

SmartLog Pilot 1:

BLOCKCHAIN

Taking Logistics to 4.0



SmartLog blockchain logistics platform live testing in Port of Tallinn

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Shared ledger technology

Introducing Blockchain

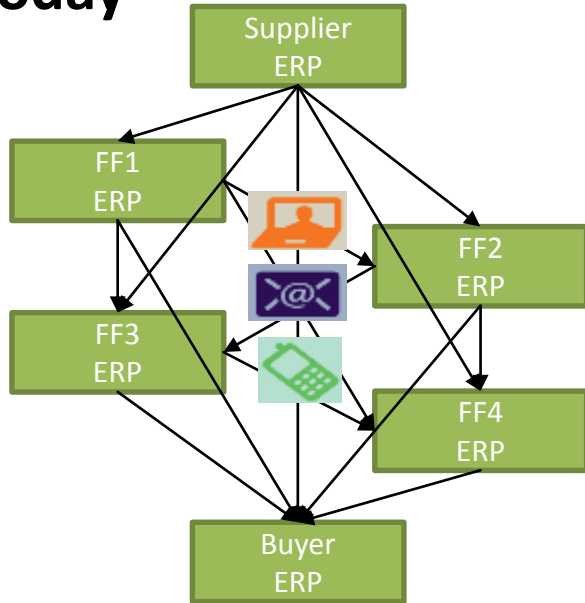
What?

*A **shared ledger technology** allowing any participant in the business network to see **THE** system of record (ledger)*



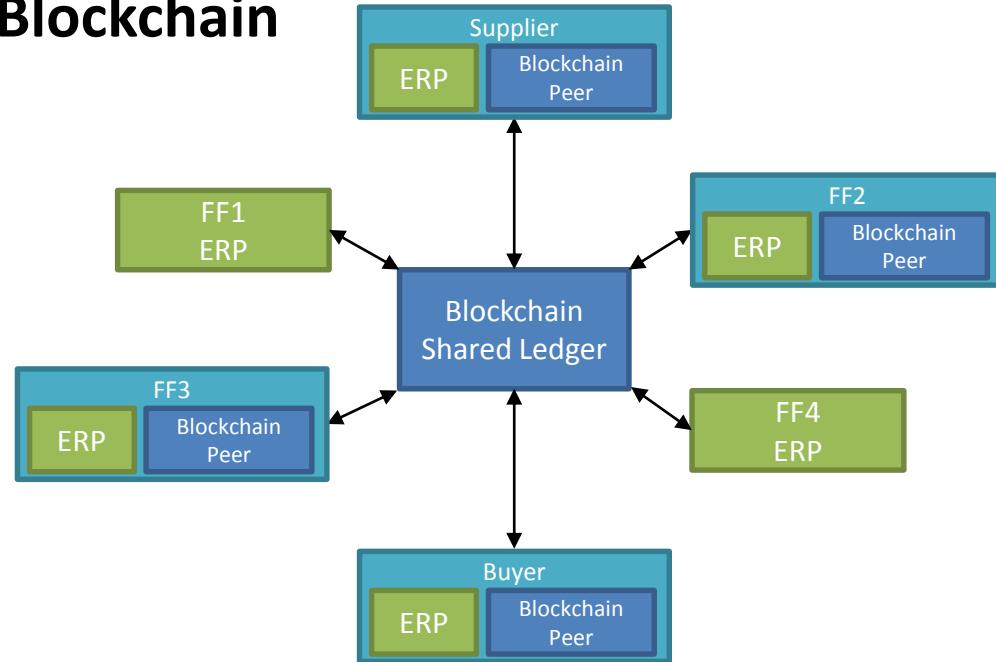
Comparison between solutions

Today



FF = Freight Forwarder

Blockchain



Blockchain for Business

What?

Append-only distributed
system of record shared
across business network

**Shared
Ledger**

**Smart
Contract**

Business terms embedded
in transaction database &
executed with transactions

Ensuring appropriate
visibility; transactions are
secure, authenticated &
verifiable

Privacy

Consensus

All parties agree to
network verified
transaction

Broader participation, lower cost, increased efficiency

Three different blockchain frameworks

- R3 Corda <https://www.corda.net/>
- Ethereum <https://ethereum.org/>
- Hyperledger Fabric
<https://www.hyperledger.org/>

R3 Corda

- Specialized platform for the financial services industry.
- Takes the highly regulated environment into account by augmenting smart contracts with legal prose.
- No own currency.

