

Hands on Lab 2234

Integrating IBM Internet of Things Platform and IBM Blockchain

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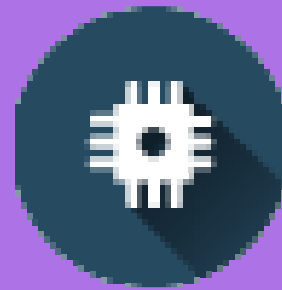
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InterConnect
2017

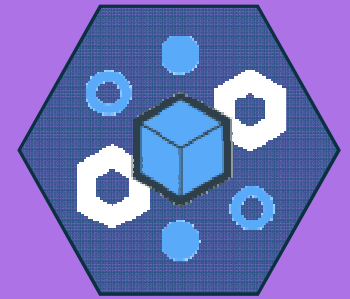


Hands on Lab Agenda

In this hands-on lab, you will deploy smart contracts for IoT in IBM Blockchain, and connect MQTT devices to send IoT data to the blockchain using the IBM Watson IoT Platform. In an IoT context, data comes from "things" to private blockchain ledgers for inclusion in shared transactions with tamper-resistant records. Attend this lab and start creating a more efficient business network with the IBM Watson IoT Platform and IBM Blockchain.



IBM Watson IoT Platform



IBM Blockchain



Agenda

- Blockchain Basics
- IoT and Blockchain
- Lab Scenario

The Business Value of Blockchain

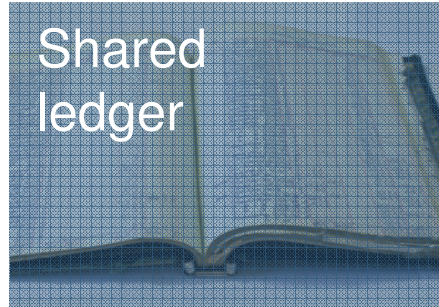
Blockchain is a shared ledger technology allowing any participant in the business network to see
THE system of record (ledger)



Blockchain for business ...

Append-only
distributed system of
record shared across
business network

Shared
ledger



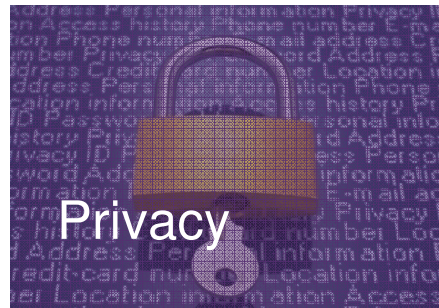
Smart
contract



Business terms
embedded in
transaction database
& executed with
transactions

Ensuring appropriate
visibility; transactions are
secure, authenticated
& verifiable

