BLOCKCHAIN & INDIRECT TAX

Bitcoin is everywhere. Over the past few years stories about cryptocurrencies, the millionaires they have made, and their volatility have been inescapable. Bitcoin, though, is only the thin end of the wedge.

Blockchain is the technology on which Bitcoin and other cryptocurrencies operate: a massive database of transaction records – called "blocks" – linked together and time-stamped using highly secure cryptography.

> "Blockchain is the tech. Bitcoin is merely the first mainstream manifestation of its potential."
>
> Marc Kenigsberg, founder of *Bitcoin Chaser*

From an accounting perspective, blockchain is an open, distributed ledger. Instead of a traditional ledger system where each party creates and keeps their own records of a transaction, a blockchain-based system means that each party – all of whom are vetted before being granted access to the network – submits transaction data to the blockchain.

This data is then verified by the other participants in the network. If that data is authenticated by a majority of network participants (often referred to as "nodes"), it is time-stamped, added to the chain, and it cannot be amended. Each subsequent transaction is added to the existing data, and so the blockchain grows.

Ultimately, blockchain technology helps to create one inviolable record of what has happened within an economy, an industry, a sector, or whichever parameters the network participants decide to set. Blockchain establishes who is trading what, with whom, when, where, and for how much.

Unlike local ledgers, which could be stored on far-distant and potentially incompatible operating systems, or even on paper, this blockchain-based ledger is instantly accessible by anyone who needs it and who has permission to access it.

With blockchain, business can be done quicker and more securely; better and more accurate business records are created; and those records are stored and protected by the security measures inherent in blockchain technology.

At PwC, we believe that blockchain will solve a number of key problems for indirect tax.

> "Blockchain will change a great deal of financial practice and exchange… Forty years from now, blockchain and all that followed from it will figure more prominently than will Bitcoin."
>
> Larry Summers, former U.S. Secretary of the Treasury

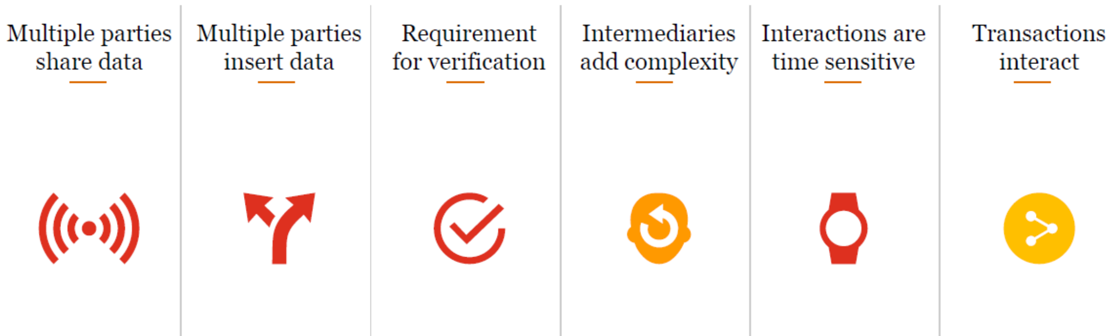
WHO COULD USE BLOCKCHAIN?

Blockchain can be used by any type of business in any sector, but moving onto blockchain-based systems will benefit some businesses more than others.

In order to identify such businesses, we at PwC have a basic six-point checklist.

If a business can answer "Yes" to any four of the following six questions, we believe that blockchain could dramatically improve the efficiency and security of that business:

- Do multiple parties share transaction data?
- Do multiple parties input transaction data?
- Is verification of transactions required immediately?
- Do intermediaries involved in transactions add complexity?
- Are transactions time-sensitive?
- Do multiple transactions interact?



All six of these triggers can be found in the world of indirect tax, so what can blockchain do for its specific problems?