Selecting the Right Blockchain Use Case

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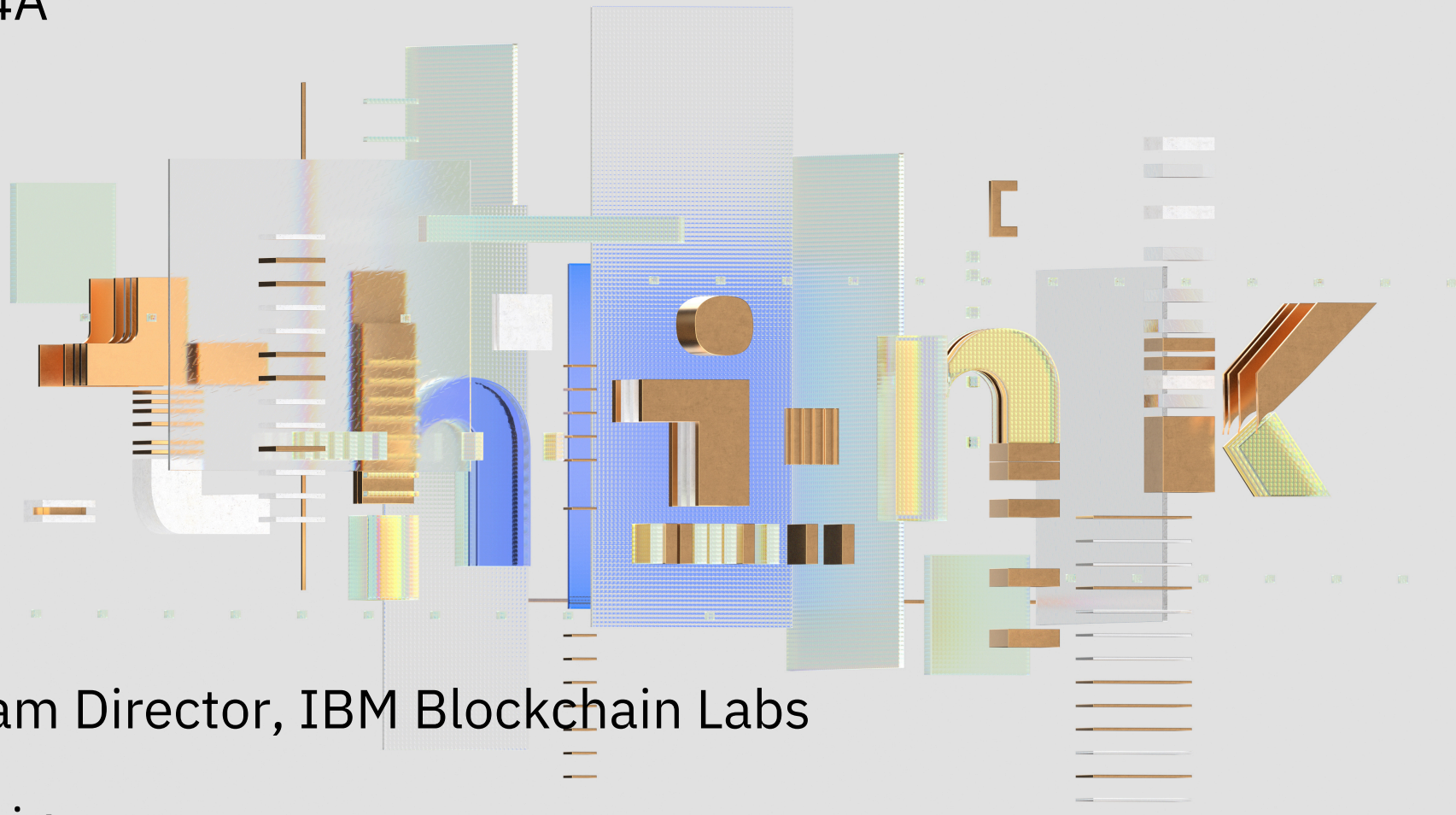
Session 1894A

