

# Transactions and Distributed Ledger Technology

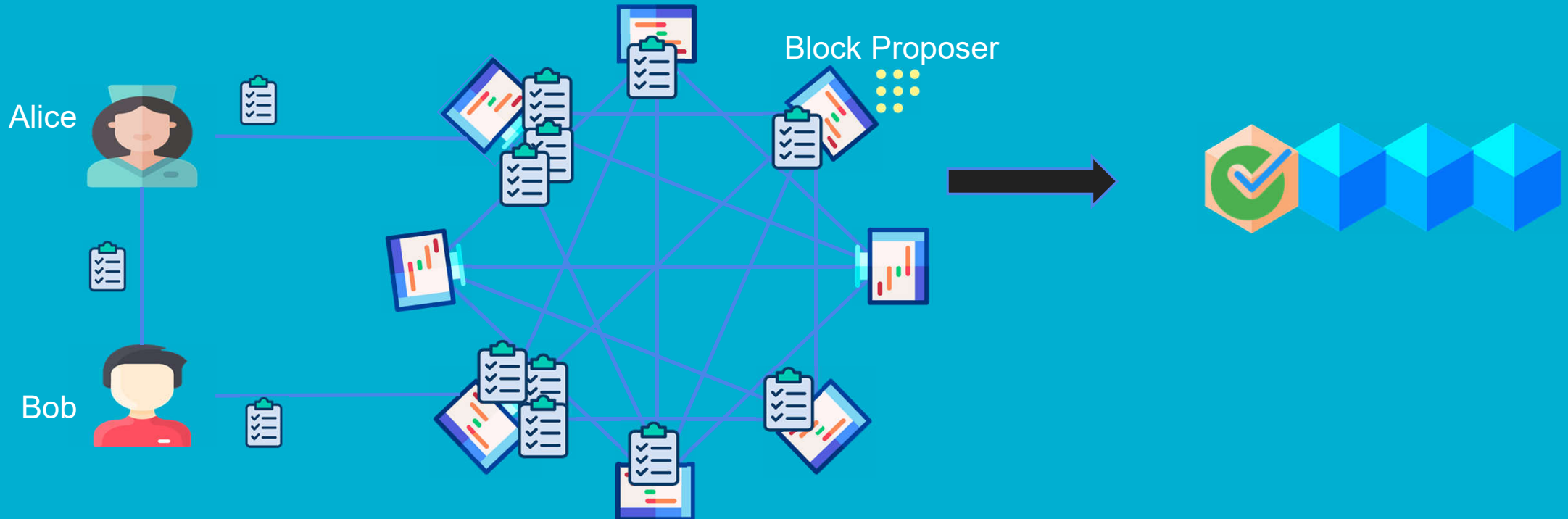


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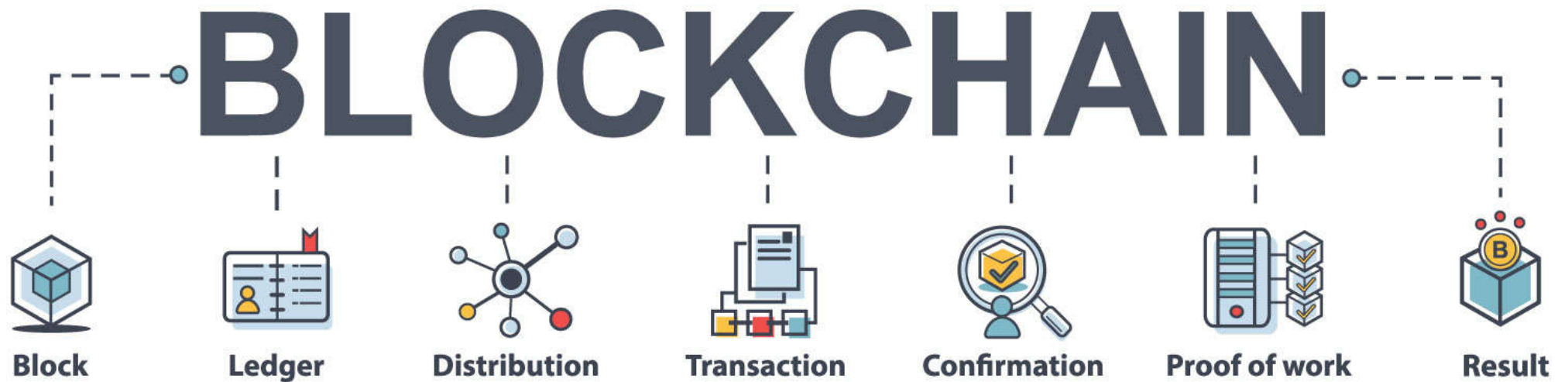
Indian Institute of Technology (IIT) Jodhpur  
॥ त्वं ज्ञानमया विशानमयोऽसि ॥

