# BLOCKSTRUCT

## 0bsnetwork
*Blockchain For The Real World*

Enterprise – Private – Public

## Blockchain For The Real World

Srdjan Kupresanin, Founder
*Vienna, 17th January 2019*

Blockchain is not a silver bullet about to disrupt everything, magically making the world a better place and everyone wealthy.

Smart contracts are neither smart, nor contracts.

Rather than making outrageous promises, we're offering to help make your interactions with your customers and partners more efficient and more transparent to your stakeholders. And with cleverly designed asset tokenisation, we can help bring your business truly into the 21st century.

One "outrageous" claim that we are confidently making is that our platform is one of the very best in the world in terms of its technical capabilities. Easy to work with and develop on.

That's Blockchain For The Real World.

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# Introduction to 0bsnetwork Blockchain Platform

## Blockchain For The Real World

- A blockchain platform 100% focused on and uniquely suited to the B2C and B2B needs of startups, established small and medium companies, as well as globe-spanning enterprises with hundreds of corporate partners and millions of users.
- 0bsnetwork is the right platform for you if you want decentralized, fair, immutable and trust-less ledger of data and transactions in a B2B setting, for example in a cross-border supply chain network, or for pay-per-use business model in manufacturing. It is also the platform of choice if you want to create a retail/loyalty token, or for tokenizing ownership in a network of car-sharing vehicles or hotel rooms. Actually, in terms of token use cases, with our smart assets feature, your imagination is the only limiting factor!
- 0bsnetwork is feature-rich, 40-200x faster than the more established platforms such as Ethereum, cost-effective and scalable. And thanks to its Next Generation Decentralized Proof of Stake algorithm, it doesn't burn as much coal as six medium-sized European countries to process your transactions.

## Industry Leading, Made For Business Features

- 0bsnetwork natively built-in features replace 90% of all the smart contracts you'd need to custom develop on Ethereum platform, saving development time and cost and eliminating huge space for errors and potentially costly and/or crippling bugs. On the other hand, for those cases where smart contracts are indeed necessary, 0bsnetwork supports that feature as well!
- Data transactions are the primary feature for business – store, share and process (incl. in an automated way) business data, trigger events, compare, analyze and draw business intelligence from data indelibly carved into the blockchain with or without out smart contracts.
- If you need a token, it takes 1 minute and two clicks to create one. Mass transaction feature is there for token and data distribution and storage on a massive scale. And the built-in decentralized (ergo, secure) exchange is ready for your utility, asset or payment token
- We already have several clients for tokenisation and blockchain for business implementation and 0bsnetwork is included in the Blockchain Lab of the Austrian Federal Chamber of Commerce.
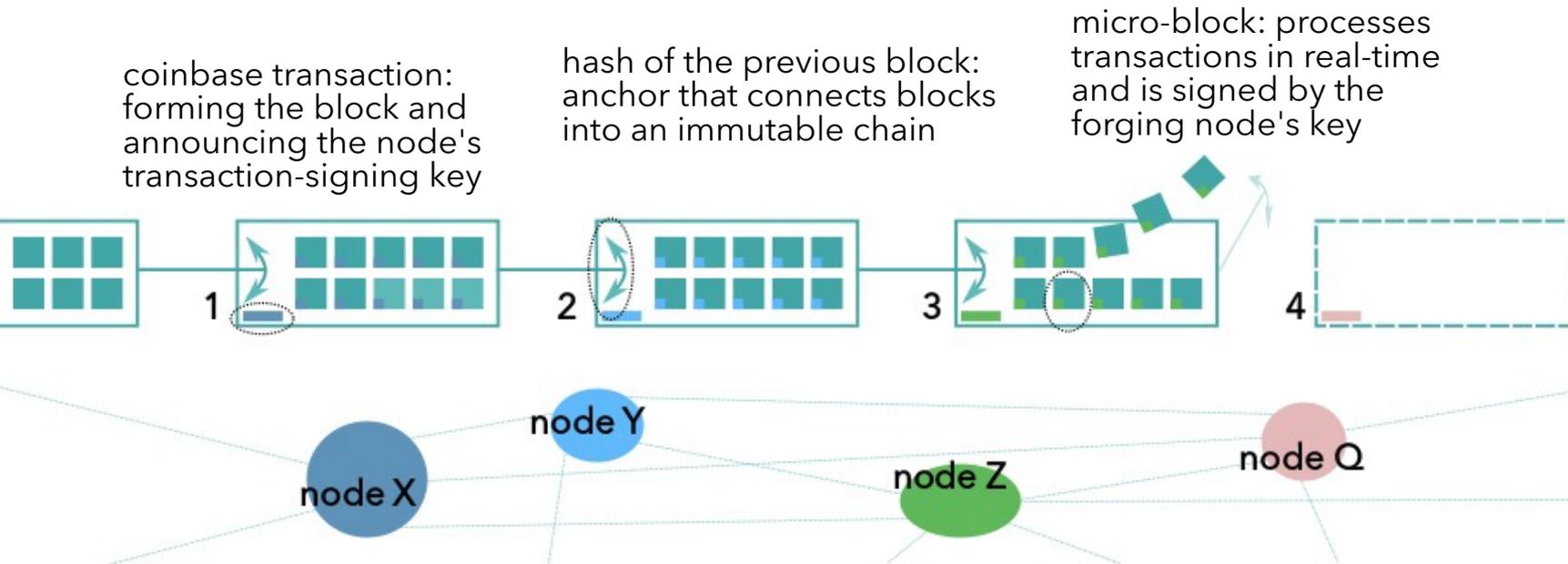
# Blockchain Business Applications: Overview