think 2019



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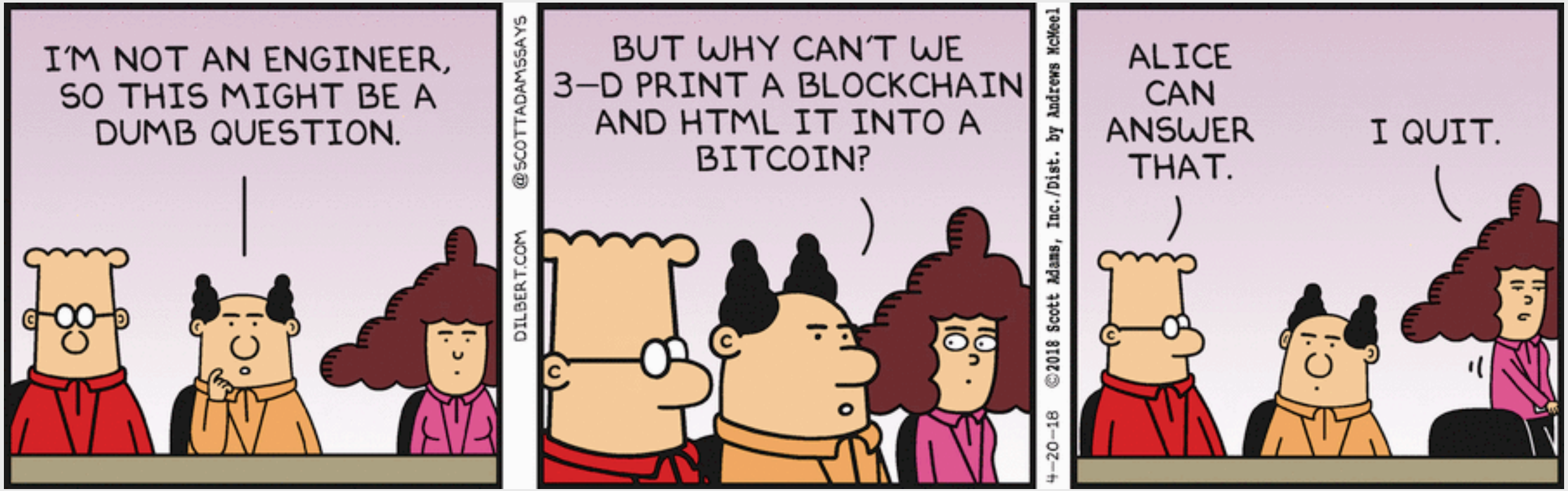

I'M NOT AN ENGINEER, SO THIS MIGHT BE A DUMB QUESTION.
DILBERT.COM @SCOTTADAMSSAYS
BUT WHY CAN'T WE 3-D PRINT A BLOCKCHAIN AND HTML IT INTO A BITCOIN?
4-20-18 ©2018 Scott Adams, Inc./Dist. by Andrews McMeel
ALICE CAN ANSWER THAT.
I QUIT.

Characteristics of a Good Blockchain Use Case

Business Network

Identifiable business network that can benefit from connectivity.

Siloed Repositories

Entities independently maintain similar datasets, maintaining their own version of the truth.

Multiple Writers

More than one entity generates transactions that impact data maintained by multiple institutions.

Minimal Trust

Current state processes are heavily dependent on intermediaries for execution.

Process Dependencies

Fulfilling a given process requires input/action by multiple parties.

