New Horizons®
Computer Learning Centers

THE BENEFITS OF BLOCKCHAIN

Blockchains are proving to be key in a world where everything is moving to a digital platform. From improving processes where people need to access, verify, send or store information securely, this system of organizing and storing information ensures several benefits.

SECURITY
It is a fundamental cryptological law that it is relatively easy to set a problem that is very, very difficult to solve. What is relatively easy for a network of computers to do is, in practice, impossible even for much larger networks to undo.

IMMUTABILITY
Since multiple copies of a blockchain are kept and managed by consensus across a peer-to-peer network, no one peer can alter past transactions.

RESILIENCE
The distributed nature of the ledger makes it resilient. Even if many peers go offline, the information is still accessible.

VERIFIABILITY
The combination of transparency and immutability also allows us to satisfy full public verifiability: anyone in the world can check for themselves that the rules of the system - in the case of digital currencies, that coins should be spent only once - are being followed. While information cannot be manipulated, it can be easily verified thanks to the size and power of the network.

TRANSPARENCY
The fact that all transactions are broadcast to all peers also makes the ledger transparent. However, the encrypted nature of the transactions means that privacy is also assured.

Blockchain technology brings a priceless asset to IT that has been sorely missing: Trust.

These benefits can be tuned, and blockchains tailored to their specific functions to ensure that issues such as privacy, accountability, and transparency are tightly managed. Taken individually, these benefits would mark the blockchain technology as an extraordinary system. But it's when we consider how these benefits combine that the technology's truly transformative potential is revealed.

Source: "The Future is Decentralised." Nicolas Cary and Sarah Meiklejohn, Blockchain.com, 2018.