

Introduction

Tagion

A democratic monetary and banking system owned by its stakeholders and governed as a common. Tagion has its own non-collateralized money, Tagions.

Mission

To create and accelerate the world's transition to a sustainable and non-discriminating banking system with the next generation of peer-to-peer e-money.

Vision

A sustainable economic world



Current Blockchain Based Monetary Systems Main Issues

Centralized Governance Model

Centralized Money supply

Transaction Volumes

Transaction
Speed

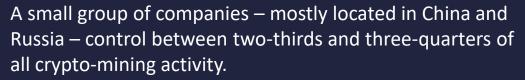
Energy Consumption Inefficient
Use of Data

Unorderly
Transactions
Creating
Bias



Centralized Governance Model





https://www.theguardian.com/technology/2018/oct/15/blockchain-democracy-decentralisation-bitcoin-price-cryptocurrencies



In the Tagion network power concentration is made impossible

The model is based on the ideas and design principles of Nobel Memorial Prize winner in Economic Sciences, Elinor Ostrom



Centralised Money Supply

Current monetary systems

- Money supply controlled by central banks
- Fractional banking allowed by loan providers (commercial banks)
- Fixed supply models in fiat and DLT based systems
- Pegged currencies that are non-independent

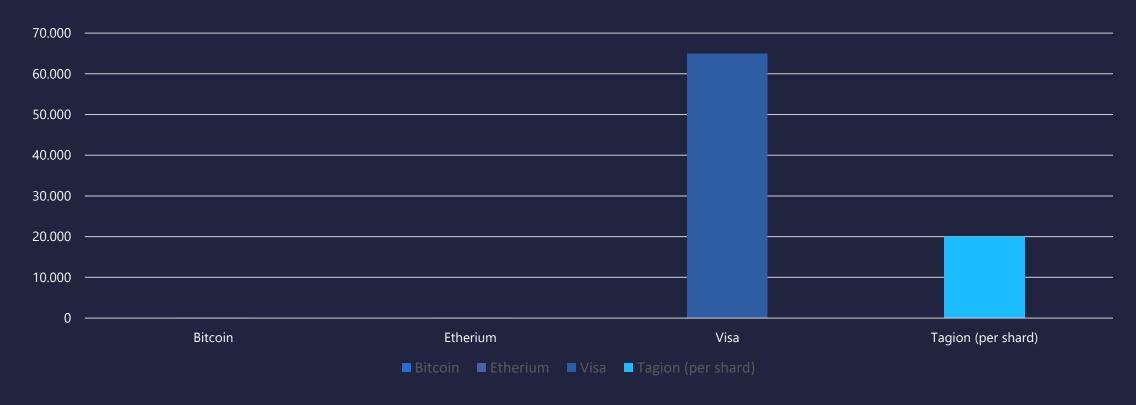
Tagion

- Algorithmically controlled issuing and burning based on:
 - Velocity of money
 - Adoption
 - Supply of money
 - Transaction size and more

