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INTRODUCTION





INTRODUCTION

B lockchain technologies are of the biggest innovations of the 21st century given the ripple effect it is having on multiple sectors and creating breakthrough use cases in finance innovative applications for a range of business functions. Cryptocurrencies as a new, indigenous digital asset class with no central authority and their underlying blockchain technology, are the next-big-thing in digital transformation. The financial sector is the first disruptor to fully embrace distributed ledger networks and transform established financial institutions by making operations more transparent, less vulnerable to fraud, and more cost-effective for end users. Decentralized technology is one of the leading innovations in the field and mitigates risk within the interconnected global financial system by applying advanced cryptography that is truly resistant to hacking.



But where do cryptocurrencies come from? All crypto assets are software developed by code that determines absolutely every function associated with the cryptocurrency, from storing data and recording transactions to distributing rewards. In almost all cases, the code is public and transparent to the nodes

of the network, hosted on individual computers around the world rather than on a central server. Transactions are stored in a special type of secure database, the blockchain, which acts as the ledger of all coded transactions.

Once a new block is entered into the blockchain, no one can change it in the database without meeting certain requirements, and everyone can see the public record of all transactions without losing their anonymity. Cryptocurrencies are generated by algorithms based on cryptography and written to issue tokens to computers that add transactions to the blockchain. This process is also known as 'mining'. Miners use specialized hardware and the decentralized software to add transactions to the entire network. In exchange for maintaining the system fully operational miners are paid with new cryptocurrency tokens, while most digital coins are created this way.





In other cases, cryptocurrencies can be produced by a deviation in a blockchain called a 'hard fork'. These occur when blockchain protocols change so a new, unique branch is appears on the chain that is incompatible with the old chain. Bitcoin Cash, for example, was made through a hard fork on the original Bitcoin blockchain.¹

There are numerous ways to leverage blockchain capabilities, beyond record keeping activities and trading. As the corporate world is more interconnected with the advent of digital transformation, investors deal with new challenges that require a deeper understanding of how new emerging technologies can reshape businesses and how to obtain and regulate financial exposures. Below is what stakeholders should know about the growing role of blockchains in the financial industry, from tech-savvy unicorns to traditional institutions:

- What is the blockchain and its relationship to cryptocurrencies?
- What are the most profound benefits for financial services?
- Are there any potential risks that banks and financial firms could face?
- What are the best investment areas to bet on?²

The value of crypto assets today is tied to speculative purchases rather than actual use cases. The acquisition of digital assets without a central authority to regulate it, poses a threat to traditional banks and has a direct impact on national currencies, especially in countries with troubled central banks. In Venezuela, for example, people who stored their savings in crypto had greater protection against rapid currency devaluation.

Of course, digital coins have their own risks and fluctuations, but since they are not managed by a central bank, more and more players are turning to this solution for financial stability and transparency. Businesses are expected to implement private blockchains to improve the traceability of their supply chains and internal operations and introduce clearer standards for some high-profile projects, while research and development will focus on investing in more scalable public ledgers.



Any financial operation with low transparency and limited traceability is vulnerable to disruption from blockchain applications.³





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