Chapter 2: What's the story we're going to build?

Learning Bluemix & Blockchain

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The Plan: 30 minute Chapters with an hour or two of practice

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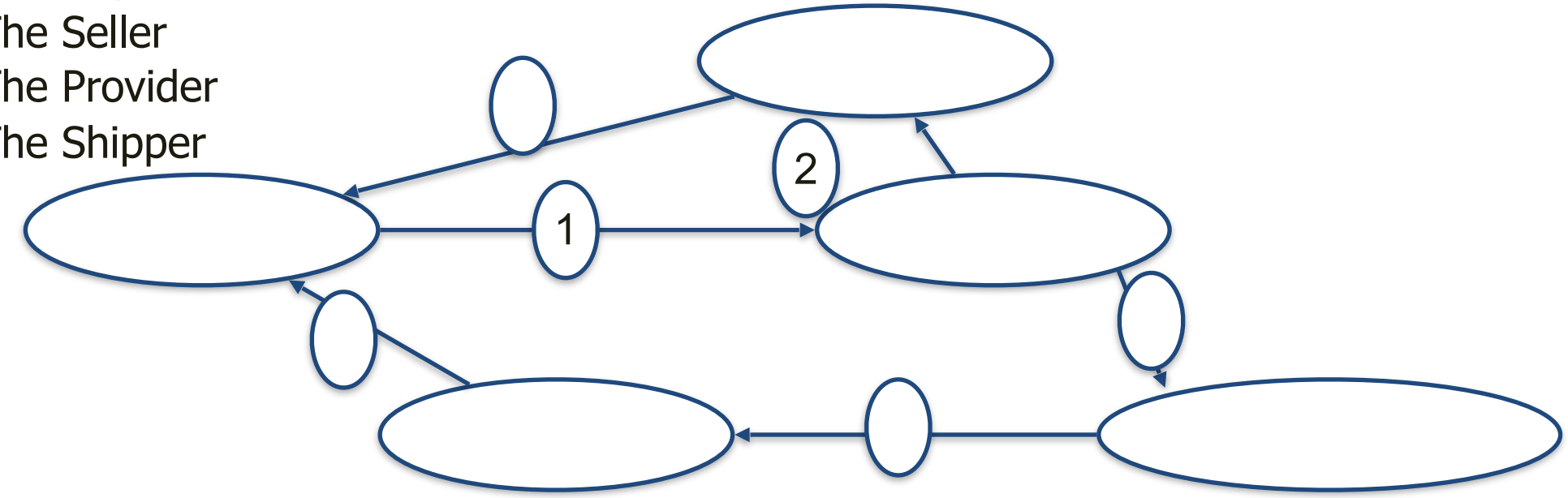
Dispute Resolution for a Finance Organization

- Dispute resolution requires gathering and correlating facts from multiple parties. This is a slow and labor intensive effort, which ties up over $100M at any point in time.
- In this example, those parties are:
  - The Finance Organization
  - The Buyer
  - The Seller
  - The Provider
  - The Shipper

1. Request Product
2. Request Payment
3. Debit Account
4. Request drop ship from Provider
5. Request Shipment
6. Deliver product



