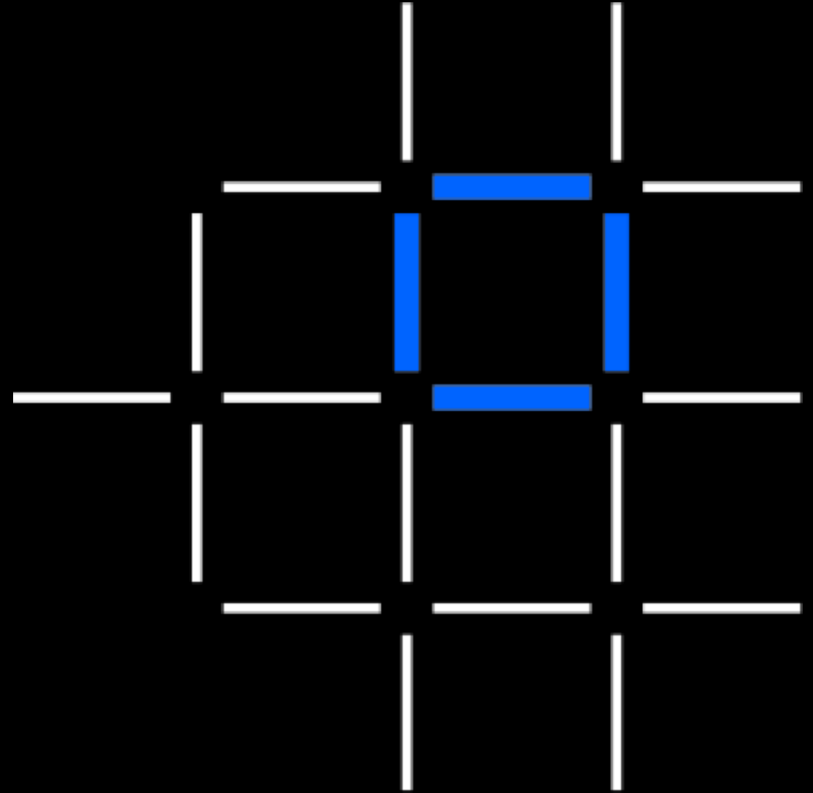


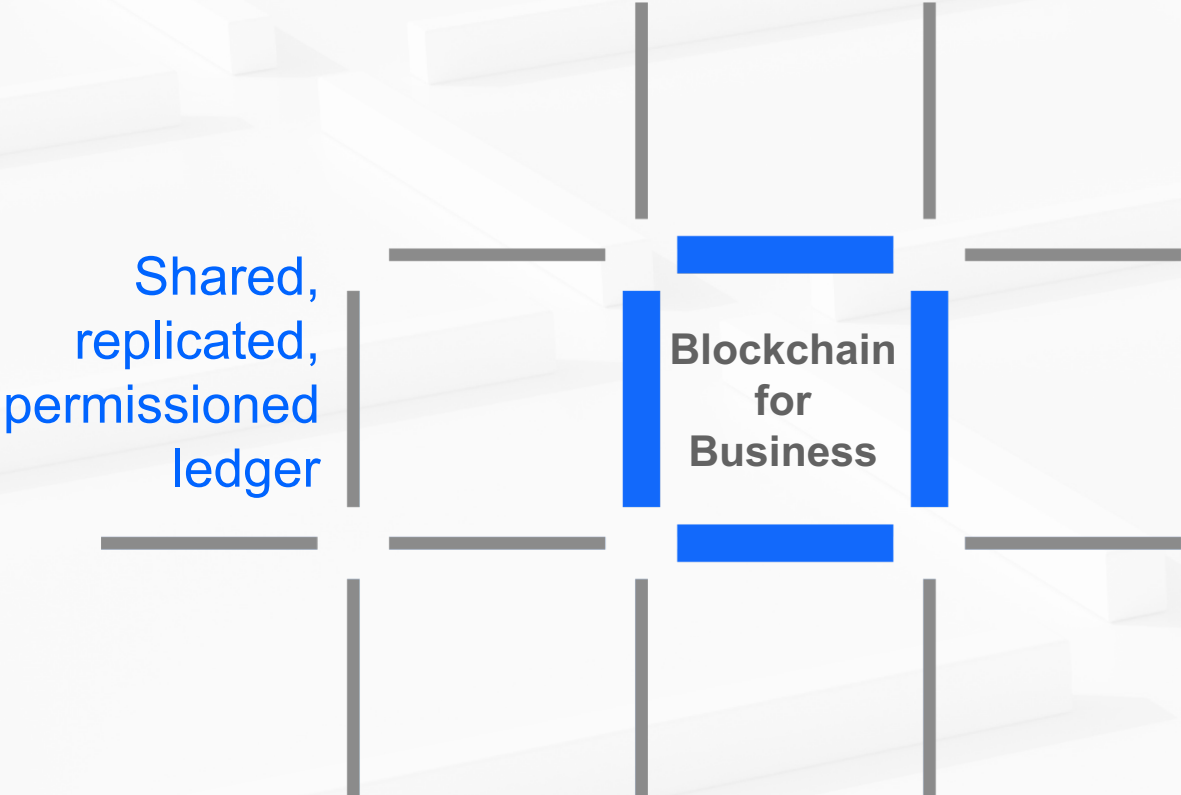
# Blockchain

An Introduction to Blockchain for Business

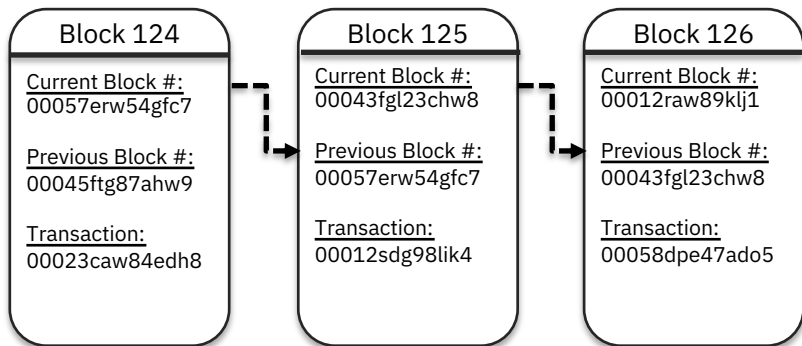
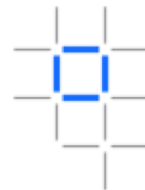
*Christopher Westwood*



# Introducing Blockchain for Business...



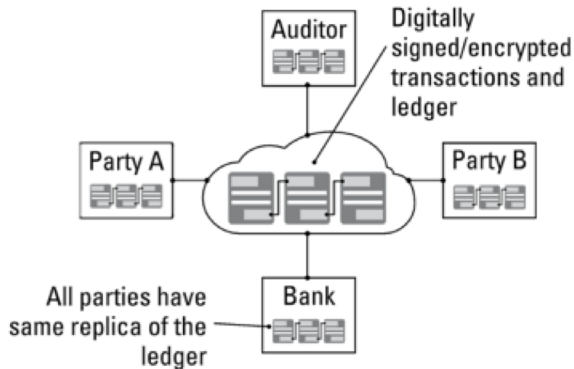
# What is Blockchain? – Lower Level

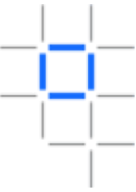


Blocks of information are linked together using ‘hashes’ where each block references the previous block to form a chain

These blocks are digitally signed and encrypted and make up the ‘ledger’

The ledger is replicated and distributed amongst the participants creating a ‘shared ledger’