Principal characteristics of 0bsnetwork Blockchain Platform, for applications in business/enterprise space are:

- **Decentralized and inherently redundant**
  - Decentralized & trustless: Each party stores the full history of data and independently verifies the accuracy of transactions – no need for central authority, no need to trust any one party
  - High availability by design: All network nodes are equal in every respect, therefore failure of one or several of them won't affect the availability of the data & transactions stored on the blockchain in any way; business process continuity is ensured by design

- **Immutable**
  - Once data and/or transactions are stored in a block and confirmed by the network of nodes, they cannot be deleted, or tampered with. Subsequent updates are possible, but the entire history will always remain visible.

- **Transparent, or Permissioned**
  - Depending on the design, blockchian applications (data, transactions, etc.) can be fully transparent and auditable for any participant in the public or private network, or permissioned, with managed rights of access for individual participants.

- **Fast and lite on resources (blockchain 3.0 technologies)**
  - With its ability to process more than 1,000 transactions per second, 0bsnetwork is more than 200 times faster than Bitcoin blockchain (~5 TX/s), and more than 50 times faster than Ethereum (~20 TX/s); speed that allows real-time business applications
  - Unlike Bitcoin and Ethereum, 0bsnetwork doesn't require specialized hardware to run; electricity consumption is 1,000x lower

- **Autonomous**
  - While we recommend to keep business logic outside of blockchain, for flexibility, "Smart Contracts", when necessary, enable total automation – from data collection, via resource management to payments, no human operators are required to oversee, steer or verify the execution of well designed business processes and relationships

# 0bsnetwork: Fast, Powerful, Fully Featured Platform

1. instantaneous transactions (40x – 200x faster than Ethereum, depending on transaction format)

2. low and fixed cost fees (on Ethereum, fees are volatile in Ether and Ether is volatile in Euros)

3. one-click token creation

4. built-in data transactions for business applications development, no smart contracts needed

5. smart accounts (2FA, time-delay, etc.)

6. smart assets (non-fungible tokens, scripted assets, etc.)