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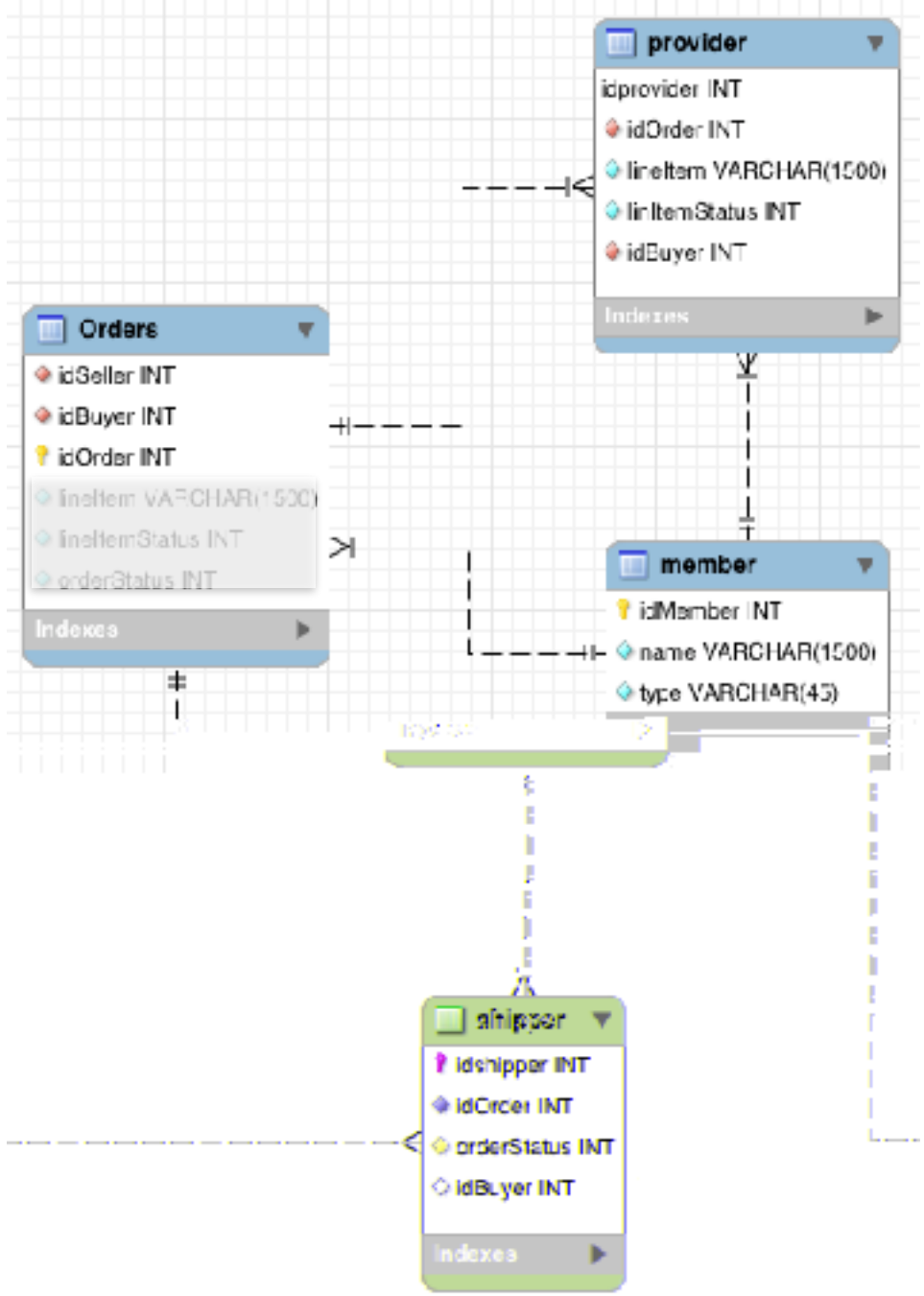
Data Model

- An order has a status of:
  1. Ordered
  2. toProvider
  3. toShipper
  4. Shipping
  5. Delivered
  6. Paid
  7. inDispute
- An item has a status of:
  1. Ordered
  2. toProvider
  3. toShipper
  4. Shipping
  5. Delivered
  6. Backordered



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The basic stories

- As a Finance Organization, I want to see the finance related status of every order executed by my clients when they are using my credit services instantly and in real-time
  - This will allow me to manage dispute resolution over the phone immediately rather than taking multiple weeks to resolve a dispute.
- As a seller, I want to see the order, shipping and finance status of every sale in the system.
- As a buyer, I want to see the real-time status of every order.
- As a buyer, I want to be able to initiate a dispute with the click of a single button and provide all required data automatically to my finance organization
- As a manufacturer, I want to be able to see all open orders and the shipment status on all orders.
- As a shipper, I want to be able to interact with this system with as little change as possible on my end.

