The Token Economy

Andy Martin
Token economy

Digital Asset

Tokenisation associates ownership, identity & access rights

Smart Contract

Process codifies & automates the business model & organisation for trading & use of digital assets

Blockchain

Shared, trusted, timestamped & distributed source of the truth of that digital asset
### blockchain – what’s different?

<table>
<thead>
<tr>
<th></th>
<th><strong>Old</strong></th>
<th><strong>New</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Market data</td>
<td>Central</td>
<td>Distributed &amp; decentralised</td>
</tr>
<tr>
<td>Platform power</td>
<td>Lock-in</td>
<td>Open-neutral</td>
</tr>
<tr>
<td>Identity</td>
<td>“Controls”</td>
<td>“Verifies”</td>
</tr>
<tr>
<td>Incentive</td>
<td>Winner takes all</td>
<td>Win-win-win</td>
</tr>
<tr>
<td>Liquidity</td>
<td>“Analogue”</td>
<td>“Digital”</td>
</tr>
<tr>
<td>Monetisation</td>
<td>Platform</td>
<td>Data owner, innovator &amp; platform</td>
</tr>
</tbody>
</table>
Token economy

DeFi Marketplace
Service layer replaces commercial banks to create credit

Supply

Manufacture

Logistics

Distribute

Digital liquidity

Smart contract matches finance to demand

Smart contract releases finance from escrow

Smart contract Pays investor

Key
Trade Finance & ST debt
Smart contract
Token, CBDC or Stable Coin or digital asset
Token economy - sample use cases

**Application**
- Subrogation
- Patient consent
- Mineral provenance
- Disputes Mgt.
- Energy trading (P2P)
- Regulatory reporting
- Bundled payment
- Paperless trade
- Food provenance
- Grid management

**Business model**
- Business
- Governance

**Business network**
- Insurance
- Health
- Industrial
- Consumer
- Energy
- DAO
- Re
- ID
- Behaviors
- Loyalty

**Platform**
- General applications
- Digital assets
- Cross chain
- Tools

**Key** Token
Blockchain platform—“holy trinity”

- **Economic model**, incentives, disincentives & behaviour changes
- **Governance model**, how decisions are made onchain via tokens & voting or offchain & guiding principles of fair, democratic & open
- **Business (commercial) model**, of monetisation & fees

**Blockhain model**

- **Incentive**
  - Behaviours
  - Benefits
  - Monetise
  - Democracy
  - Providers

- **Business**
  - Co-opetition

- **Govern**
  - Decentralise

**Key**: Token liquidity
Blockchain business model template - 1

Data owners
- Collaboration benefits
- Incentive

App Store – Neutral Entity
- Crypto - fiat
- Reserve fund
- Marketplace
- Buy/sell data
- Innovator apps
- Basic services
- Identity
- Provenance
- Payments

Validate and order
- Value
- Data
- Incentive

Data queriers
- Collaboration benefits

Innovators
- Collaboration benefits

Source, Andy Martin, IBM
Blockchain business model template - 2

<table>
<thead>
<tr>
<th>Neutral entity</th>
<th>Data owners</th>
<th>Data queries</th>
<th>Innovators</th>
<th>Validate &amp; order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue†</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>Redeem†</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fee share†</td>
<td>-</td>
<td>-</td>
<td>DApp Fee †</td>
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<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>Stake†</td>
<td>-</td>
</tr>
<tr>
<td>Fee share†</td>
<td>Fee share†</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>Access†</td>
<td>Access †</td>
</tr>
</tbody>
</table>

† All fee, access and stake value settlement in (utility) tokens

Source, Andy Martin, IBM