## What?

- Track diamonds across supply chain from mine to retail

## How?

- Shared ledger for storing digital certification with supporting material

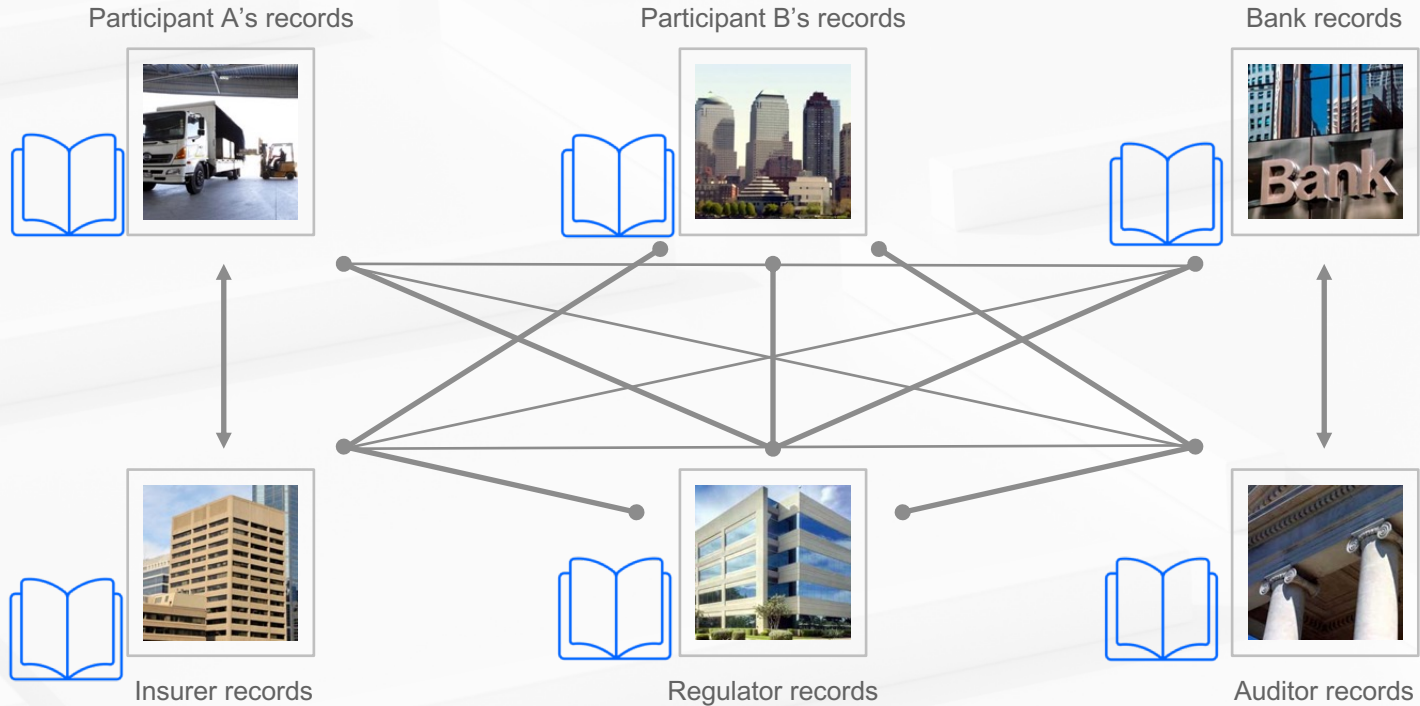
## Benefits

- Protect against the occurrence of fraud, theft, trafficking and black markets
- Assist in the identification and reduction of synthetic stones being labelled as authentic
- Increase speed of transparency for cross border transactions for insurance companies, banks and claimants



# Problem

inefficient, expensive, vulnerable



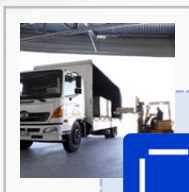
# Solution

A shared, replicated, permissioned ledger...

