

DEMYSTIFYING BLOCKCHAIN



WHAT IS IT?

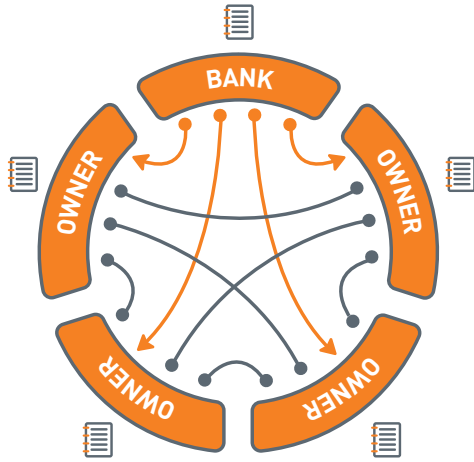
A blockchain is a form of a decentralized, digital ledger where a record of each event or transaction can be shared simultaneously across a network of computers to every participant.

Each participant in the network has an identical copy of the ledger to which they can add encrypted transactions, and, because it is decentralized, all participants are able to validate transactions while no longer having to rely on a single central authority.

The end result is a highly efficient and secure method of performing transactions.

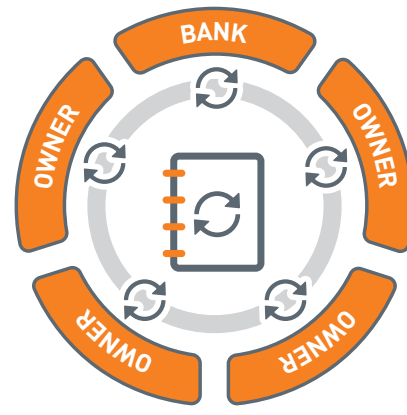
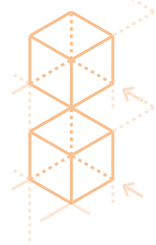
TRANSFORMATIVE POTENTIAL
BEHIND THE BUZZWORD

TRADITIONAL VERSUS BLOCKCHAIN



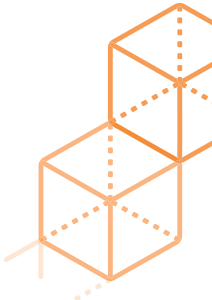
TRADITIONAL SYSTEMS

Transactions are recorded in multiple ledgers, each held by a single party, reflecting one moment in time.



BLOCKCHAIN

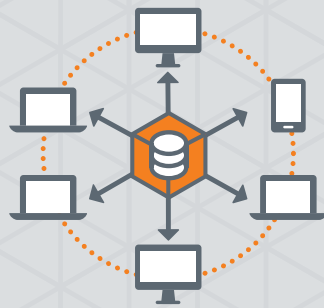
Transactions are shared and updated in near-real time by a group of participants.



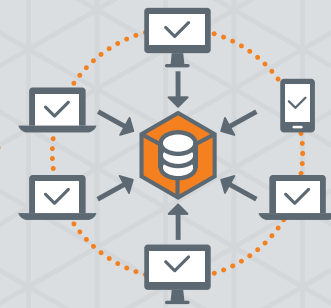
HOW DOES IT WORK?¹



A transaction is requested



The request is sent to a network of computers (nodes)



The nodes validate the transaction and the user



The transaction is combined with other data to create a new block of data that can't be altered



The block is added to the existing blockchain



The transaction is complete

UNLOCKING THE FULL POWER OF BLOCKCHAIN



DISTRIBUTED NETWORK

Leverages a distributed network of computers sharing and "hosting" the exact history of activity, transaction data



SINGLE SOURCE OF TRUTH

Provides a single, consistent and shared view of the state of a business process



PROVENANCE

Establishes provenance, or a record of an entire transaction, workflow



SECURITY/ PRIVACY

Enhances security and privacy through encryption



IMMUTABLE RECORD

No one has unilateral power to edit transactions



"SMART" CONTRACTS

Automate transaction execution and integrate workflows

READY TO HELP

PNC is among the leading banks taking an active and growing interest in blockchain. For more information, contact your Relationship Manager or [contact us here.](#)

¹ The chart illustrates one of the many process flows and applications of this technology.