Privacy



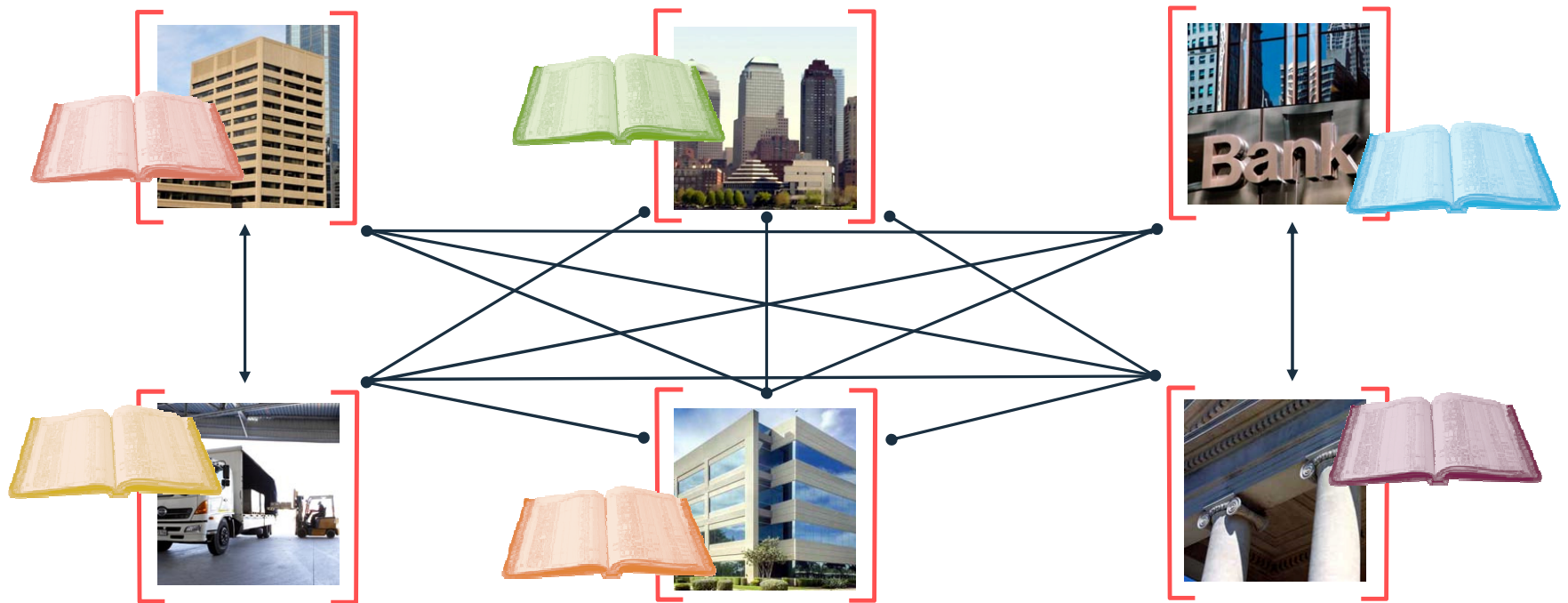
Consensus



All parties agree to
network verified
transaction

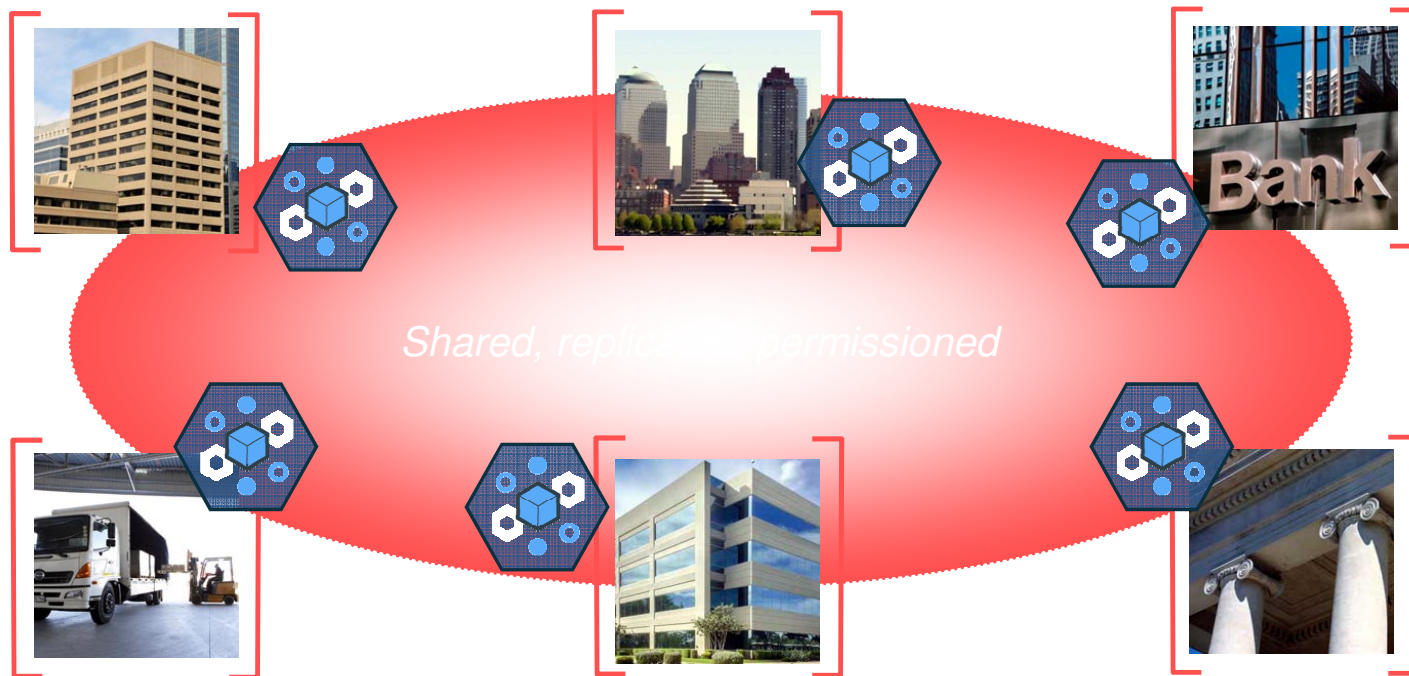
... Broader participation, lower cost, increased efficiency