# Consensus Algorithm

It is an general agreement between all the participating nodes in the network.



# Blockchain Process



# Transaction execution in Blockchain

A Blockchain normal node  
(e.g., computer or mobile),  
create transaction

The transaction broadcast to  
network of all P2P miner  
nodes

Nodes verifies  
the transaction  
using public key  
cryptography

Verified  
transaction, and  
linked to other  
transaction to  
create new  
block

New Block is  
appended  
into existing  
blockchain

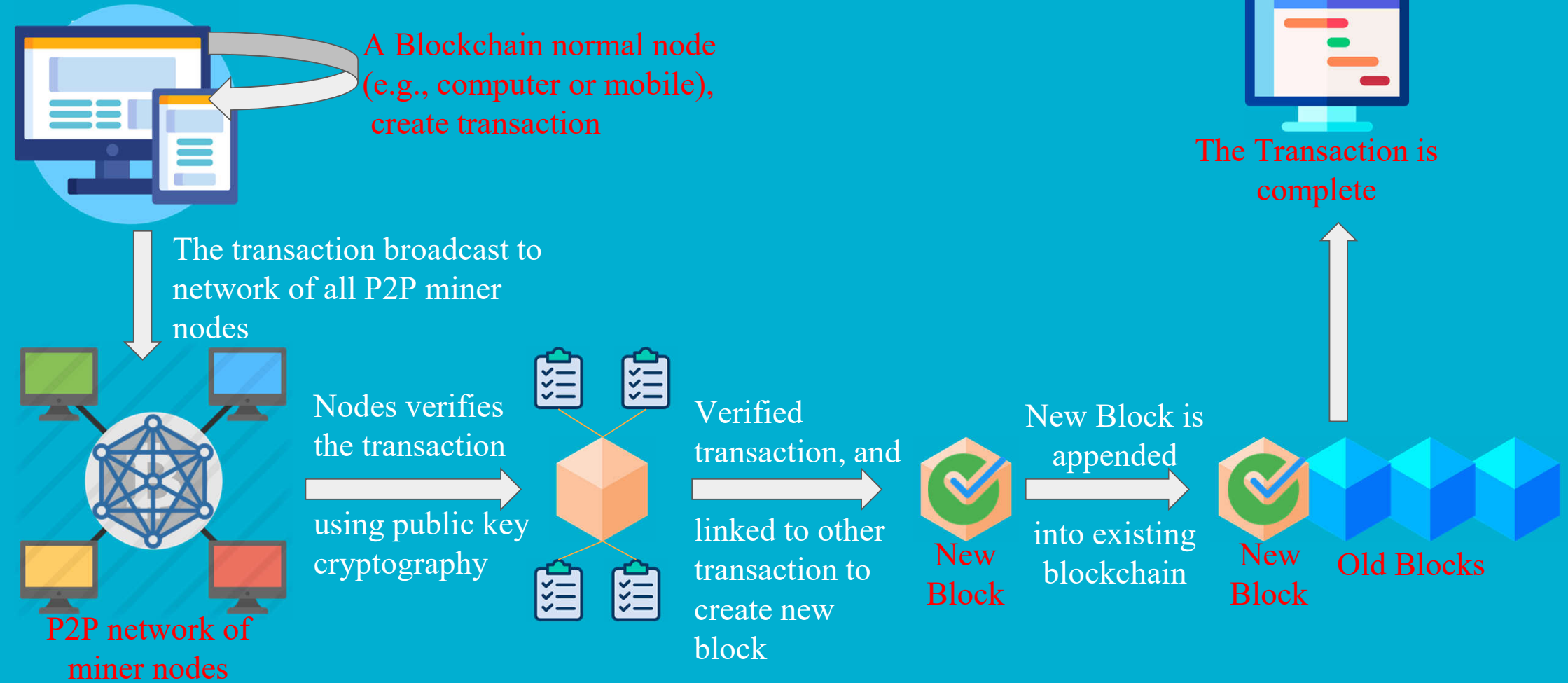