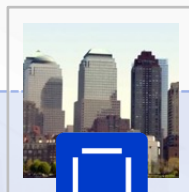
...with consensus, provenance, immutability and finality



Participant A's records



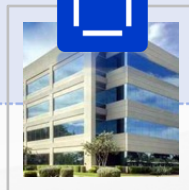
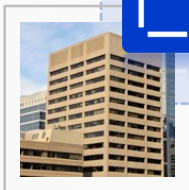
Participant B's records



Bank records



Blockchain















































Insurer records

Regulator records

Auditor records



# IBM is making blockchain real for business with cross-industry solutions and dozens of active networks.

<h2>Bank Guarantees</h2>					   														
<h2>Trade Finance</h2>					<h2>Clearing &amp; Settlement</h2>					<h2>Provenance</h2>					<h2>Unlisted Securities</h2>				
   					 														
  					<h2>Universal Payments</h2>					<h2>Global Trade</h2>					<h2>Healthcare</h2>				
  					 					  									
 					  					<h2>Identity</h2>									
					  					 									
 					<h2>Government</h2>					  					<h2>Distributed Energy</h2>				
																			



# Get started on your blockchain journey

## Start



Create or Join a network  
Prioritize the best use cases and networks for your business, and rapid development of a minimum viable network in 12 weeks or less.

## Accelerate



Commercialize your network  
Apply proven frameworks & expertise to address complex legal/ governance & operational challenges, & deliver a production network.

## Innovate





Extend a network  
Build business models & new applications through the integration with established networks & advanced technologies.


# Thank you

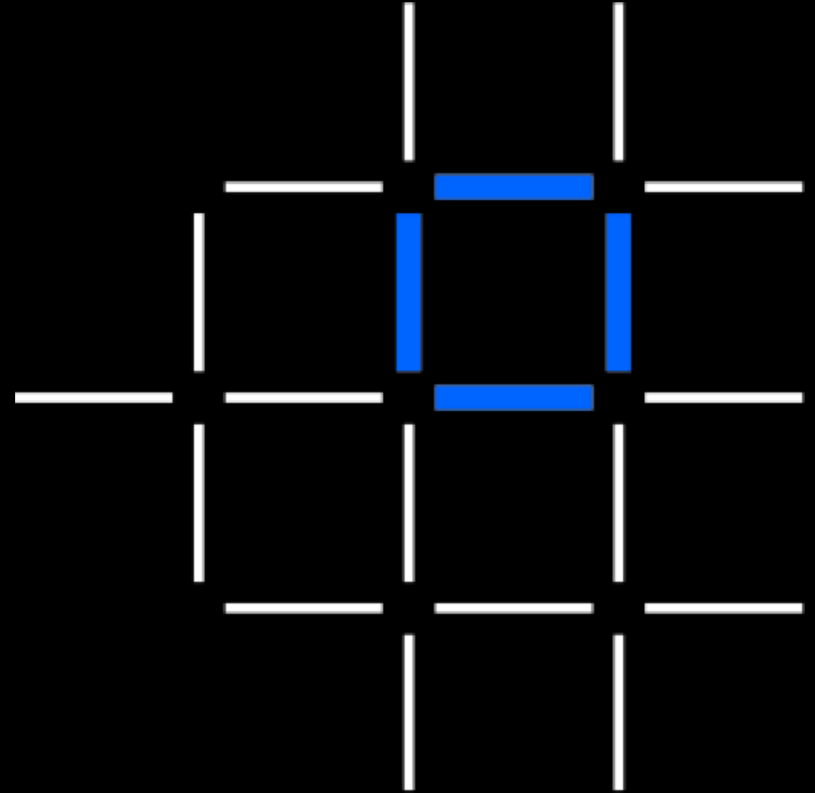
*Christopher Westwood*

*Questions? Tweet us or  
go to [ibm.com/blockchain](https://ibm.com/blockchain)*

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