

POINT OF VIEW

BLOCKCHAIN: LOOKING BEYOND THE
HYPE OF BITCOIN





As a form of currency, Bitcoin continues to divide opinion across financial services, technology, politics and civil liberties groups. Some see it as a means to free currency control from centralised forces and central banks, while others fear it has already become a platform for criminality and black marketeers.

Despite these questions about the viability and suitability of Bitcoin as a currency, the underlying technology that enables Bitcoin to function – namely blockchain – presents us with a fundamental opportunity for the wider marketplace. This technology has the potential to improve security, processes and systems in the financial services sector, government and anywhere where accurate, tamper-proof record-keeping is essential.

Arguably, the greatest disruptor in a generation

Blockchain is arguably the greatest disruptor to the global financial system in a generation. While many technologies have changed banking, few have fundamentally challenged the operating principles underlying many banking transactions and book keeping. The clever mathematics and elegant structure of the blockchain means that all transactions involving intermediary chains can be collapsed down to an inherently trustworthy peer-to-peer connection between the counterparty institutions. What does this mean in practice? This great contraction reduces the overheads of everything from simple international money transfers to resolving complex derivatives contracts, and in many cases takes processes that once took weeks

to reconcile and reduces them down to just minutes.

Blockchain takes its lead from a number of computing paradigms, in particular distribution and cryptography. Existing ledger accounting in the financial services sector is usually in the form of a centralised and private database, not too different from the paper-based versions used a century ago. With blockchain, the ledger moves to an open and distributed record shared across the participant nodes in the blockchain. Each node maintains its own version of the ledger, and the network must collectively agree on the authenticity and correctness of transactions before carrying out an update.

This is made possible by using a mathematical consensus technique that removes the need to have a central

authority. Instead, the participants in the network collectively enforce trust and maintain the true state of the ledger: the greater the number of participants, the more robust the network and by being inherently suspicious, the network actually generates trust with each new transaction

Value generation – use cases for blockchain in banking

Blockchain has the potential to unlock tremendous value for financial services companies as well as individual account holders. By not requiring prior trusted relationships, or a chain of intermediaries to establish bona fides, transactions can be completed quickly while maintaining a very high degree of trust. Banks can reduce transactions fees and the opportunity cost of long settlement cycles.

Of course, any change to banking processes that reduces these types of operating costs can also impact the way the banks make money from processes and charges. By bringing this particular process cost down to a fraction of current levels, banks may need to restructure part of their revenue base to account for the change in admin-based revenue. Thankfully, blockchain also has a role to play in building new revenue-generating business models, as well as changing old ones.

Consider your average retail banking customer. Regulators in several markets, most notably the UK, are pushing to make accounts fully portable in order to simplify the process of moving banks and to encourage competition between established retail banks and new challenger banking businesses. In this liberated environment, transaction fees can no longer be the battleground for retention. Instead banks will need to focus on building sticky, personalised relationships with their customers.

Blockchain will enable this by both reducing the overheads, and also providing

a rich source of analytics inputs that can be combined with other social and personal information to give a uniquely personal digital interaction with the bank.

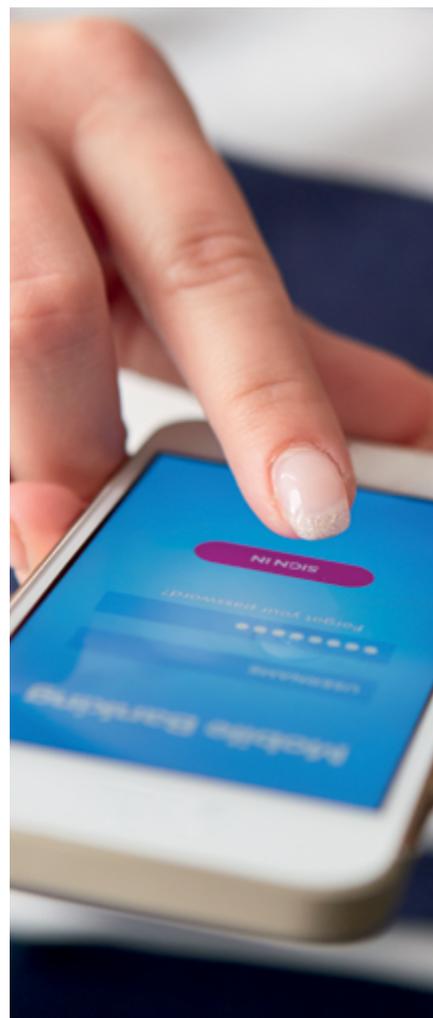
In time, banks may even build services on blockchain to manage digital wallets or even legal documents such as property deeds or wills. Governments in Latin America and Greece are already exploring how to move their land registries to blockchain, providing a roadmap for other governments to follow.

From a systemic point of view, blockchain will also enhance risk management at a macro level. Blockchain maintains a transparent record of all transactions, making it much easier to unwind complex transactions back to constituent components, and as a result actively manage risk. In many ways, had such techniques been available at the time of the global financial collapse in 2008, the systemic failures could have been detected and avoided before the meltdown took place.

The measures introduced in the wake of the collapse place additional regulatory and compliance overheads on institutions, and so systems which are inherently trustworthy and transparent would be a huge enabler of value.

Blockchain has the potential to create a highly competitive marketplace for trusted accounting and transaction bookkeeping. At a pure financial services level, it lowers cost and improves security and accuracy of trades. Up to a government and administrative level, blockchain has the capability to allow departments to significantly overhaul and simplify complex transaction-driven systems including land sales, property deals, government debt deals and more.

Developing blockchain strategies is without doubt one of the most significant considerations for the rest of the current decade.



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