The Transaction is  
complete

P2P network of  
miner nodes

New  
Block

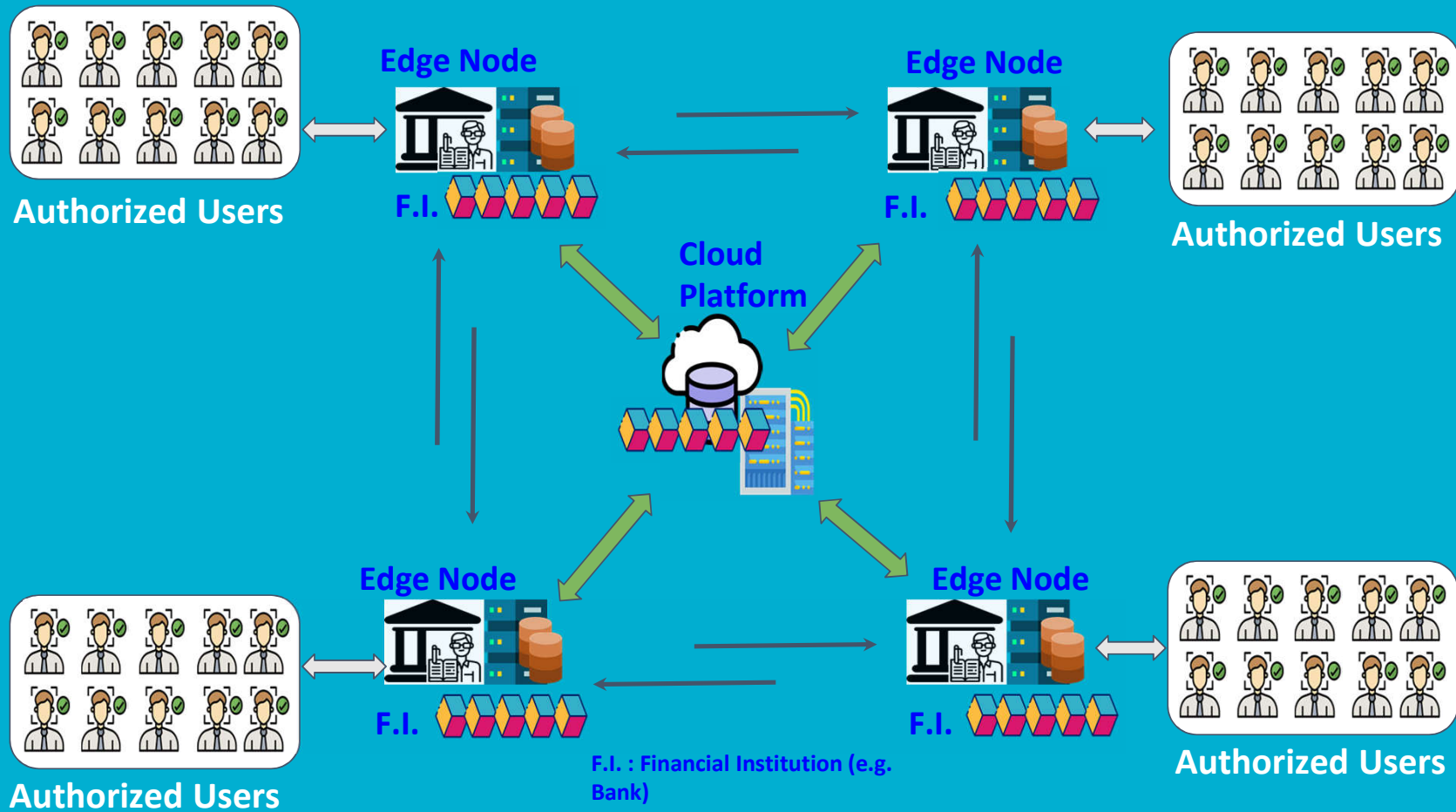
New  
Block

Old Blocks

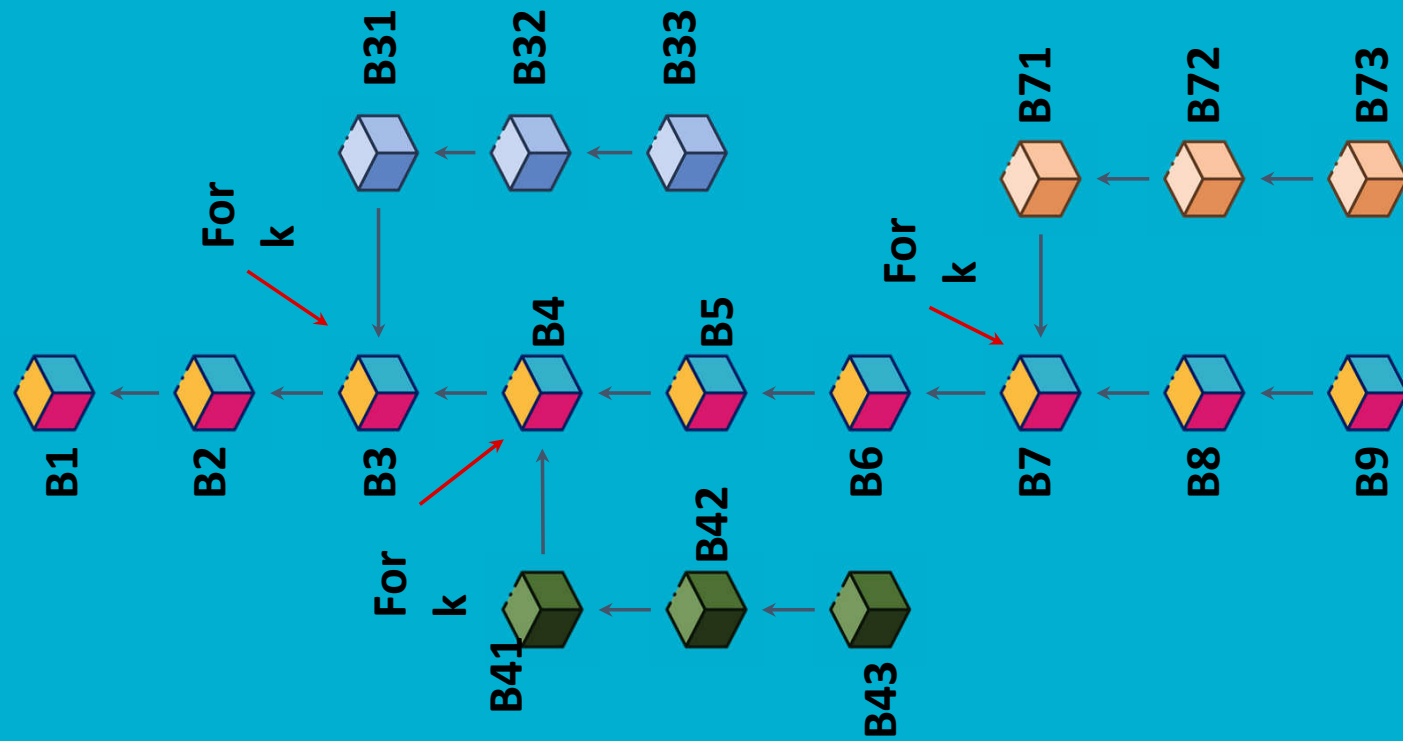