7. smart contracts, for when they are really truly needed :)

8. fast and secure decentralized exchange for instant token tradeability

9. fiat (USD, EUR, etc.) and cryptocurrency (BTC, ETH, etc.) gateways

10. low resource utilisation – energy efficient / green

# Hyper-fast Next Generation* Proof of Stake Algorithm

coinbase transaction: forming the block and announcing the node's transaction-signing key

hash of the previous block: anchor that connects blocks into an immutable chain

micro-block: processes transactions in real-time and is signed by the forging node's key



node X

node Y

node Z

node Q

* designed by Emin Gün Sirer and his team at Cornell University – World's leading blockchain R&D team
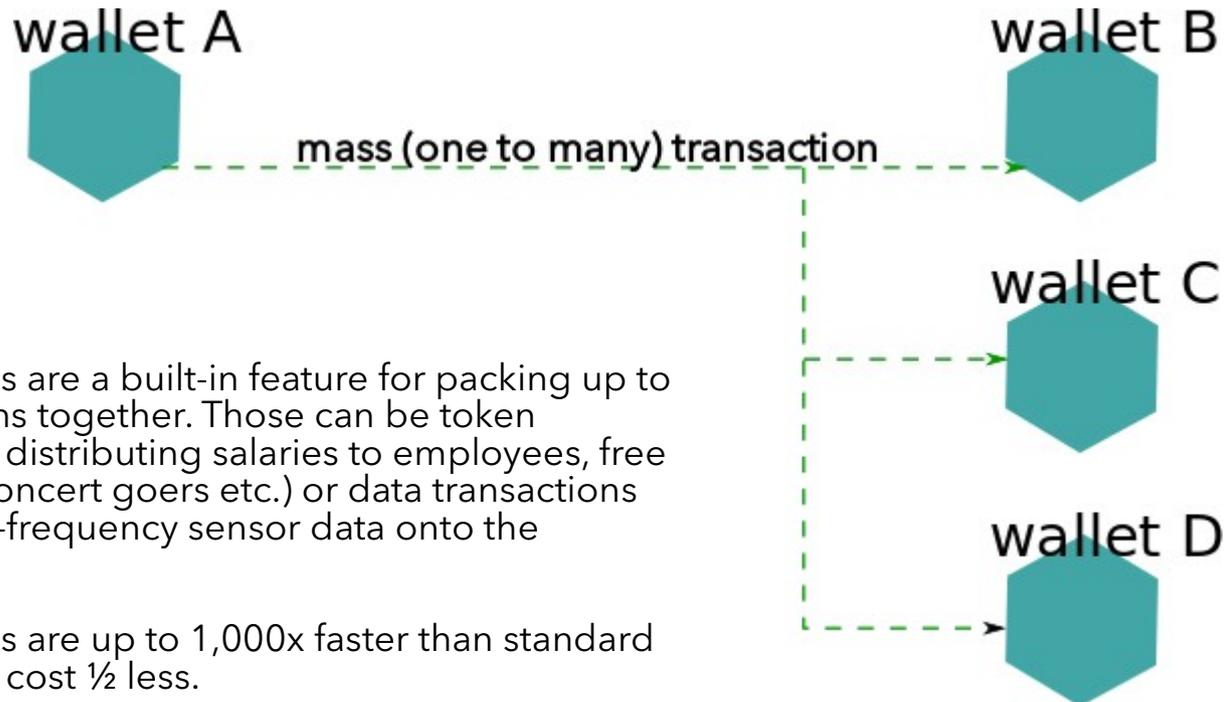
# Token Transactions

wallet A                                                          wallet B

standard wallet to wallet transaction ——————————▶
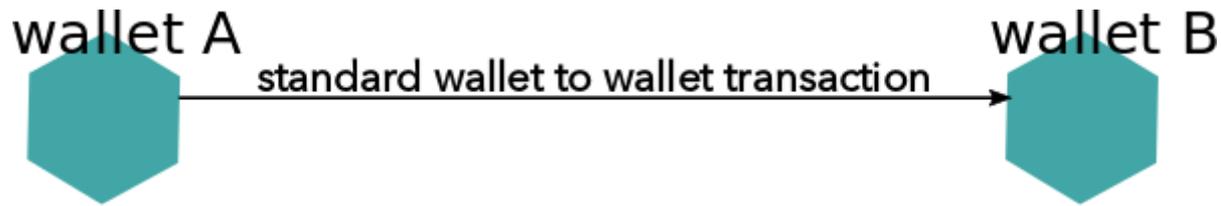
Simple transactions are processed instantly and cost a fixed amount of 0.05EUR.