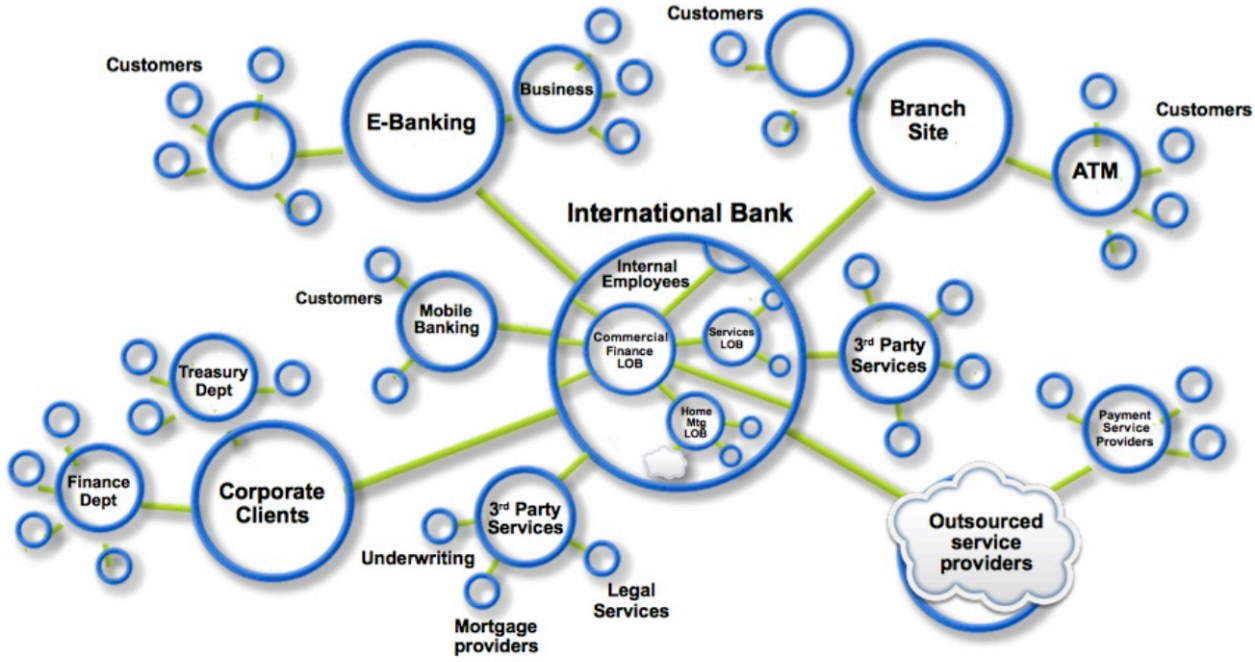
Shared Rules

Entities need a common set of business rules and parameters around transactions.

Business Network

- Identifiable organizations
- Business to business interactions
- Value across all participants
- Enterprise impact
- Industry impact

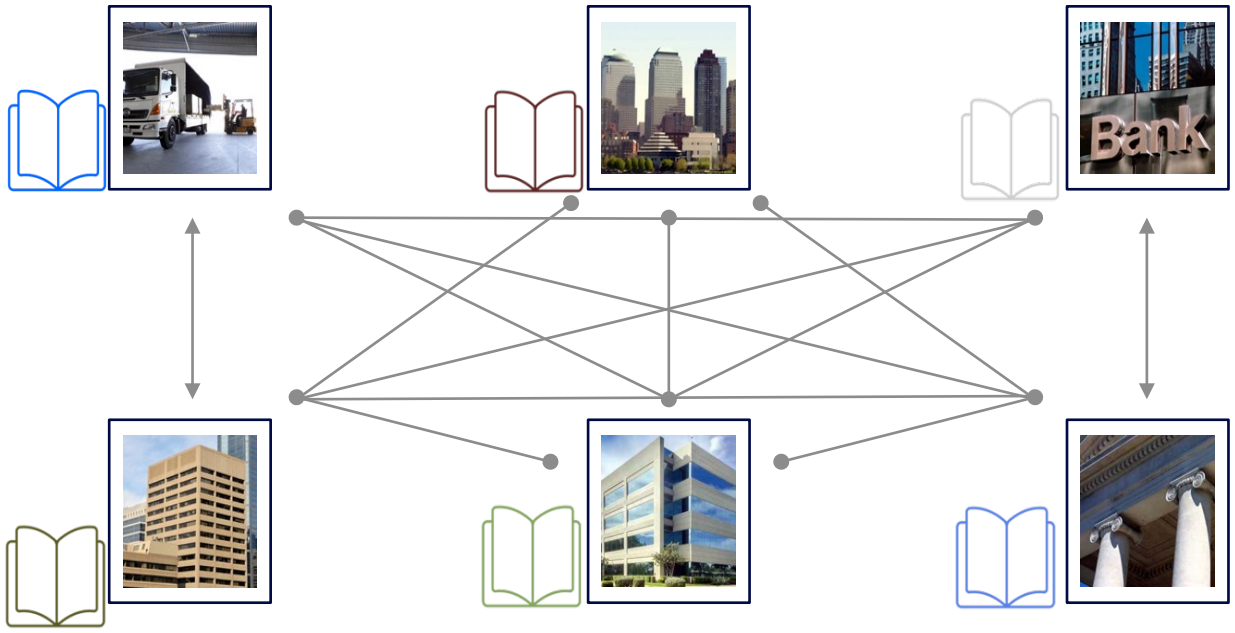
Business network that can benefit from connectivity.



