## BLOCKCHAIN: ADAPTING TO DISRUPTIVE TECH

In the relatively few years since digital currencies first began using blockchain technology, the array of potential applications has grown significantly – and continues to expand. *Dan Balla, Matthew Schell* and *Dave Uhryniak* from Crowe look at how it impacts accountancy

B lockchain's wider adoption is leading many accounting professionals to question how their firms should adapt to this potentially disruptive technology.

There is no single, universally agreed-upon answer to that question, but — beginning with a clear understanding of blockchain basics — it is possible to begin developing a roadmap firms can use in response. As defined in a recent whitepaper, a blockchain is a peer-to-peer, internet-based distributed ledger, created to capture transactions conducted among various parties in a network.

A key feature of blockchains is that every user (or 'node') on a blockchain has an identical version of the ledger, and all copies are updated automatically whenever a new transaction occurs. Once a transaction is entered, it cannot be changed or deleted.

This feature has led some to question the value – or even the need – for audits when blockchain technology is employed, but such concerns seem premature, at the very least. As the AICPA whitepaper points out, the acceptance of a transaction into a reliable blockchain might be sufficient evidence for certain financial statement assertions, but it does not necessarily provide sufficient evidence of the nature of the transaction.

For example, a transaction that is accurately recorded in a blockchain still could be unauthorised, fraudulent or illegal. It could be executed between related parties or linked to a side agreement that is not recorded in the blockchain. And, regardless of its monetary accuracy, a blockchain transaction still could be incorrectly classified in the financial

statements. In view of these risks, there will still be a need for assurance providers to verify the nature and validity of blockchain transactions.

But while the widespread adoption of blockchain technology does not spell the end of audit and assurance practices, it likely will have a material impact on the way audits are conducted. Specifically, the nature of audit evidence and the methods that auditors use to validate data and information will need to evolve to accommodate blockchain transactions.

At present, most industry and professional groups are still in the 'watching' phase. That is, they are monitoring the development and application of blockchain closely, recognising that they might need to provide interpretive guidance or revise audit standards to reflect its growing use.

## AHEAD OF THE CURVE

While the largest CPA firms are devoting significant resources to exploring blockchain technology, mid-size or smaller firms might question how they can respond cost-effectively, especially considering the absence of specific guidance. Regardless of size or resources, there are some basic steps accounting firms can take to prepare for the wider adoption of blockchain technology.

An important first step is for firms to understand how their clients are already implementing blockchain technology, or how they might do so in the future. Then they can begin to define the new risks that such implementations could introduce, identify appropriate controls, and consider how to audit and validate the effectiveness of those controls – the basic blocking and tackling of the profession.

Second, CPAs should recognise that blockchain transactions could have as-yet-unforeseen accounting or tax ramifications. Even without explicit guidance, accountants should start thinking about how these might develop – and how they would advise their clients to address them.

CPA firms can also can take several more proactive steps, beginning with the most fundamental success strategy: identify an underserved niche and fill it. In the case of blockchain, that means studying how this technology could be adapted to meet the specialised needs of those industries or functions that the firm specialises in serving.

For example, blockchain is most applicable to situations that need a permanent, auditable history, involve intermediaries, and require multiple users to access a database. The financial services and healthcare industries were among the first to recognise blockchain's potential application, but other industries also fit that description.

Another useful strategy is to establish a working relationship with a technology provider that can help develop industry-specific blockchain tools and auditing applications. At the same time, accounting firms also need to identify the new technical skills they will require, and then develop a plan for building these capabilities internally or recruiting the needed talent.

Finally, in addition to monitoring the work of standards-setting and professional organisations, firms of all sizes should join in taking an active role in one or more of the various blockchain industry groups or task forces such as the Chamber of Digital Commerce and the Accounting Blockchain Coalition, among others. Furthermore, many accounting, auditing, and issuance-related organisations, such as the AICPA, Chartered Professional Accountants of Canada, or other jurisdictional groups, are excellent starting places for relevant educational materials and working groups.

In addition to advocating for clear, internationally consistent standards, organisations such as these can help accounting professionals stay abreast of events.

Ultimately, the most successful firms will be those that look beyond merely keeping up with blockchain developments, and instead look for ways to identify and capitalise on the opportunities this new technology offers.