Imagine having to wait 20-60 minutes for your payment at a bar or restaurant to be processed. Imagine the transaction fees to change every second of every day, varying wildly. That's the reality of Ethereum. Not on 0bsnetwork.

Additionally, as a token issuer, you can enable Custom Fees, so your customers can use your token for the transaction fee as well. No need to go to an exchange and buy a special "gas" token, just to be able to buy a concert ticket, as an example.

# Mass Transactions

wallet A

wallet B

mass (one to many) transaction

wallet C

wallet D

Mass transactions are a built-in feature for packing up to 1,000 transactions together. Those can be token transactions (eg. distributing salaries to employees, free beer tokens to concert goers etc.) or data transactions (eg. writing high-frequency sensor data onto the blockchain).
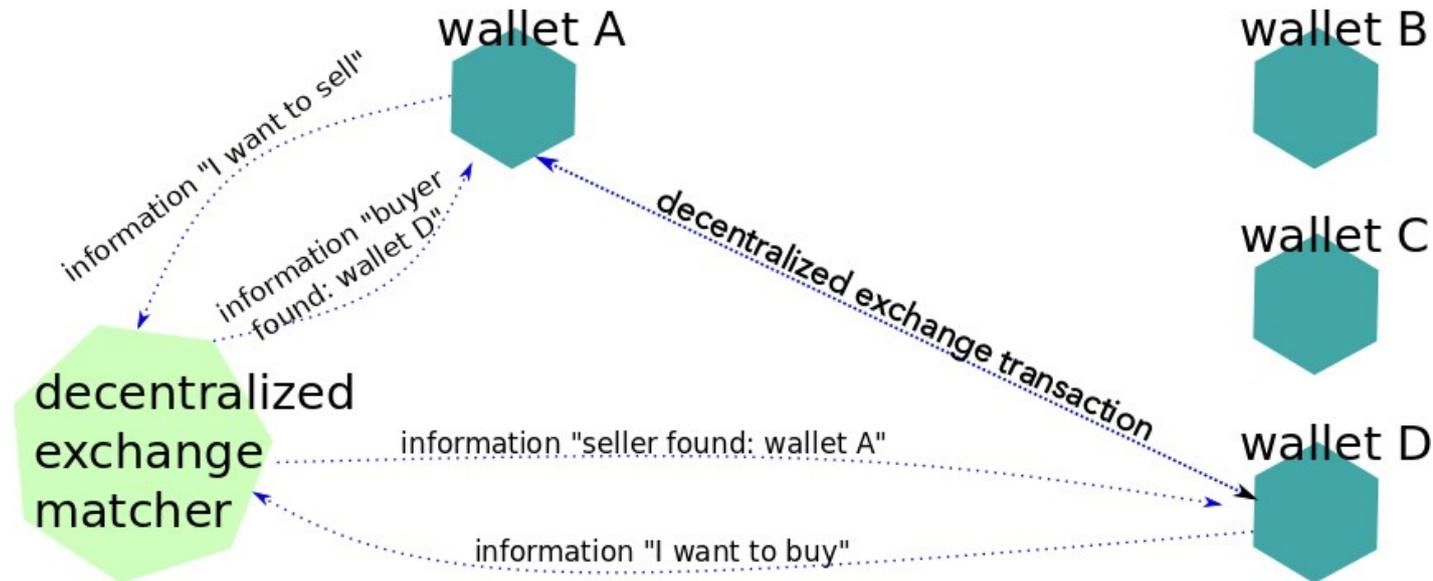
Mass transactions are up to 1,000x faster than standard transactions and cost ½ less.

# Data Transactions

Store data from sensors in your vehicles, industrial robots, handheld devices, environment monitors, etc.

This is a natively built-in feature of the platform, no special development is necessary.