Siloed Repositories

- Different rendition of same data
- Conflictive views
- Loss of transaction context
- Data reconciliation
- Dispute resolution

Entities independently maintain similar datasets, maintaining their own version of the truth.



Multiple Writers

- Multiple transacting organizations
- Shared system of record
- Hosted copy of data
- Provenance

More than one entity generates transactions that impact data maintained by multiple institutions.

Minimal Trust

- Multiple non-trusting writers
- Single organization cannot be trusted with data
- Need for intermediaries
- Consensus
- Immutability and finality needed

Parties within a given business process do not trust each other.

Process Dependencies

- Cross organization business process
- Correlation between transactions
- Reduced exposure for each party

Fulfilling a given process requires input/action by multiple parties.

Shared Business Rules

- Enforce a common set of business rules across organizations
- Enforce legitimacy of transactions
- Restrictions for when transactions can be performed
- Rules that dictate terms of transactions
- Verifiable operations

Enforce legitimacy of transactions.

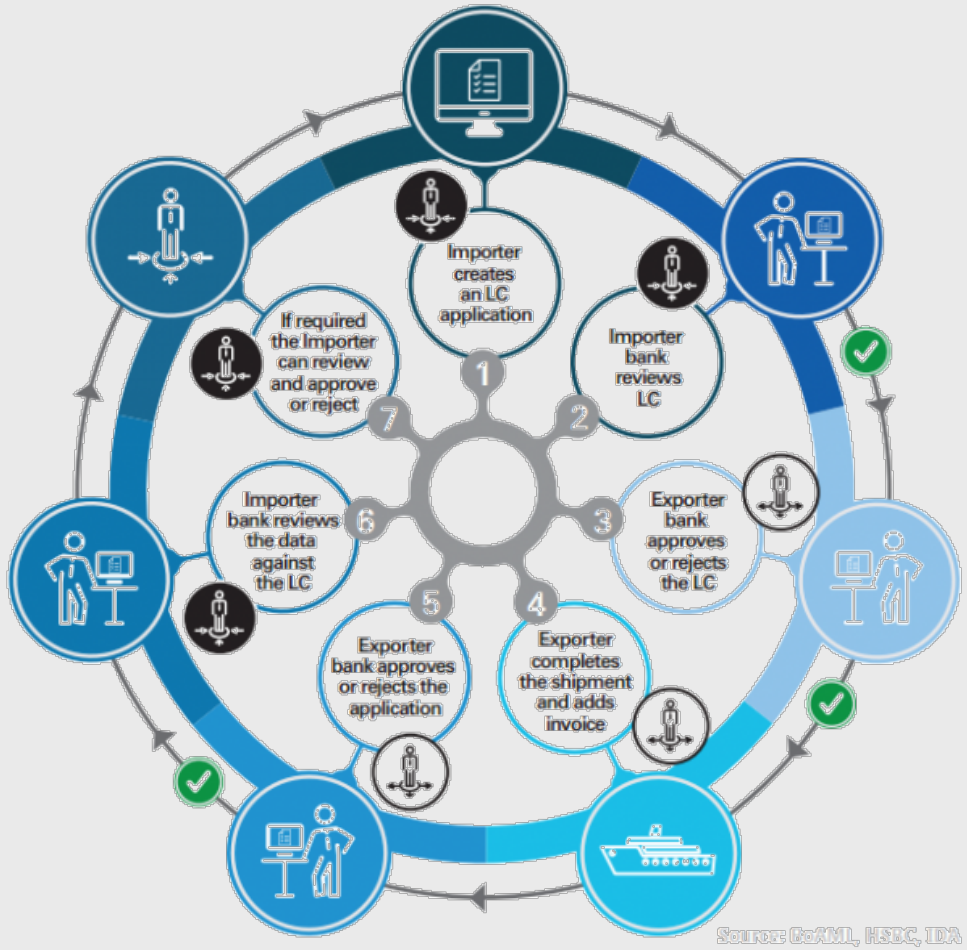
Other Considerations

- Technology requirements
- Blockchain “flavor”
- Scalability
- Enterprise security
- Enterprise support