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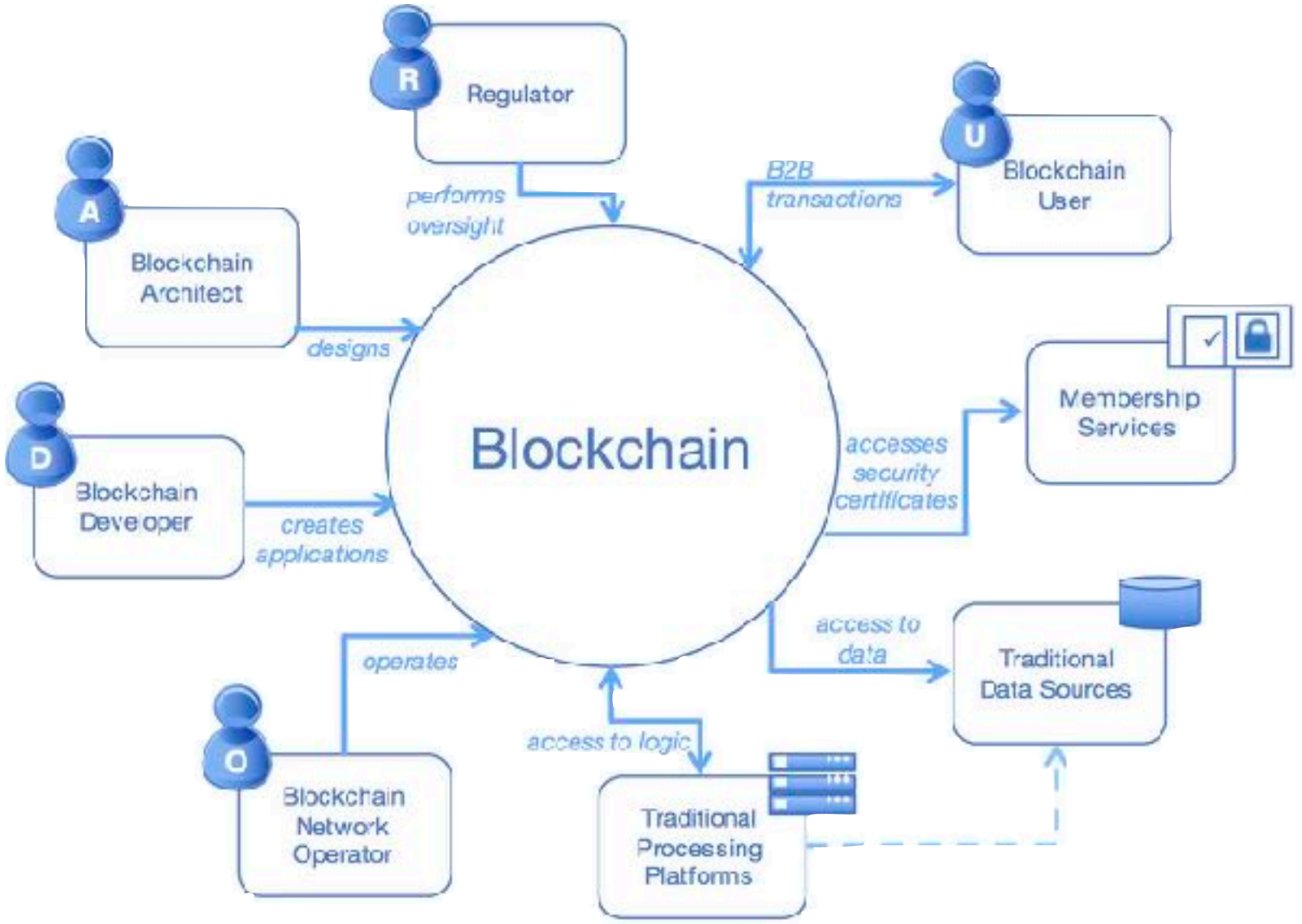
Actors in a blockchain solution



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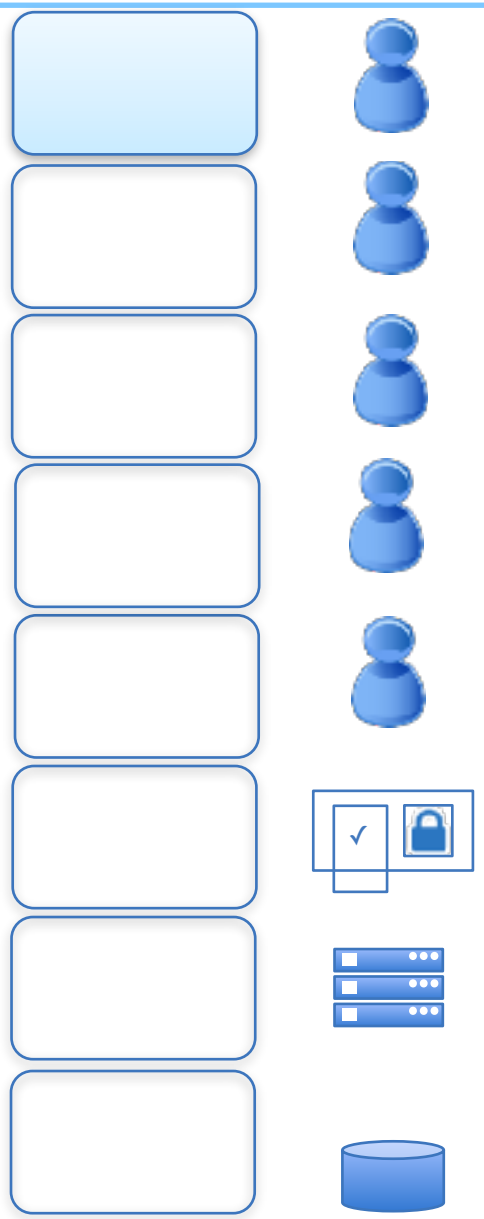
Actors in a blockchain solution



