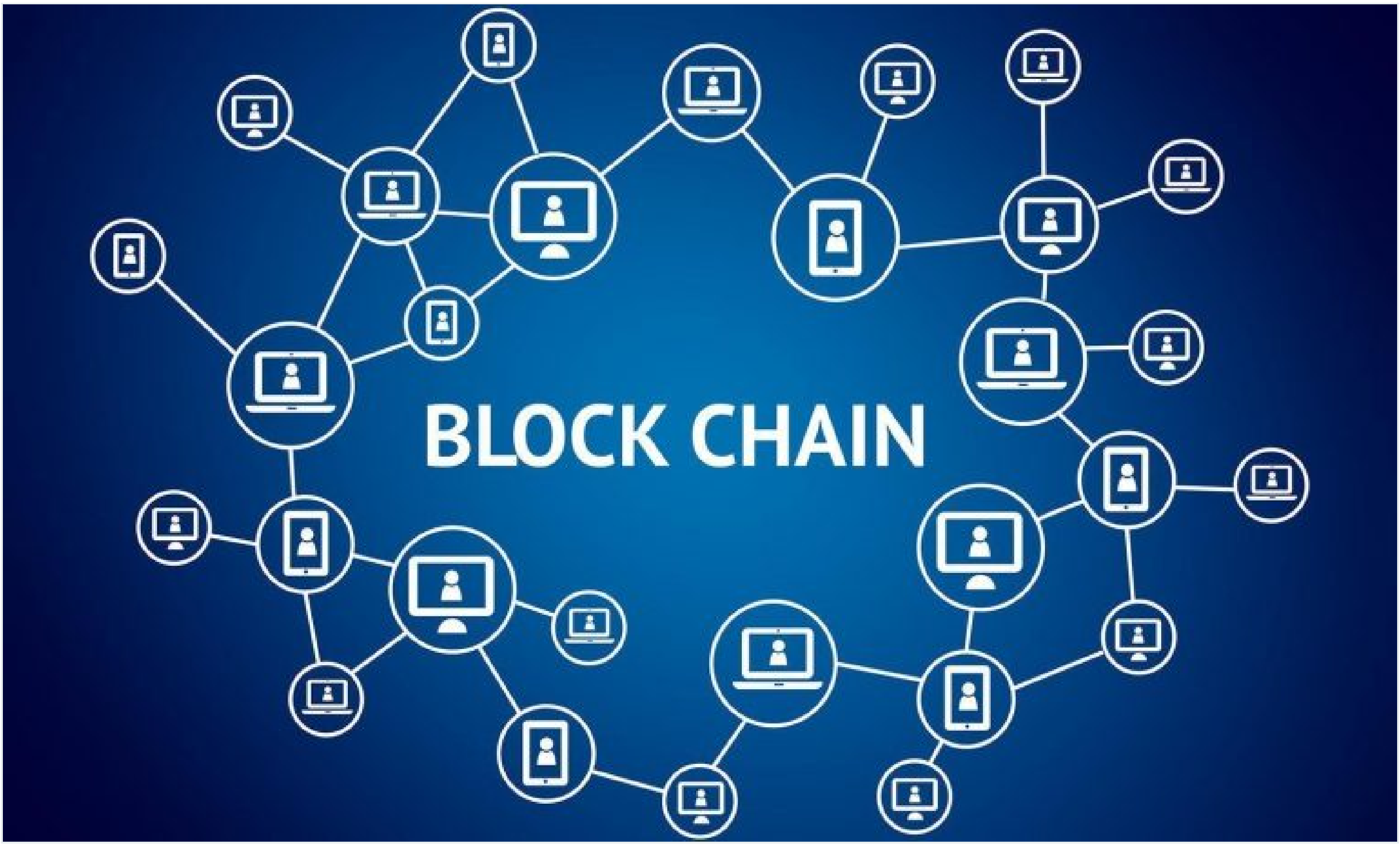
involvement in a blockchain project, according to PwC's 2018 Global Blockchain Survey.

David Deputy • Dec. 17, 2018



Eighty-four percent of executives say their companies have at least some involvement in a blockchain project, according to PwC's 2018 Global Blockchain Survey.

Blockchain has evolved beyond the distributed ledger for cryptocurrency transactions alone. It has become a powerful, coveted technology that maintains assets and property rights, and disrupts operational frameworks across industries.

Large enterprises are incorporating it into their infrastructures to secure and store

Double-entry accounting has revolutionized and become the standard of bookkeeping. By definition, it recognizes the interplay between organizational assets as well as liabilities and equity to create an accurate fiscal view of an entity. Blockchain builds on fundamental accounting principles so financial assets are shared and transmitted to counterparties quickly via a shared, trusted ledger. All transactions are recorded in a distributed, public or private ledger that cannot be altered, resulting in a trustworthy audit trail. Also, multiple participants can validate all transactions against the digital identities and rules in a blockchain network, which eliminates challenges around validity and multi-party reconciliation.

This doesn't mean blockchain will eliminate the need for CPA services. However, the nature of their work will change. CPAs will have to master blockchain to get their work done, like spreadsheets before it.

Accounting and tax advisor knowledge remains critical, but will require an understanding of the software networks that attest to the integrity of transactions. Accountants must focus on valuation, market volatility and regulatory compliance to help clients investing in digital assets stored on blockchain-based systems. They will also need to prove the existence of the account and test the client's ability to access and control the asset.

For example, if a business maintains custody of its digital assets, issues may arise with internal controls, as well as proof of existence and access. By holding private keys, which are sentence-long strings of random digits, the business can initiate transactions from an account or send the balance elsewhere. To safeguard these keys, accountants can recommend risk mitigating approaches such as they split the string up and segregate access, using wallets that require multi-party signoff and using encrypted hardware to put them into physical "cold" storage. These are fundamental changes from traditional approaches to account control and signature authorization. CPAs will need to understand the meaning, strengths and weaknesses

efficiencies, either through joining a network sponsored by others or creating their own blockchain network. CPAs must review the rules in the form of smart contract code, evaluate the risks and governance around network participation and assess the internal controls of the client organization's interactions with blockchain networks. This means that the traditional work of many CPAs will begin to be supplemented with software that assures, monitors and manages internal controls and that is distributed among multiple parties.

Finally, as with any technology, flaws are likely to be found in blockchains. Bugs in smart contracts, and software like wallets that leverage and interact with them, might result in incorrect or unexpected results. Therefore, CPAs need to err on the side of caution.

The initial blockchain inquiries CPAs see today likely focus on accepting, holding or investing in bitcoin and other cryptocurrencies, and the tax principles that apply. Per 2014 IRS guidance, virtual currencies should be treated as property so capital gains are taxable and losses are deductible. This means those using alternative currencies need to keep a detailed transaction trail that notes when and at what value the currency was bought and sold.

To avoid compliance headaches, businesses should keep and trade digital assets on reputable exchanges with strong verification requirements, as challenges might arise with offshore platforms or for taxpayers that fail to report foreign bank and financial accounts.

As blockchain permeates the SMB market, customers will begin to seek advice on how to properly govern their fiduciary responsibilities while taking advantage of frictionless trusted transactions. How CPAs answer these questions will vary depending upon client industry, which makes it critical for accounting professionals and tax advisors to understand the basics of the technology, its influence and the

Accounting • Auditing • Digital Currency • Hardware • Technology