We.Trade

Blockchain based international trade platform that manages the entire process from order to payment.

- ✓ **Business network** comprised of banks and companies wanting to trade.
- ✓ **Siloed repositories** of data managed individually by each bank associated with the trade transaction.
- ✓ **Multiple** entities, at least four, required to complete a transaction.
- ✓ Banks have traditionally been the facilitators of trade deals due to **lack of trust** between trade counterparties.
- ✓ Inherent **process dependencies** between counterparties and banks in trade transactions.
- ✓ Difficulty guaranteeing contract enforcement based on **shared rules**.

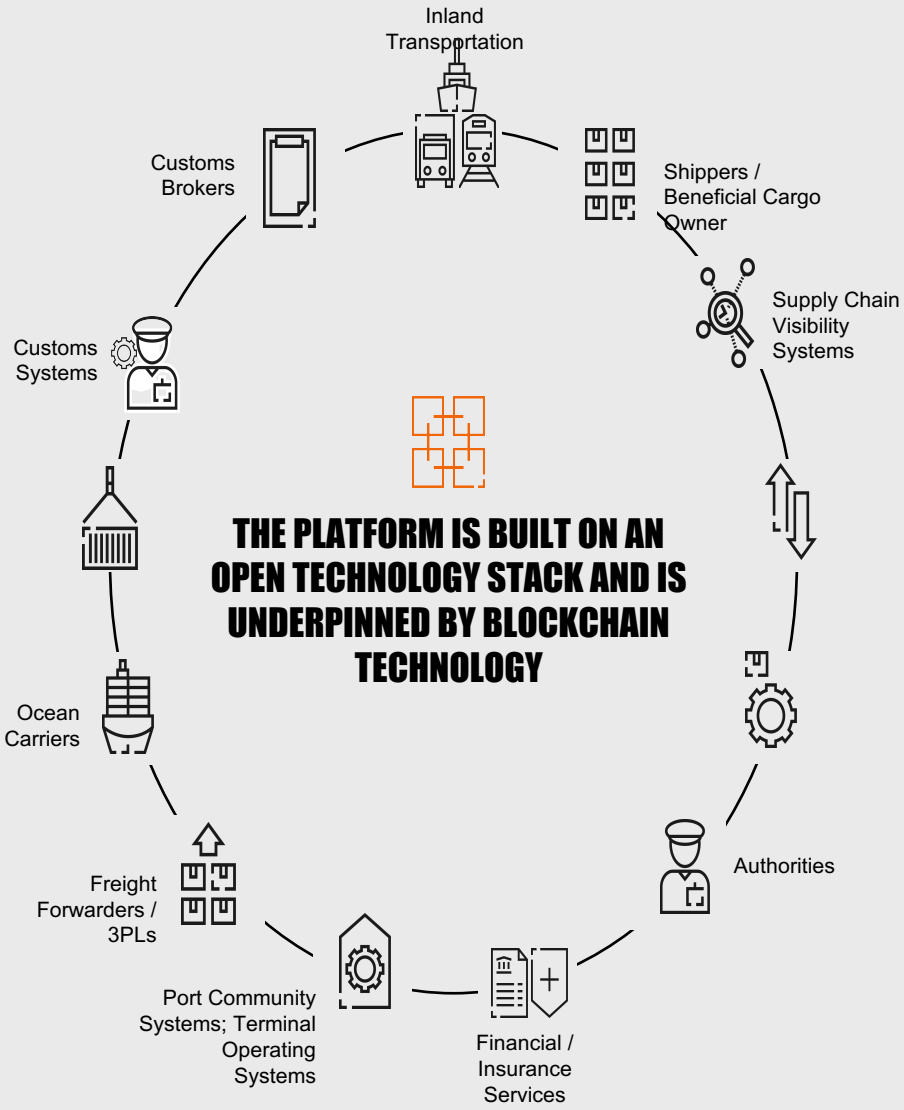


we.trade
more trust. more trade.