Problem ...



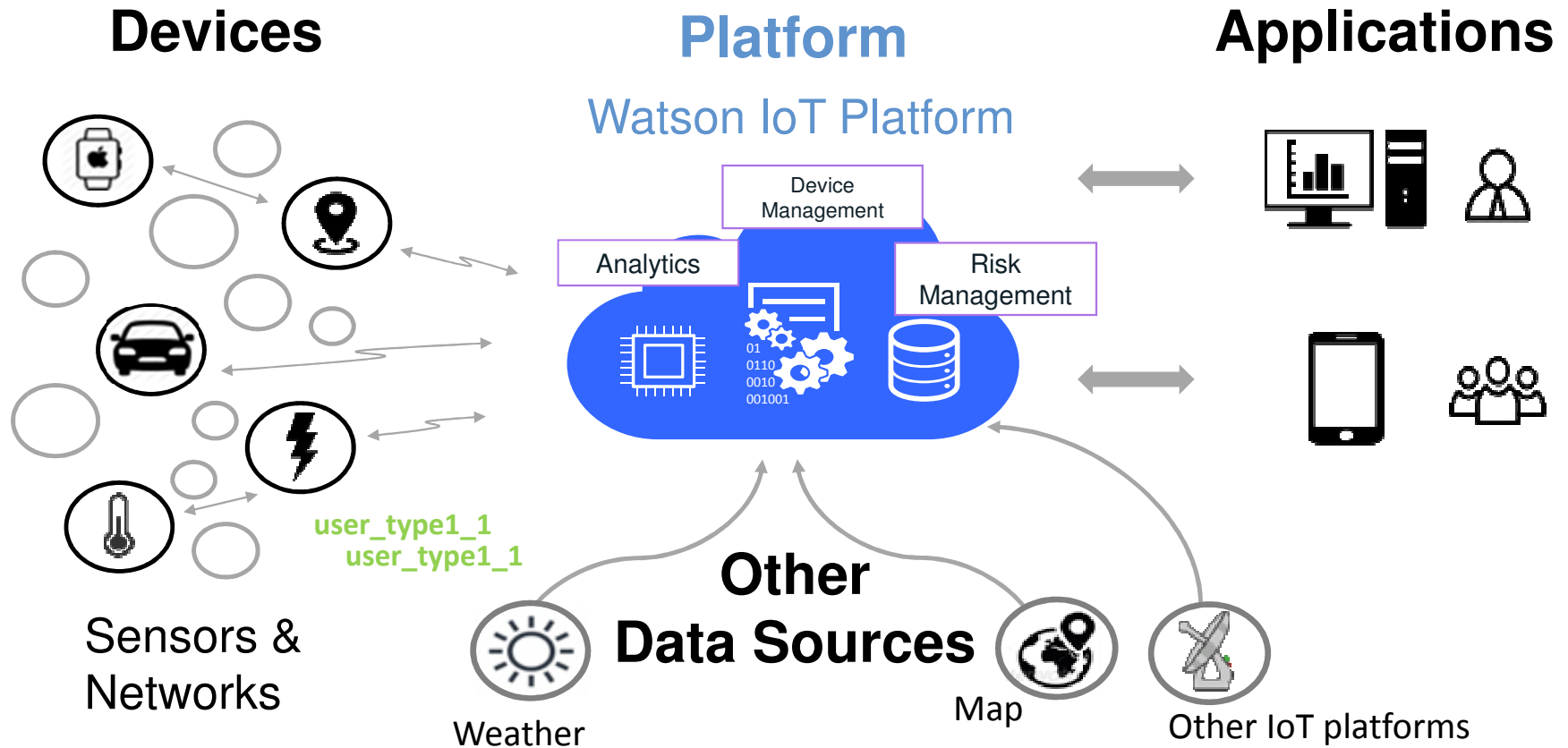
... Inefficient, expensive, vulnerable

Solution ...



