



## BLOCKCHAIN: A SILENT UPHEAVAL

🕒 April 2, 2017   📍 Local Business

**By Spyros Papavassiliou**

It's a relatively new technology that could revolutionise the way transactions are made, and tech experts are just now figuring out what it is, and what it can become. Oddly, while its application could alter industries, it may not even become known to the average consumer.

It's called blockchain, and though it was originally devised for the digital currency Bitcoin, the tech community is just now finding other potential uses for the technology.

The best way to think about blockchain is by visualising it as blocks of data which are linearly and chronologically ordered, and non-alterable retrospectively. It has also been described as a digital ledger, with each block corresponding to a page.

Blockchain allows for digital information to be distributed to various nodes (computers connected to the Bitcoin network), so it cannot be controlled by any single entity. In addition, data stored in a blockchain is public, since it is embedded within the network as a whole.

To gain some perspective on blockchain and its implications, the Cyprus Weekly spoke with advocate Anastasios Antoniou of Antoniou McCollum & Co, a top-tier Cyprus law firm specialising in commercial and corporate law.

Antoniou has considerable experience dealing in novel legal challenges in all industries, revolving around data protection, digital law, regulatory issues, and commercial law more broadly.

“Put simply, the theory behind blockchain is that we decentralise transactions. To remove the need and the existence of intermediaries between transacting parties,” says Antoniou.

Antoniou offers the example of a bank acting as an intermediary between transacting parties, serving to handle and clear funds in bank account they offer.

“Blockchain aims to eliminate that,” Antoniou says.

Antoniou offers another example that is closer to home: the elimination of a lawyer as an intermediary.

“For example, acting as an escrow agent, which is a lawyer holding funds on escrow for other parties until the transaction finishes. That function will also become redundant; it is envisaged, at least.”

Blockchain is essentially a database that will run on millions of terminals of computers around the world, and participants in a specific context of a transaction will actually be drawing from that database to verify their transaction in a permissionless manner, says Antoniou.

“There’s many takes on this but, put simply, we’re talking about creating system which is decentralised, permissionless and allows the verification of transactions without the need for an intermediary,” Antoniou explains.

What is particular odd about blockchain is that its application may not be visible to the end-consumer.

“It’s important to note that when blockchain technology is fully implemented, I don’t think most of us will really know. Because it will be embedded in transactions taking place today as we know them,” says Antoniou.



Offering another example, Antoniou explains: “When you pay for something online, you have so many intermediaries. Those intermediaries, including in some cases your credit card-processing intermediary, could be eliminated. The end-consumer may not know, or they may do, it depends on how blockchain technology is eventually deployed.

“My best guess at the moment is that most blockchain applications will not be instantly recognisable to consumers,” Antoniou offers.

How blockchain ends up being applied also depends on the legal framework that may be put in place. Antoniou says there is an initiative in the European Parliament to legislate on blockchain, which he says could end up being redundant or impede the technology’s development.

“Blockchain is supposed to be left alone and be developed, exactly because it is destined to be an open-source situation and that is how we have that impenetrable element,” Antoniou says.

“Each transaction creates a block. That block created by each transaction is not amendable retrospectively.

"It perpetually sits in the chain, and that block is used in next transactions to verify those next transactions, and so forth. So it's like a tree of blocks being created and manifesting online, and facilitating commerce."

At the moment, there is no comprehensive application of blockchain outside the financial sector, says Antoniou.

"There are intended applications, and they have been identified, such as the escrow agencies I mentioned before. Even in financial services, it is not quite there."

Blockchain does another thing: it removes the human element, says Antoniou.

"So it aims to decentralise, have permissionless transacting, open source, self-verified, and remove the intermediary which are human beings at the end of the day. So that might be the most catalytic element, that it would remove human judgement in some cases."

Antoniou says that he does not know of anyone from Cyprus-based industries looking into blockchain to apply it. Whatever exposure Antoniou McCollum & Co has is through foreign clients looking into ways of deploying blockchain under EU law.

"Sometimes it has to do with how forward-looking your social-political-economic institutions are. There are central banks, such as those in Singapore, China or the United States, that are exploring blockchain, some of them even exploring a central bank currency based on blockchain," says Antoniou.

Asked about potential drawbacks, Antoniou gives a lawyerly response: dispute resolution.

"A smart contract which will be self-executed when the conditions are met, is an unknown creature to how conventional lawyers would perceive things. We don't have those solutions develop, we don't know what will happen."

Antoniou offers an excellent example: "If one party is in Europe and transacts with another party in Asia, and the server on which elements of the blockchain are situated is in the United States, we have multiple jurisdictions.

"So if something goes wrong in that transaction, if you ask me which jurisdiction's courts should hear that dispute, I don't have the answer to that. Because our current framework has not been designed to accommodate these situations.

"My guess is that the hype we have seen regarding blockchain will diminish in 2017, which in my view is a good thing. Because when we get to see it in action, we will form a more solid view as to how it fares in the real world," Antoniou says.