DISTRIBUTED LEDGER & ZERO KNOWLEDGE TECHNOLOGY IN FINANCE
Our background

Founded in 2015 with the vision of helping companies solve real-world problems using advanced cryptographic technology including distributed ledgers.

<table>
<thead>
<tr>
<th>Summary</th>
<th>Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Founded</td>
<td>2015</td>
</tr>
<tr>
<td>Employees</td>
<td>30</td>
</tr>
<tr>
<td>Headquarters</td>
<td>London</td>
</tr>
<tr>
<td>Field of Business</td>
<td>Blockchain Technology</td>
</tr>
<tr>
<td>Product Focus</td>
<td>Privacy &amp; Interoperability</td>
</tr>
</tbody>
</table>

Partners

- Energy Web Foundation
- London Fintech Week
- RocketSpace
- Momentum
- Microsoft
- Innovate UK
Working with the largest global corporates...

Aviation
- KLM
- SITA

Telecoms
- TIM
- vodafone

Shipping
- Lloyd's Register

Auto
- TOYOTA

Aid
- United Nations

Energy
- Shell

Finance
- Grupo Bancolombia
- BARCLAYS
- Bank of America

Our clients
- LEXCOSYSTEMS
- nuggets
- CYGNETISE
- BARTR
- supermoney
- Travel Ledger
- qappil
- SATOSHI
- energy web
- InvenTrust
- emsurge
- BABB

...while maintaining roots in the startup & developer community.
Blockchain technology value

- **Data / Process Integration**: 10%
- **Asset Registration / Ownership**: 30%
- **Value / Token Exchange**: 60%

Financial services:
valuation, reduced risk for insurance, banking, trading

physical / digital assets
Distributed Ledgers in Finance

Trade Finance
Asset Tokenisation, Financing,
Securitisation
Fiat Tokenisation
Trading & Settlement
Cross Border
Insurance
CASE STUDY

Shell
Matching buyers and sellers on blockchain technology

A energy trading system enabling Shell’s trading desks to price and fulfill orders using ethereum blockchain technology.

Having gone live at the start of November 2018, Shell’s DS-X platform has allowed traders to automate processes while using an intuitive interface, ensuring energy trading at Shell is now vastly more efficient while gaining the benefits of a decentralised system. The order lifecycle time is reduced significantly, and all data on the system is stored and encrypted, providing increased security and data integrity.

“We did the first product derivative trade on blockchain together with our partner Applied Blockchain.”

**Ben van Beurden, CEO, Shell, 08/11/18**

“We investing in Applied Blockchain is part of our commitment to use digitalisation to create value in our core business and develop new business models.”

**Johan Krebbers, CTO IT, Shell**
Lloyd’s Register
Shaping the Marine and Shipping industry's future

Lloyd’s Register is a leading international provider of classification, compliance and consultancy services to the marine and offshore industries.

1760 at Lloyd’s Coffee House in London new ships were recorded in a physical ledger known as the Lloyd's Register. Today, thanks to Applied Blockchain, ships in the Lloyds’ Register can be recorded on an immutable blockchain ledger.

Lloyds Register and Applied Blockchain register ships using blockchain technology.

LR announced a co-operation project with Hyundai Heavy Industries (HHI) in Korea, to explore the value of blockchain when applied to shipbuilding.”
CASE STUDY

KLM

Aircraft component tracking using blockchain technology at KLM
Private Blockchain Network for Insurance

Private Blockchain Network for Trade Finance

Private Blockchain Network for Food Supply Chain

Private Blockchain Network for Shipping

Private Blockchain Network for Commodity Trading

"We can't use our blockchain solution to insure commodities on their chain"

"We can't access competitive insurance for our food supply chain, because insurers operate their policies on a different blockchain"

"We'd like to reduce our financing risk by applying our new blockchain solution to assets we manage, but that only works if those assets are on our blockchain"

"Our blockchain solution can't act on shipping records that reside on another blockchain"
Zero Knowledge Proofs
Next generation cryptography to prove you hold information without revealing the information itself.
## K0
Zero knowledge proof product for enterprise privacy and interoperability

<table>
<thead>
<tr>
<th>Technology Generation</th>
<th>Type</th>
<th>Platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Public smart contracts</td>
<td>🪓</td>
</tr>
<tr>
<td>2nd</td>
<td>Enterprise blockchains with proprietary privacy technology: no interoperability.</td>
<td>🪓 🟢 🟢 🟢</td>
</tr>
<tr>
<td>3rd</td>
<td>K0 introduces zero knowledge proofs to separate assets from specific underlying ledger implementations, making the assets more secure, portable and interoperable.</td>
<td>🪓 🪓 🪓 🪓</td>
</tr>
</tbody>
</table>
“We’ve accessed cheaper insurance, even from providers on other blockchains, and without revealing our commercially sensitive data”

“We’re insuring more commodities, registered on any private blockchain network”

“We’re verifying ship records more quickly”

“We’ve reduced our financing risk by using our blockchain solution to verify properties such as asset age, no. of previous owners without seeing the actual data, or the blockchain where the asset was first registered.”
THANK YOU!

To find out more about our products & services
appliedblockchain.com