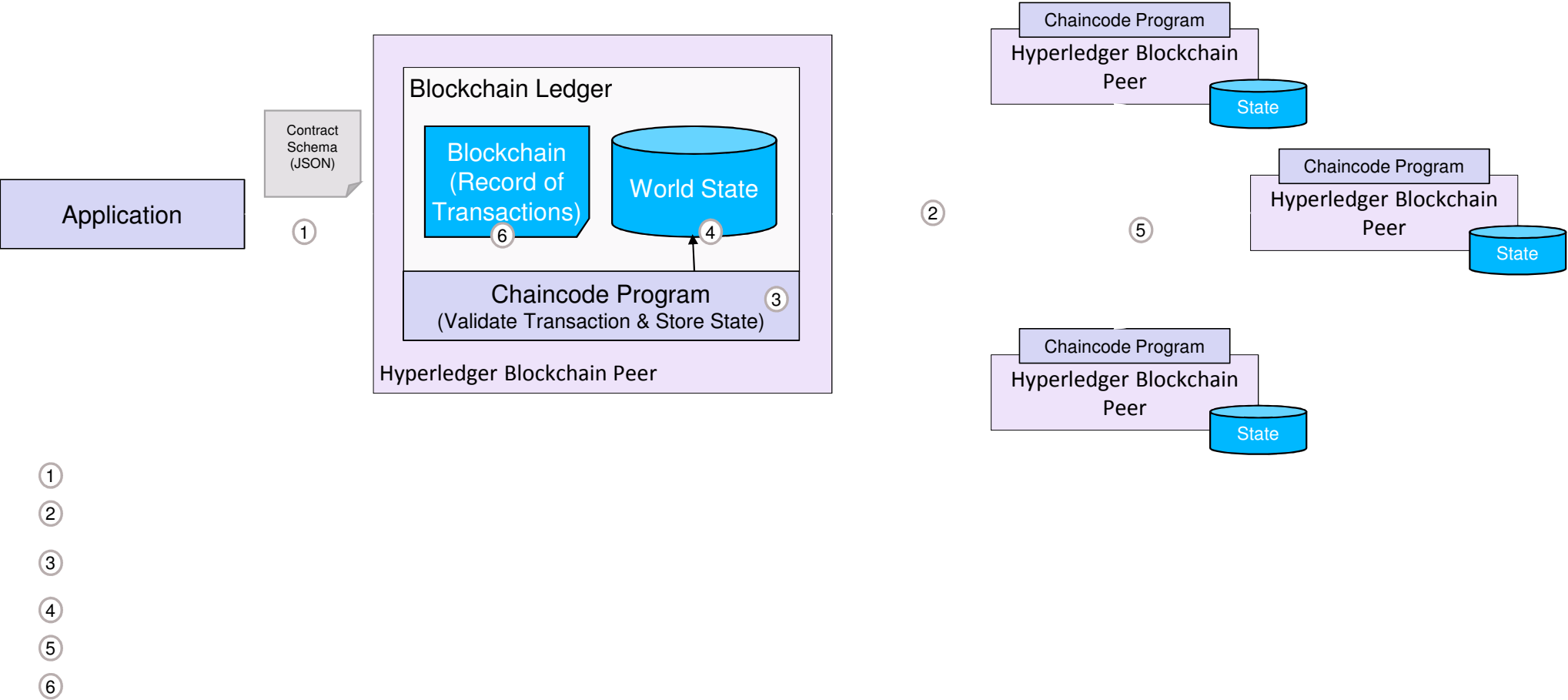
... Consensus, provenance, immutability, finality

What is an IoT Platform?