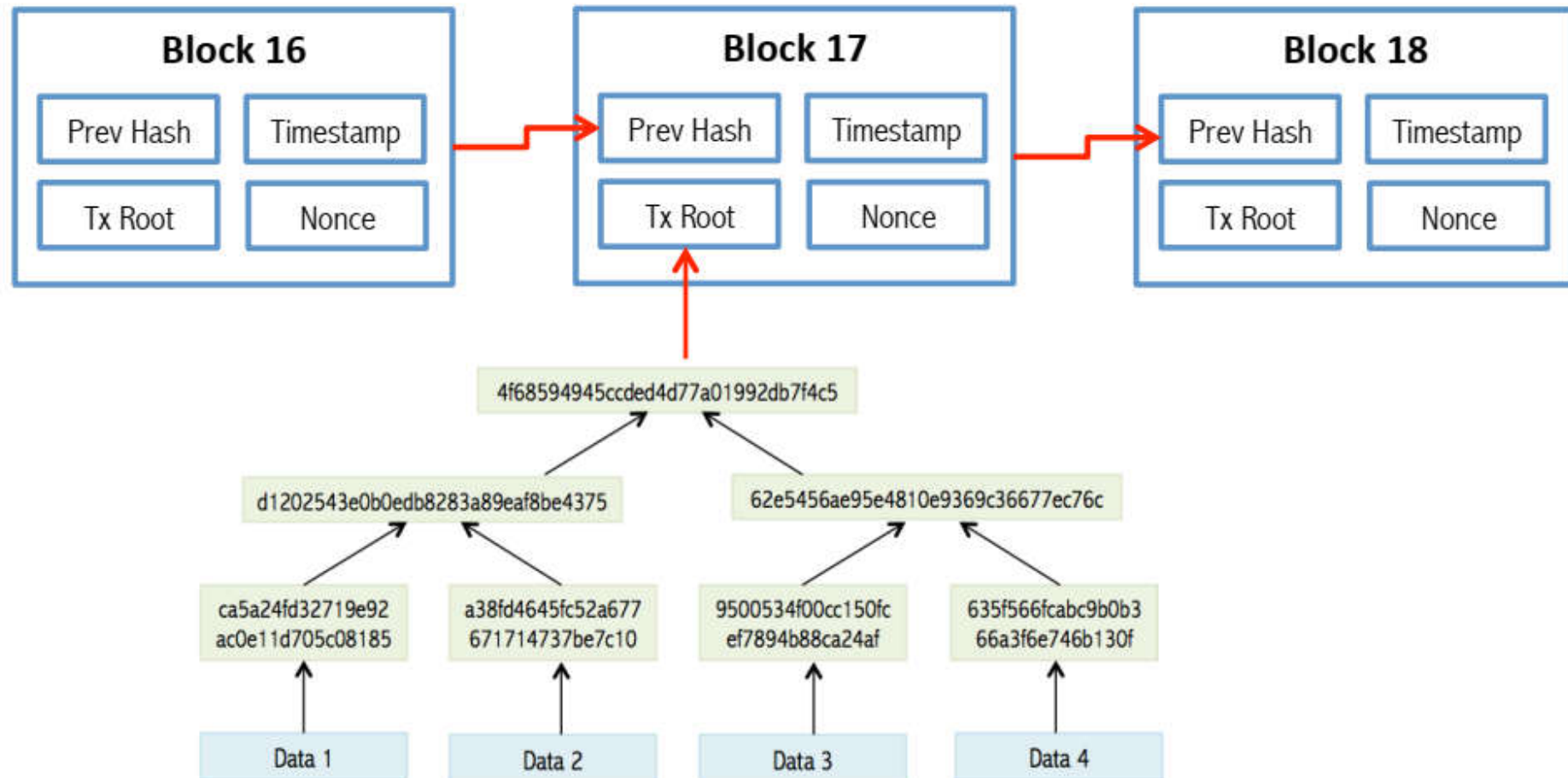
# Edge-Cloud Architecture



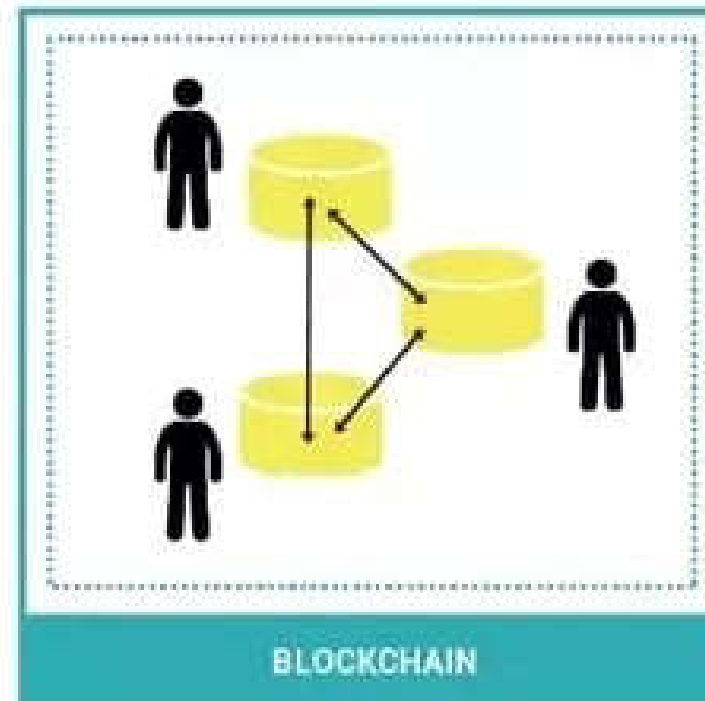
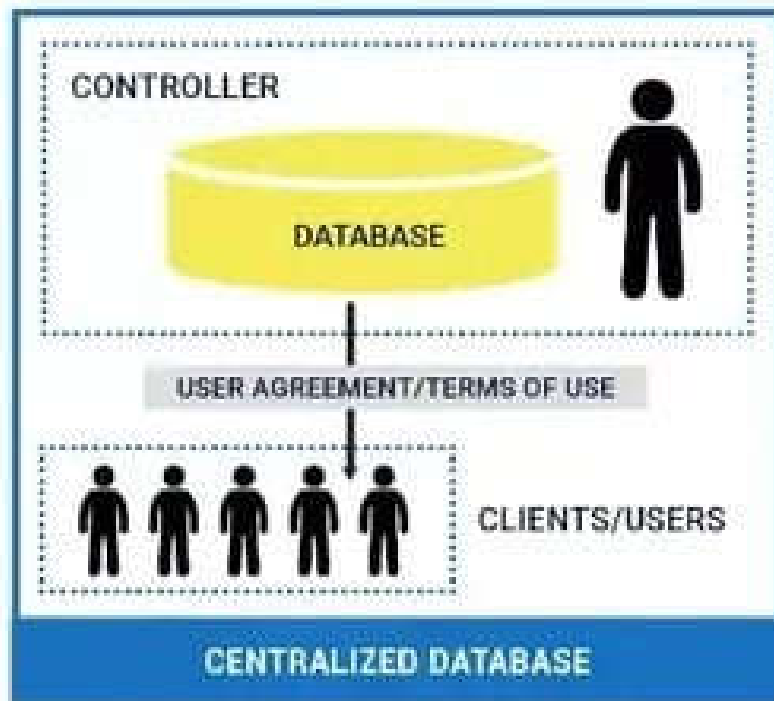
# Structure