# Decentralized Exchange

wallet A

wallet B

wallet C

wallet D

information "I want to sell"

information "buyer found: wallet D"

decentralized exchange transaction

decentralized exchange matcher

information "seller found: wallet A"

information "I want to buy"
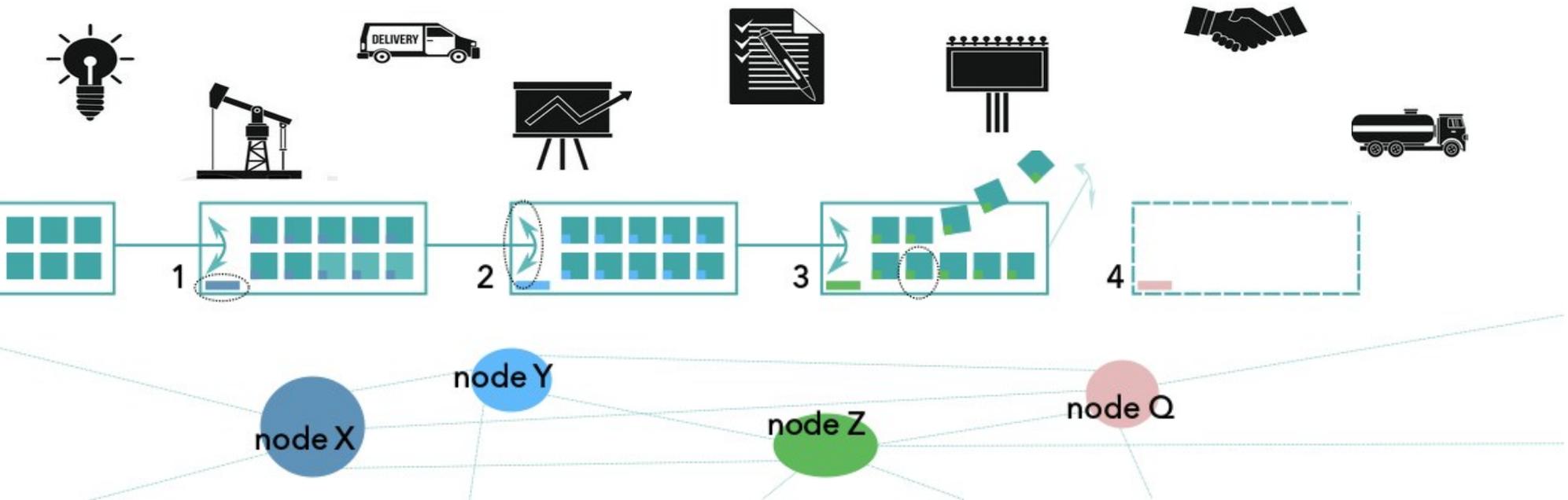
Unlike traditional exchanges (you've surely heard of MtGox, as an example), it's impossible to steal funds from our decentralised exchange, because they are never actually stored on the exchange.

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# 0bsnetwork is A Platform

Multiple private and permissioned (enterprise) blockchains can be easily spawned and anchored into the public chain as and when needed. We also play nice with your existing ERP system. So transition is smooth and you can choose what and when to process using blockchain.
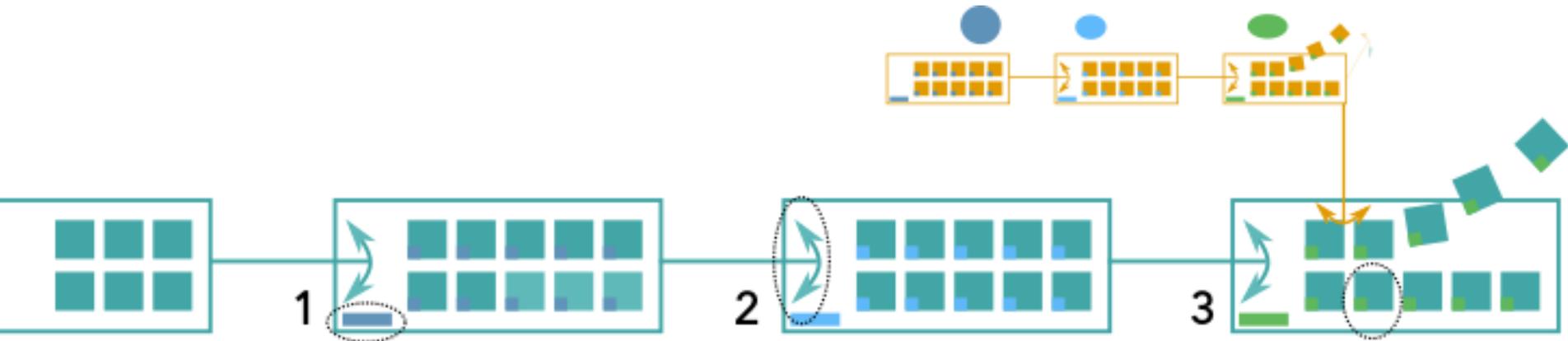
# Developer Tools