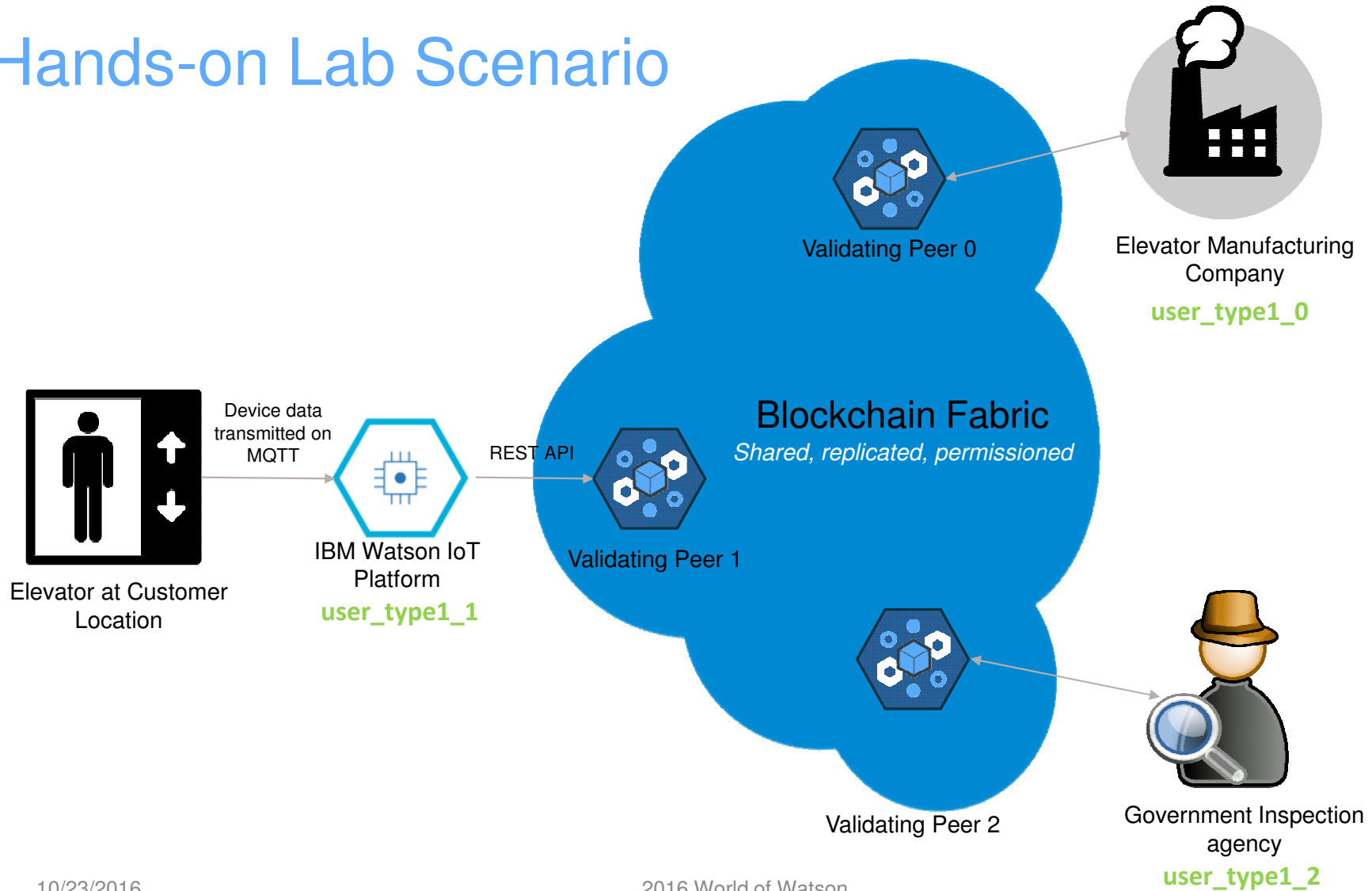


Invoking a Blockchain Transaction

Peer	Individual nodes in a fabric.
Fabric	Collection of nodes



Hands-on Lab Scenario



Lab Guide Download

<https://ibm.biz/iciotlob>

Lab Simulator

<https://ibm.biz/icsimulator>

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