Chapter 1 & 2.1

Financing Co, Buyer, Seller, Shipper, Provider

Finance Co.

Chapters 3-12

Chapters 4 & 5

Chapters 4 & 5

Outside the Tutorial

Supplied in Tutorial

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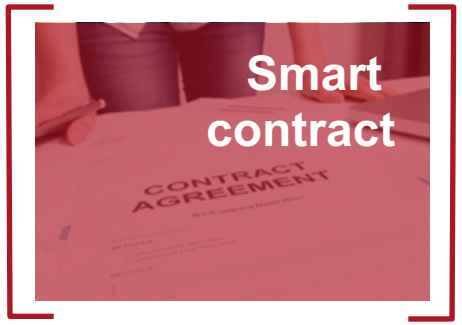
Append-only distributed system of record shared across business network



Business terms embedded in transaction database & executed with transactions

Ensuring appropriate visibility; transactions are secure, authenticated & verifiable

Transactions are endorsed by relevant participants

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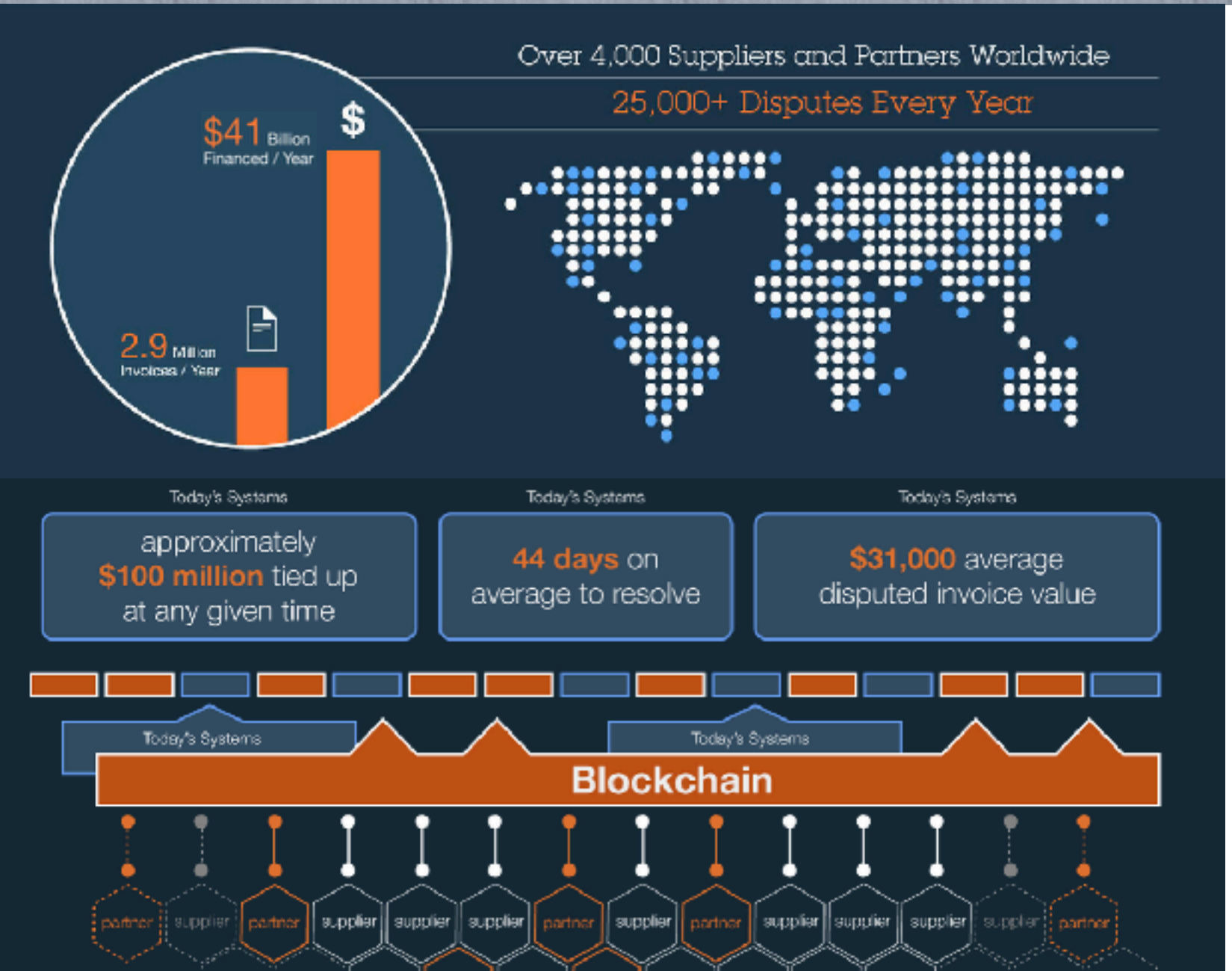