Rich and extensible Application Programming Interface enables easy development of B2B and B2C third-party applications on top of the 0bsnetwork blockchain
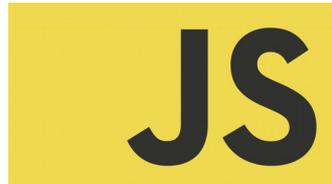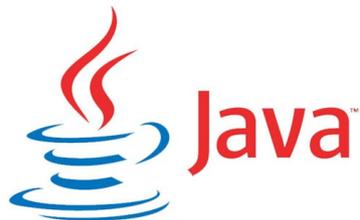
Most widely used programming languages in the world, for:

**Web development**

**Back-end, data analysis, scientific computing, AI**

**Applications, embedded software, web, etc.**

# 0bsTag – Tag It Smart
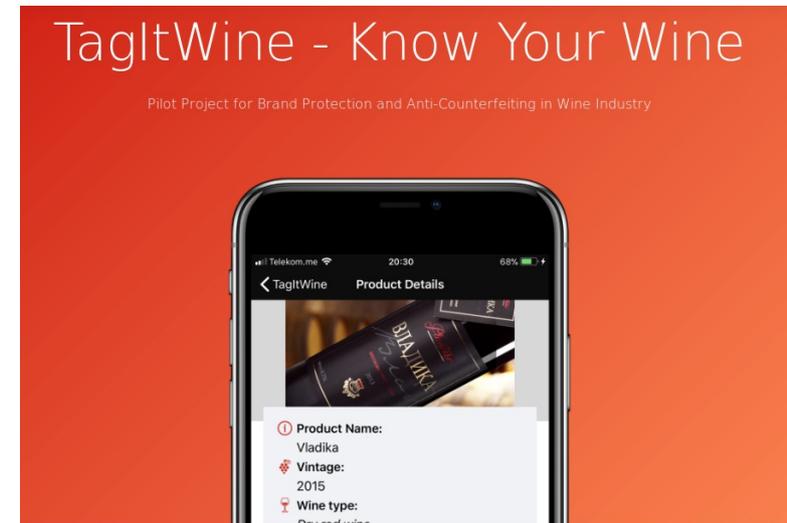


Prevent forgeries of your products, prove the origin of your premium products to your customers, provide insight to all your stakeholders into exactly where, when and how your products move. Combine with other IoT sensors for a rich data insight.

