## CORDA DESIGN TRADE-OFFS

<table>
<thead>
<tr>
<th>TRADITIONAL BLOCKCHAINS</th>
<th>CORDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block-based Consensus</td>
<td>Real-time Flow-based Consensus</td>
</tr>
<tr>
<td>- Difficulty with Performance / Scaling</td>
<td></td>
</tr>
<tr>
<td>- Validator governance</td>
<td></td>
</tr>
<tr>
<td>Gossip / Broadcast Network</td>
<td>Point-to-Point messaging with Observer Nodes</td>
</tr>
<tr>
<td>Full Replication on Databases</td>
<td>Partial Replication on States</td>
</tr>
<tr>
<td>- Difficulty on Privacy &amp; Data storage</td>
<td></td>
</tr>
<tr>
<td>Anonymous Wallets</td>
<td>Single Node Identity (1-to-1 Mapping)</td>
</tr>
<tr>
<td>- Feature, but must be governed in a permissioned network</td>
<td></td>
</tr>
<tr>
<td>- Allows for more B2C (but in an unregulated way)</td>
<td></td>
</tr>
<tr>
<td>UTXO (for coins) / Replicated VM (for Ethereum)</td>
<td>UTXO</td>
</tr>
</tbody>
</table>
Problem Statement & Stakeholders

Architected & Developed a truly decentralized, democratized, transparent ‘Food Traceability Platform’ across the food supply chain based Blockchain technology for sustainable practices with certain characteristics.
Corda – Basic Flow & Key Concepts

Vault/ledger

Network

State & Flow

Lettuce Harvest Contract

Farm ✔
Logistics ✔
Distributor ✔
End Consumer

Farm
Lettuce Harvest Contract

Notary

Lettuce STATE
(Farm related)

Farm id:
Batch No:
Location:
Harvest Date:
Mean temp:
Mean nitrogen:
...
...
...

Farm
Lettuce Harvest Contract

Lettuce Logistic Contract

Logistics ✔

Distributor ✔

Lettuce STATE
(Logistics related)

Lettuce Distributor Contract

Logistic ID:
Bill no:
Pickup Date:
Pickup location:
Temperature in transit:
Drop date:
Drop location:
...
...
...
...
...

Lettuce STATE
(Logistics related)

Restaurant id:
Name:
Warehouse info:
Purchase order:
Received date:
...
...
...

End Consumer

Restaurant ✔

Lettuce Restaurant Contract

Mindtree
For further details, please contact:

Madhusudhan KM - Madhusudhan.KM@mindtree.com

Santanu Mukherjee – santanu.Mukherjee@mindtree.com

Welcome to possible
www.mindtree.com/social