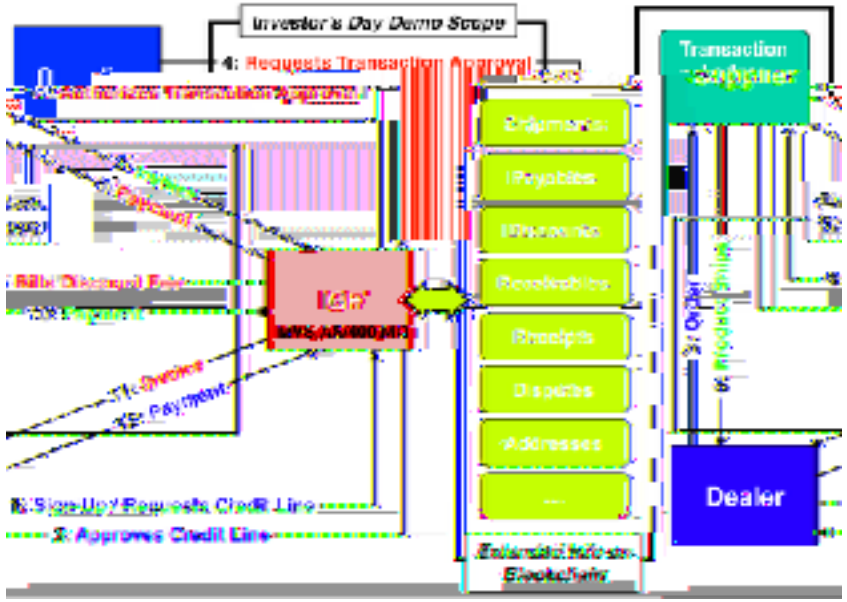

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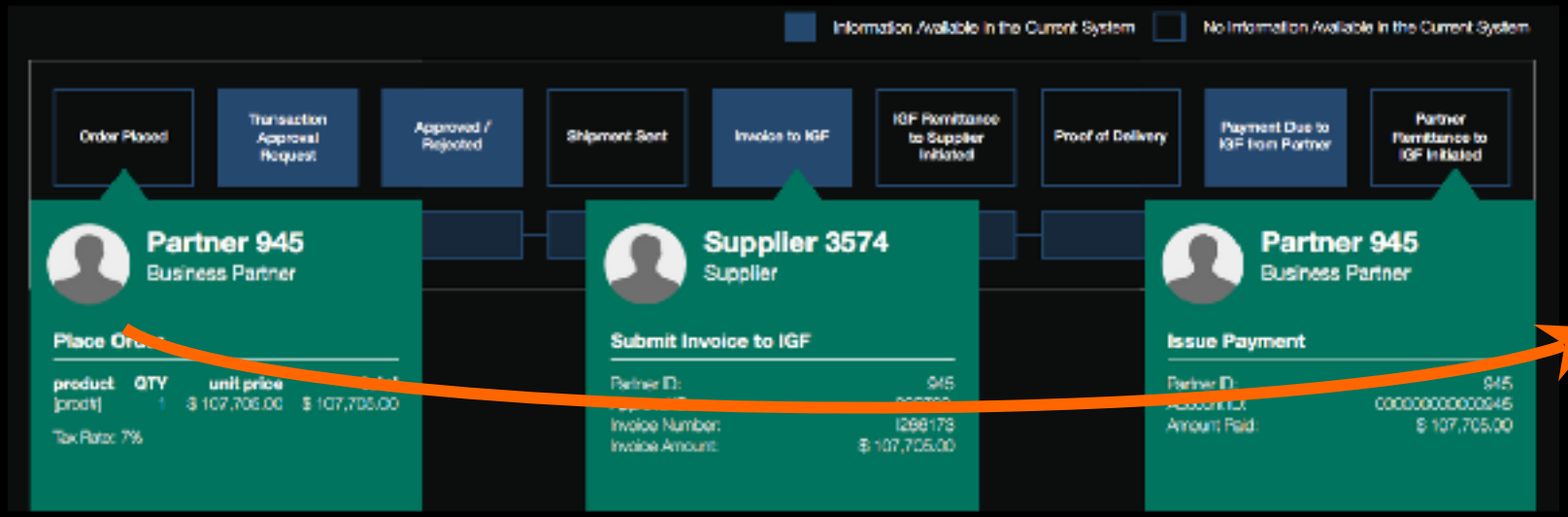