# 0bsWorld Ecosystem (illustration only, does not imply brand endorsement)
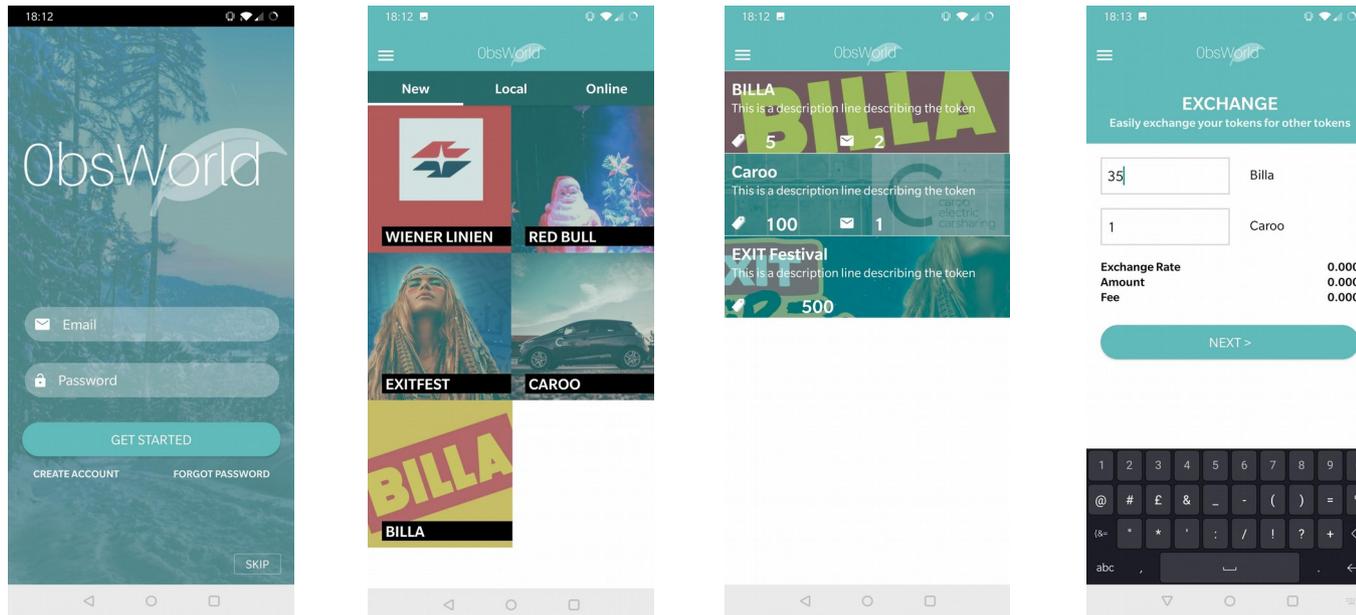


Our voucher ecosystem app for retail customers – enabling cross-selling, promotions, user interaction, various reporting tools. Once you see the benefits of the the platform, you'll probably want to extend the application of blockchain in your business to stock/inventory management and logistics.          14

# ClickMarket

Blockchain-backed web shop enables token as a means of payment, or loyalty programme, as well as certification of origin and tracking of deliveries.

We're starting with the fresh organic produce, but same platform can be used for any kind of web shop where certification of fair trade, responsible resource utilization, trade free of middle-men, etc. are required, or would be nice to have.

With blockchain, it's also really difficult to fake customer reviews, which helps increase buyer confidence in the marketplace.



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# Asset Tokenisation: Caroo/Eloop

Caroo (recently rebranded to Eloop) is one of our first clients, tokenizing their 100% electric vehicle sharing fleet.

Crowd investors can purchase small shares in the vehicles and then, through data storage on the 0bsnetwork, have full insight into what their vehicles are doing, where they are, how they're being used, how much revenue they're generating and how much of that revenue the investors will receive. It's almost impossible to cheat with such a system.

And we're ready to implement similar systems for management of other assets: hotel rooms, or apartments, boats, industrial machinery, construction machinery and tools, etc.