# The data structure of the Bitcoin Blockchains

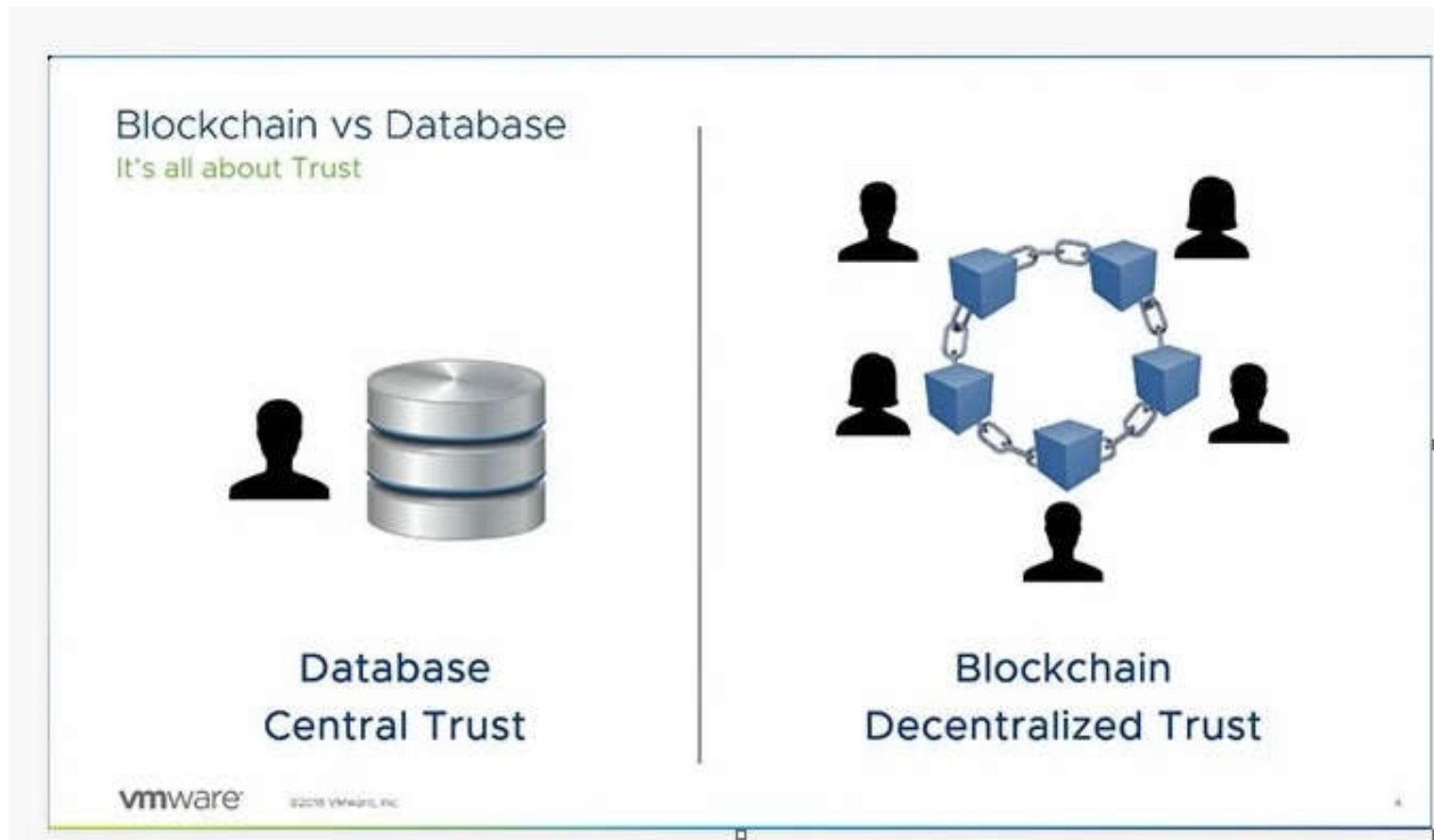


# CENTRALIZED DATABASES VS. BLOCKCHAIN





# Blockchain Decentralized Trust



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# Thank you!