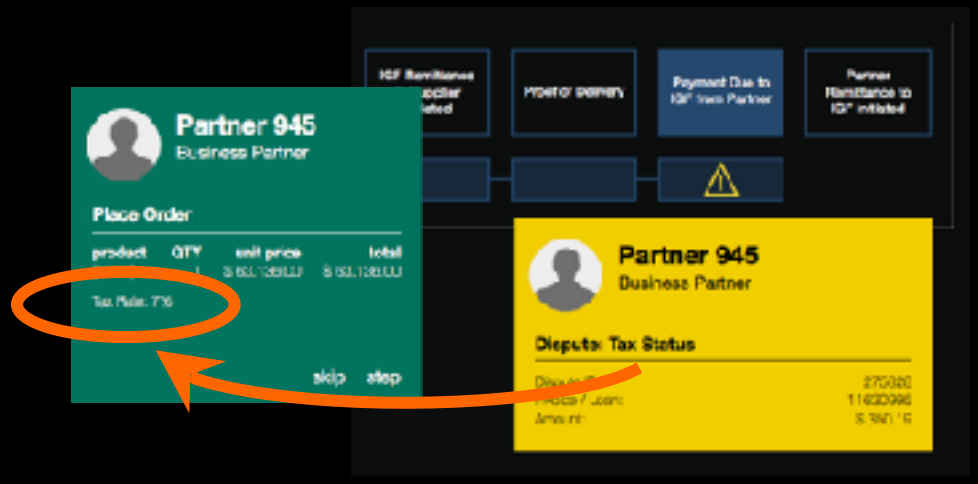
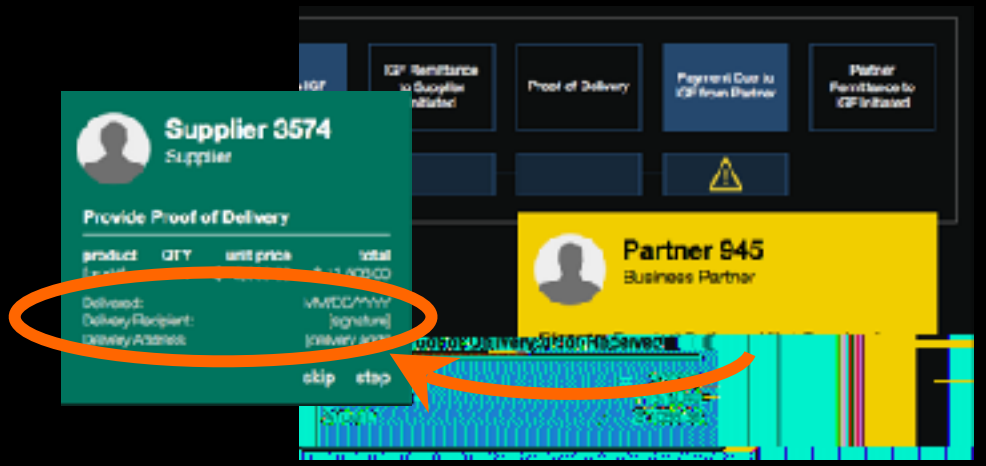
An immutable, non-repudiable record of events, shared between Partners, Suppliers and IGF…