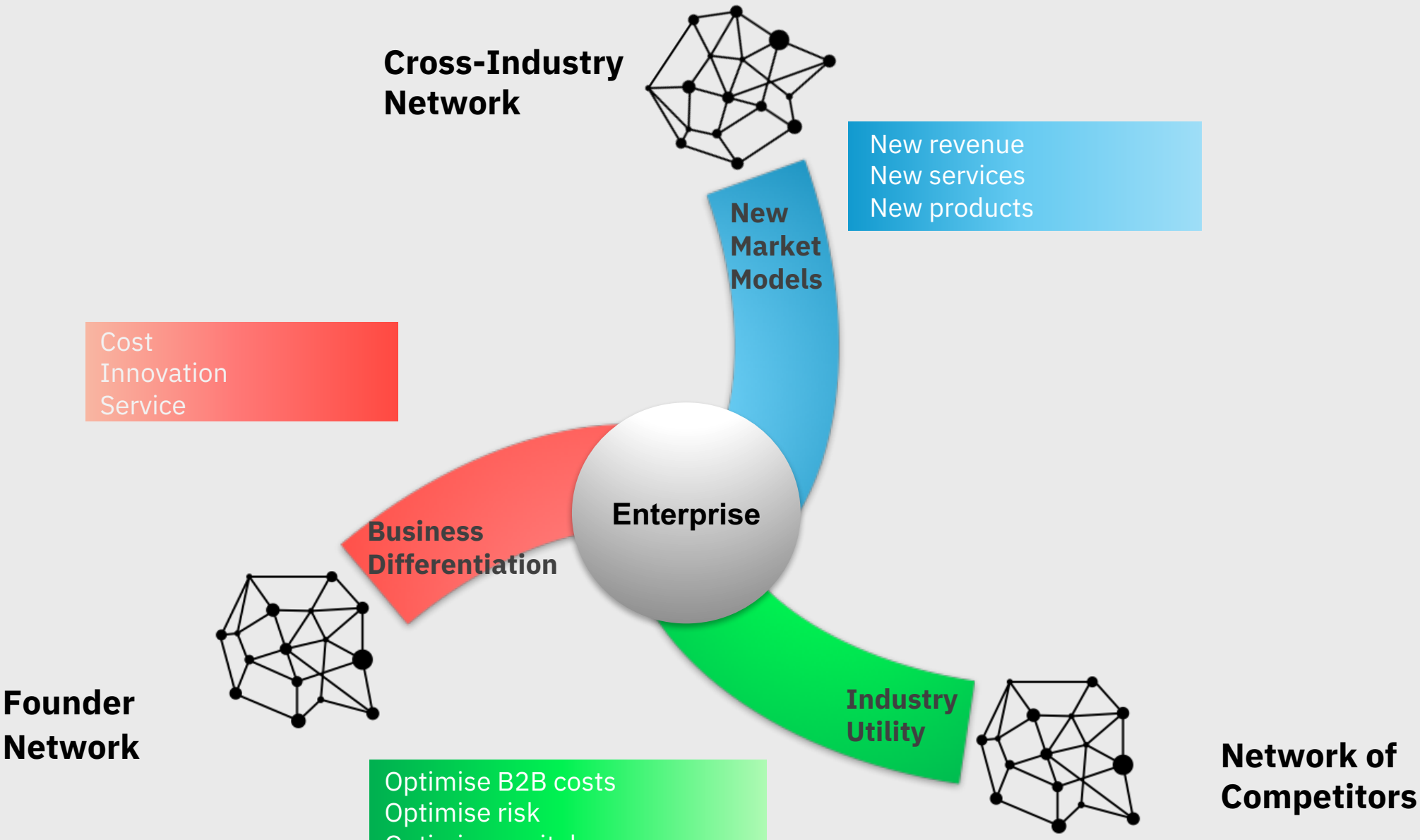
TradeLens

Blockchain-enabled shipping solution designed to promote more efficient and secure global trade