Ethereum

- Independent of any specific field of application.
- Not modular, but a generic platform for all kinds of transactions and applications.
- Own currency- Ether. Tokens via smart contracts.

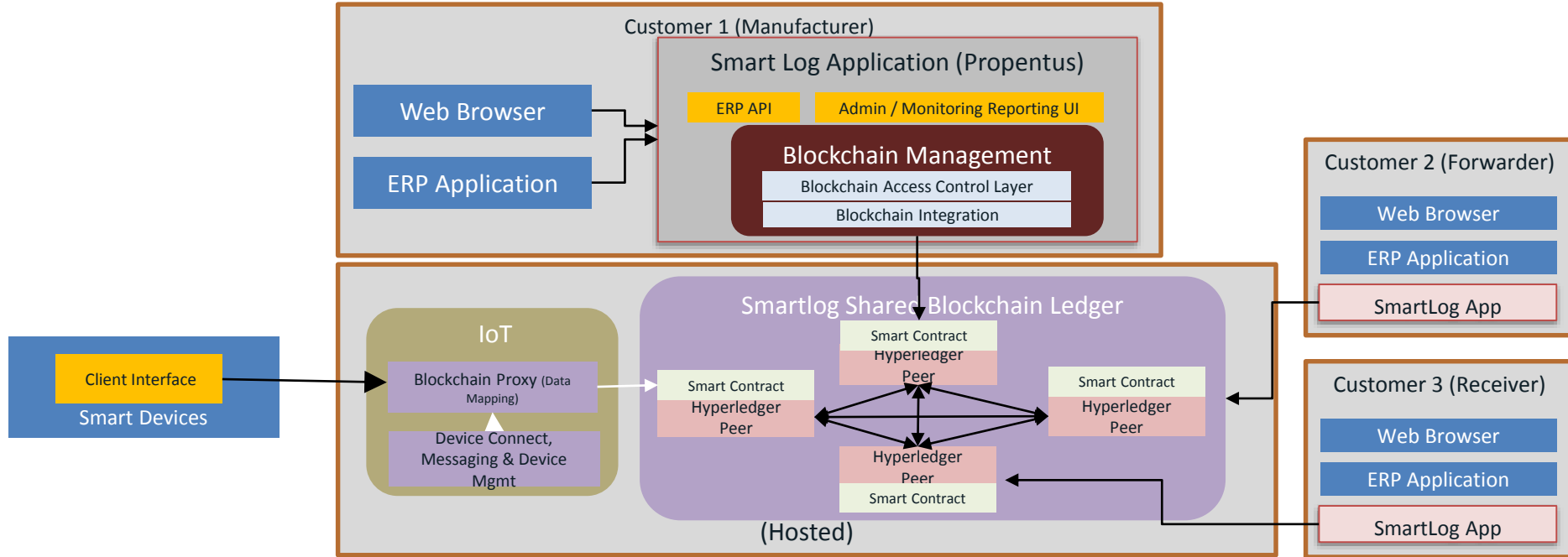
Hyperledger Fabric

- Modular and extendable architecture that can be employed in various industries.
- A versatile toolbox. Can be customized to a multitude of applications.
- No own currency.

SmartLog PoC Project

- Project SmartLog is about introducing a blockchain technology application into the logistics business operational data transfer traffic – not just as a commercial, proprietary application suite, but rather as an industry-wide open solution to which every interested and involved party can join and from which every involved party can directly benefit from.
- SmartLog blockchain shared ledger platform is based on the Hyperledger Fabric.
- <https://smartlog.kinno.fi/solution/>

SmartLog Hyperledger Fabric based Architecture



SmartLog Pilot1 Participants

1. A Port
2. A Container Terminal
3. An Ocean Shipping Line
4. Container Trucking Companies
5. Shippers
6. Customs Brokers
7. Customs

You are welcome to contact SmartLog!

Thank you for the attention!

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