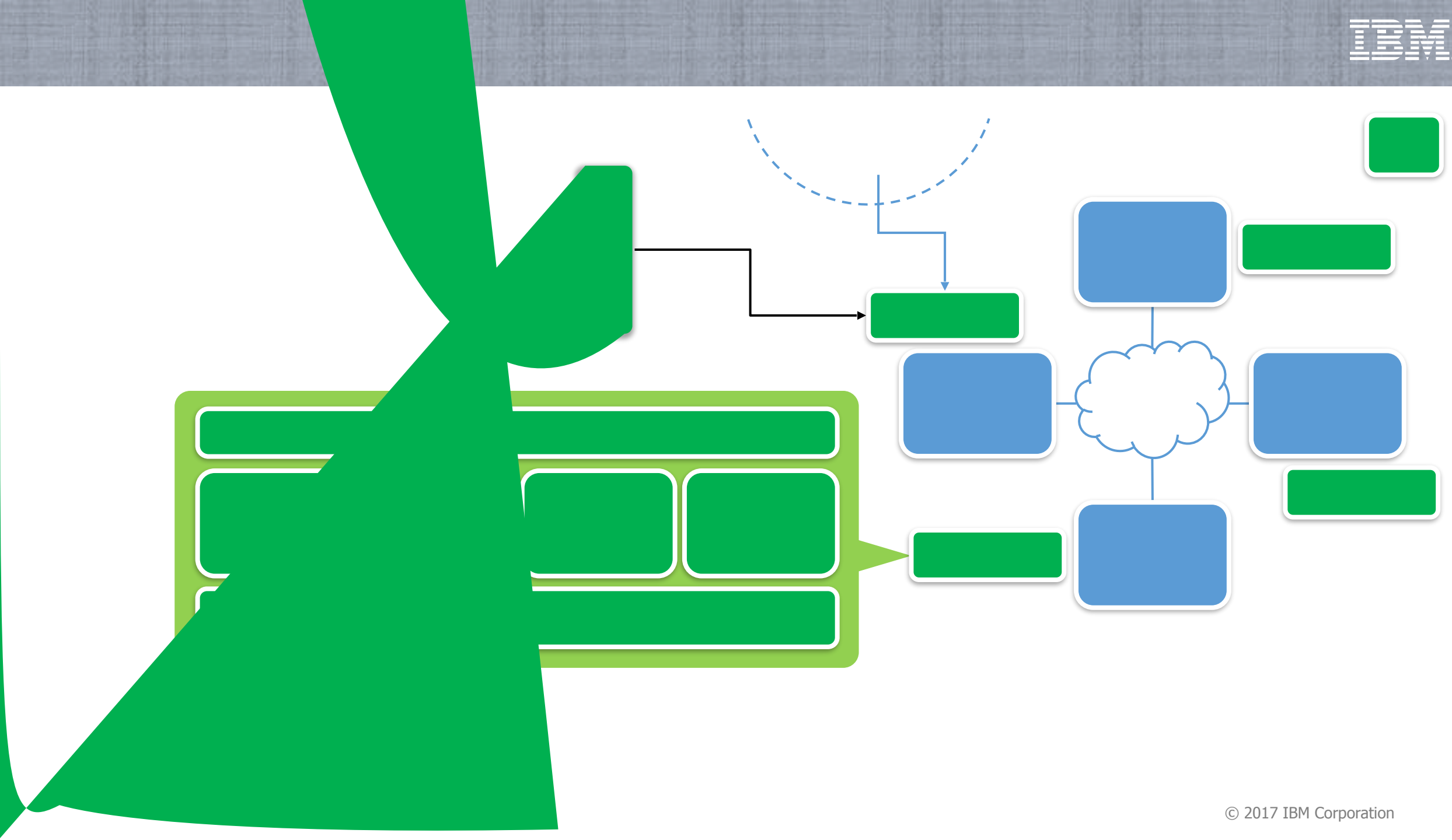


…enabling a comprehensive view across the entire transaction lifecycle….