- ✓ **Business network** comprised of shippers, shipping lines, freight forwarders, port, terminal operators, etc.
- ✓ **Siloed repositories** of data managed individually by each private entity and governmental organization.
- ✓ **Multiple entities recording** data and documents as shipments move through the supply chain.
- ✓ **Lack of trust** between parties, inefficient clearance processes which can open the door to fraud.
- ✓ Continued “blind spots” across organizations underscored by **process dependencies** and geographic boundaries.



Three Entry Points for Network Formation



Blockchain Maturity Model

Discover
Try
Form
Learn
Buy

Discover
1-3 days

- Blockchain Education
- Use Case Validation
- Design Thinking Workshops
- Network Identification
- Requirements gathering

First Project
4-12 weeks

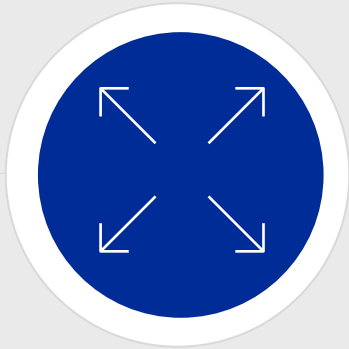
- Minimum Viable Product
- Minimum Viable Ecosystem
- Business Value Assessments

Pilot
6 – 9 Months

- Pilot – real transactions
- Legal entity setup and regulatory compliance
- Governance setup
- Funding model and Monetization policy
- Additional integrations to existing systems

Production
1 Year +

- Fully integrated solution processing real transactions providing real returns
- Member recruitment
- Application maintenance
- New feature releases
- Cross-network interoperability



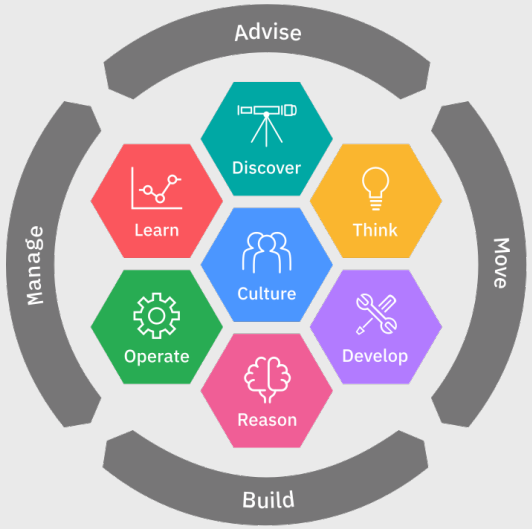
Expand & Activate

Scale

- Live growing network providing real returns
- Membership recruitment
- New technology integrations and further interoperability

Getting Started Services

IBM Cloud Garage with Blockchain Offerings provide you the services you need to get started with Blockchain.



Discovery Workshop

Understand market opportunities and select a use case which represents the value your organization and your business network seek, while also gaining a deeper insight in blockchain technology.

Length: Half Day

Architecture Workshop

Engage an IBM Blockchain architect to help you plan and define the architecture for your enterprise blockchain solution, which includes a two-day in person workshop.

Length: 1 week

Design Thinking Workshop

Apply IBM Design Thinking principles to evaluate current business processes, identify business network and define the minimal viable product for your blockchain solution.

Length: 2 days

Design Thinking & Architecture Workshop

Combine an IBM Design Thinking workshop with IBM Blockchain's approach to solution architecture to define the minimal viable product, as well as, a blockchain solution architecture.

Length: 3 days

MVP Build-up

Develop a functioning blockchain solution using agile methodologies, leveraging experts in IBM Blockchain, UX/UI design and development, and cloud architecture.

Length: 4 – 12 weeks

Blockchain Education

Engage with an IBM Blockchain technical expert to learn about Hyperledger Fabric, IBM Blockchain, and general blockchain concepts.

Length: Up to 1 week

The Future belongs to a “network of networks”

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Thank You

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