transactions are processed." Those applications could yield a wealth of structured data from new sources, meaning "the impact of how the ledger will be compiled is potentially immense."

3. **Blockchain is growing—fast.** Research firm MarketsandMarkets forecasts that the blockchain market will grow vigorously, with a compound annual growth rate above 60% through 2021 that will take it from $210 million to $2.31 billion. "The excitement around blockchain continues to gain momentum as firms see it as an opportunity to get their feet wet with a transformative computing architecture that they believe will change the [accounting] industry," said Selwyn Halbertsma, director, business consulting at Synechron, an IT and consulting company.

4. **Finance executives are lagging behind their peers.** Deloitte's survey reports that about 60% of big company executives said they were knowledgeable about blockchain. Raphael said that the time has come for finance leaders to step up, as "blockchain awareness is increasing due to publicity about the amount of investment, interest in financial technology innovation, and predictions of the impact blockchain will have."

5. **Blockchain is becoming a powerful way to do business.** Because blockchain allows for the transacting and securing of digital data, it is beginning to realize its potential to aid in a wide range of areas, from compliance to data management. "It will bring enormous efficiency in business transactions besides making them military-grade secure," said Nitin Narkhede, vice president and head of blockchain and innovation at Mphasis, a digital IT services company. "Hence, there is massive interest in experimenting with the technology and applying it in every business process."