…with enhanced visibility to prevent or speed the resolution of disputes…







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Buyer

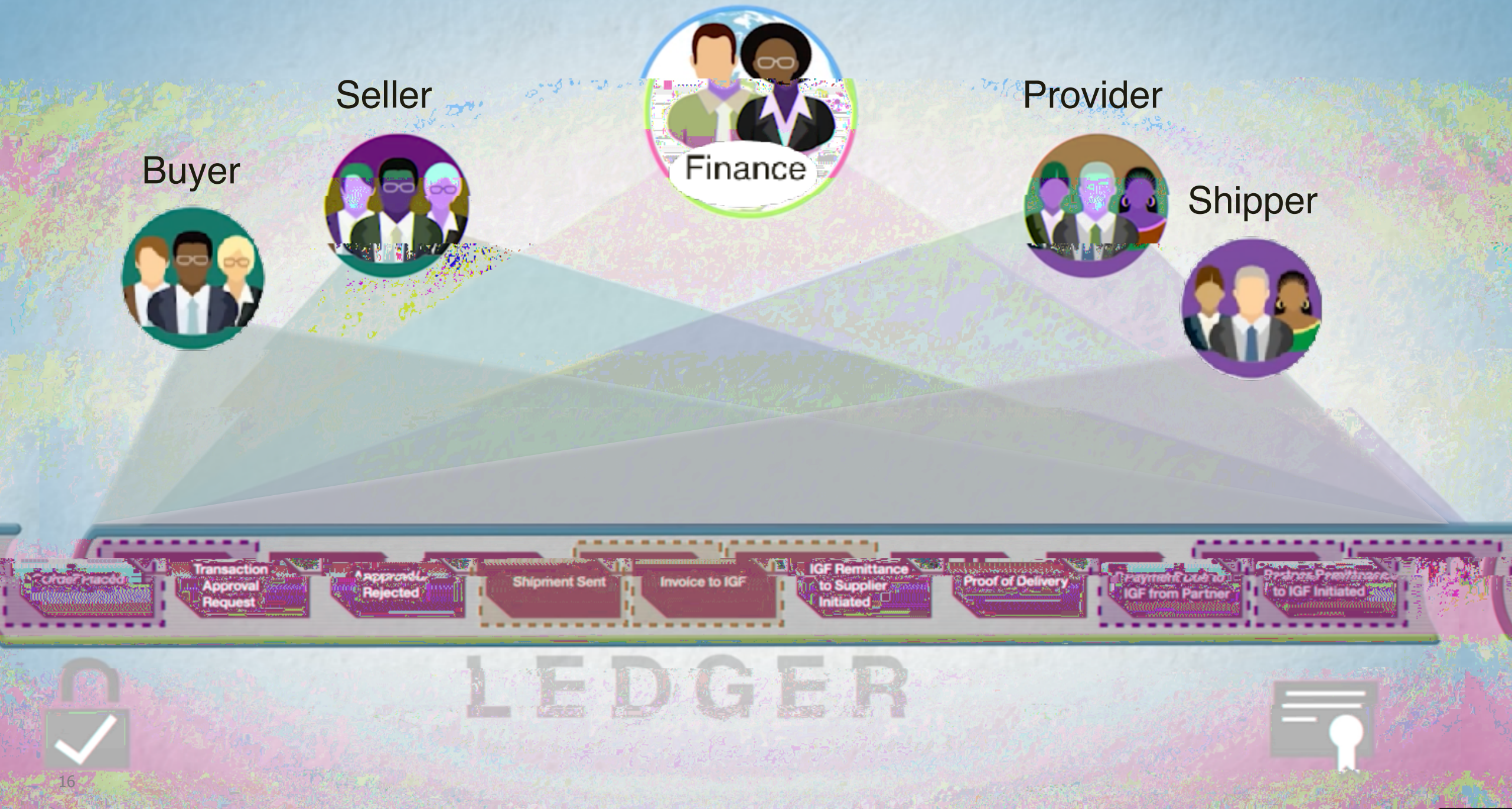
Seller

Provider

Shipper

Each participant has permissioned and secured access

LEDGER


Seller
Provider
Buyer
Finance
Shipper
Transaction Approval Request
Shipment Sent
Invoice to IGF
IGF Remittance to Supplier Initiated
Proof of Delivery
LEDGER

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