Getting Started With Blockchain

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Discussion points

• AgriDigital & Geora - who we are, what we do
• Blockchain recap
• Smart contracts & digital assets
• Supply chain use cases
• Blockchain protocol layer
• Building digital supply chains & digital trust
• Q&A
AgriDigital Story

making global agri supply chains safe, easy and secure from farmer to consumer
Today’s supply chains are manual, fragmented and risky. Margins are tight. Trade and finance are siloed and traceability is more of an aspiration than a reality.

Agriculture is the least digitized industry in the world.
At AgriDigital we are focussed on 3 big problems

**Farmers** want more control over their produce and to ensure they get paid

**Farmers & Buyers** need just-in-time, flexible finance

**Consumers** want to know where their food & fibre comes from
Solution: a digital supply chain that brings trade, finance and traceability together

- Seamless trade flow management
- Inventory management
- Shipping & logistics
- Flexible finance
- Traceability
- Integrations

+ Integration with GEORA
Why blockchain?

...and what is it anyway?
Supply chain integrity

- Naturally distributed networks
- Competitive than collaborative
- Participants often don’t know or don’t trust each other
- Need access to shared information about a common asset
What is blockchain?

- Blockchain is a peer-to-peer distributed ledger technology, allowing users to interact directly with each other without the need for a centralised trusted party.

- Users can access shared datasets with complete control over the information they store and share within the system.

- Transactions are approved by network consensus and are immutable, providing complete security in the history of ledger.

- Transactions are timestamped and recorded in blocks which are linked and cryptographically secured.
Smart contracts & digital assets

- **Smart contracts** are pieces of code used to execute transactions on a blockchain.

- **Blockchain 2.0** refers to the programmable nature of blockchains via smart contracts and the digital representation of real world things via tokenization.

- **Digital assets** are tokenized representations of physical/real world assets or rights including currencies.

- Digital assets can be programmable, conditioned or constrained. They can contain all the information required to understand an asset’s ownership, value and lifecycle in real-time.

- Digital assets on a blockchain can be seamlessly and atomically transacted using smart contracts **without the need for intermediaries** to regulate the transaction. This means we have digital trust.
Supply chain use cases

TRANSACTION & PAYMENT SECURITY

NETWORK & MARKET EFFICIENCY

PROVENANCE & CHAIN ASSURANCE
Blockchain protocol layer
Example protocol - Geora

1. Create **trusted records** of agricultural products

2. **Integrate** with platforms, Internet of Things devices and machinery

3. Deliver **asset backed finance** using smart contracts
Create trusted records

Finance and Loans
Trade Flows
On Farm Data

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GEORA

DIGITAL ASSET RECORD
Finance and Loans
Trade Flows
On Farm Data

BLOCKCHAIN PROTOCOL
Integrate along the supply chain
Innovate – new products, new business models

Use **Smart Contracts** to build solutions for:

- Registry services
- Secure payments
- Asset backed finance
Building digital supply chains and digital trust
Building blocks of digital trust

- Digital trust
- Digital currency
- Provenance & traceability
- Digital identity of people & things
- Digital programmable assets
- Digital title
- Cloud based integrated digital platforms
- Automated data workflows & documentation
- Real time, event driven supply chain finance
- Real time payments
- Digital currency
- Digital trust
Thank you / Q&A
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