Blockchain For The Real World.
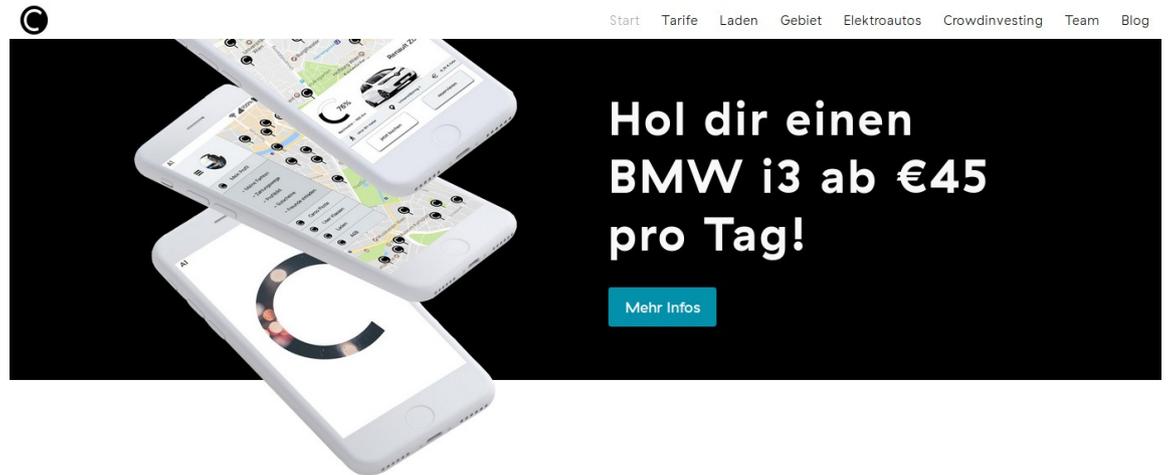


Start   Tarife   Laden   Gebiet   Elektroautos   Crowdinvesting   Team   Blog

**Hol dir einen BMW i3 ab €45 pro Tag!**

Mehr Infos

**Unsere E-Carsharing Flotte**

Die Flotte wird auch noch aus einigen anderen Fahrzeugen bestehen. Wie z.B. der BMW i3, der neue Nissan Leaf oder der Nissan e-NV200.

# Who We Are

### Srdjan Kupresanin, Founder

Originally from Croatia, worked in Mergers and Acquisitions and Strategic Management Advisory for most of his career, Srdjan is an early adopter of blockchain technology. Since 2010, he's been dreaming about facilitating Blockchain For The Real World, and now with the 0bsnetwork, as a blockchain 3.0 platform, the time is right to implement this world-changing technology. Creatively and responsibly, when and where it fits the requirements of the business, as there are no silver bullets.

### James Hitchcock, Lead Developer

Brit living in Spain, James is a multi skilled software developer, with over 12 years experience. Working from small startups to global enterprises as a consultant and lead developer, he's worked across many industries including Retail, Gaming & Sports, Logistics and Automotive. Career highlights include designing and developing an industry leading retail availability measurement system, and presenting on the stage at Tech Crunch hackathon.

And a team of enthusiastic people working with us on a full-time or part-time basis, with experience in:

# How To Proceed

- This presentation is intended to give some ideas and serve as a basis for further conversation. Ideally, it should be accompanied or followed by a verbal presentation and Q&A with us

- As blockchain is still considered a cutting-edge, new technology, Proof of Concept projects make a lot of sense for most businesses as the first step towards blockchain deployment

- Our proposal would be to:
  - Organize a one day workshop with your product/innovation team, to discuss areas where blockchain can be applied to improve your business processes, products and services
  - Identify 1-3 areas with high potential for benefit from blockchain technology application in your business and identify which (one or more) blockchain technologies are likely to fit the use cases best
  - Develop respective PoCs, refine the approach as necessary, test and then deploy in expanding circles of real world / production environment(s)
  - Enjoy the benefits of blockchain
  - Keep learning
  - Have fun and feel proud as a leader in your field, knowing that there are very few companies in the world making these bold steps at the same time as you

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# Get in Touch

- Blockstruct / 0bsnetwork is based in Vienna, with a mission to support startups, established businesses, enterprises, government and non-governmental agencies in implementing Blockchain For The Real World

- We are business and technology experts, enthusiasts and nerds, with years of experience in management consulting, mergers and acquisitions advisory, banking, software development, systems administration and more.

- We've worked extensively with companies in telecommunications, energy, automotive, electronics, manufacturing, banking and other industries throughout Europe

- We have been playing and working with blockchain since 2010. And we'd be very happy to help you design, develop, test and implement your blockchain projects

- Give us a buzz:

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