Trust in market and in system



Transaction Volumes

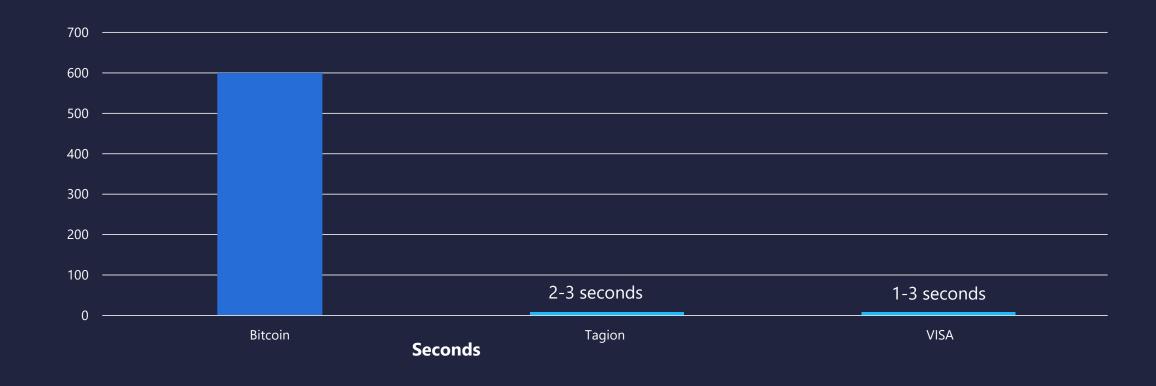


Volume of transactions (tx) / second

Sources: https://en.wikipedia.org/wiki/Bitcoin scalability problem https://en.wikipedia.org/wiki/Bitcoin scalability problem https://www.coindesk.com/information/will-ethereum-scale



Speed of transactions (Confirmation time)



Sources: https://en.wikipedia.org/wiki/Bitcoin scalability problem https://www.coindesk.com/information/will-ethereum-scale



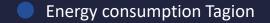
Energy Consumption

Bitcoin mining accounts for 0.29% of the world's annual electricity consumption. Mining of a single bitcoin block consumes enough energy to power more than 28 U.S. homes for a day.

Tagion consumes 10,000% less energy, compared to Bitcoin



Energy consumption Bitcoin





Inefficient Use of Data

Immutable Data-Structure



Non-Immutable Distributed Data Storage



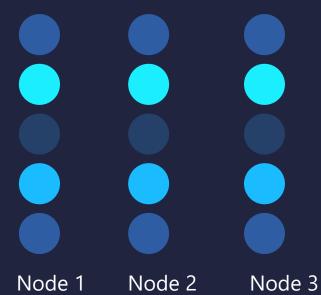
Blockchain Technology

New Tagion DART
Distributed Archive of Random Transactions
(patent pending)



Inefficient use of data

Storage of Decentralised (redundant) Data



Blockchain Technology

Distributed Storage of Data



Node 1

Node 2

Node 3

New Tagion DART

(Distributed Archive of Random Transactions) (patent pending)



Unorderly Transactions – Creating Order Bias



Current Central System

- High-frequency trading
- High barrier to entry for direct trading
- Provisioned systems
- Market arbitrage



Proof-of-Work Based DLTs

- Probabilistic with no ordering
- TX's cherry picked, based on price
- Unfair matching and settlements
- Sequential execution, because of Blockchain data structure security
- Market arbitrage



Tagion

- Exact (fair) Ordering
- Parallel execution for scaling and efficient resource utilization
- Deterministic, i.e. finality on settlements fast
- Decentralized markets (currency exchange at first)





Core Components

Network Consensus and sharding	Patent pending gossip protocol used for data synchronization and P2P network. Hashgraph algorithm used for consensus and ordering of transactions	α-version excl. P2P
Scripting Engine Script execution	Scripting Engine executing the transactions and other protocol request making sure protocols are obeyed for Transactions, Exchanges and other banking protocols	α-version
Database (DART) Distributed Archive of Random Transactions	Patent pending distributed database DART (Distributed Archive of Random Transaction) efficiently stores and distributes the outputs from the scripting and removes obsolete data	α-version

Sharding capability that along with DART and ordering, enables parallelism of transactions and speed as long as the inputs and outputs are not depended



Governance

	Purpose	Means	Accomplishes
Node Governance	Secure democratic principles, i.e.: one-person one-node	 Social proof, i.e. social interaction between node owners Reputational scoring model 	A fair and democratic network that can be said to be truly democratic, owned and governed by its users
Economic Governance	Instil trust in monetary system and provide adequate liquidity to the market	 Fixed supply at first Later, network algorithmic controlled supply that alleviate fluctuations 	 Trust in the system Support of efficient market with liquidity
System Governance	 Ensure the network is stable and secure Facilitates continuous cooperation between developers to improve technology and protocols 	Three layered technical governance controlled by majority voting 5/6 of nodes.	 Stable and trustworthy system Little chance for need of hard forks

Decentralized Regulation of Money Supply

Velocity of Tagions

 $V_{Tagions}$

Adoption

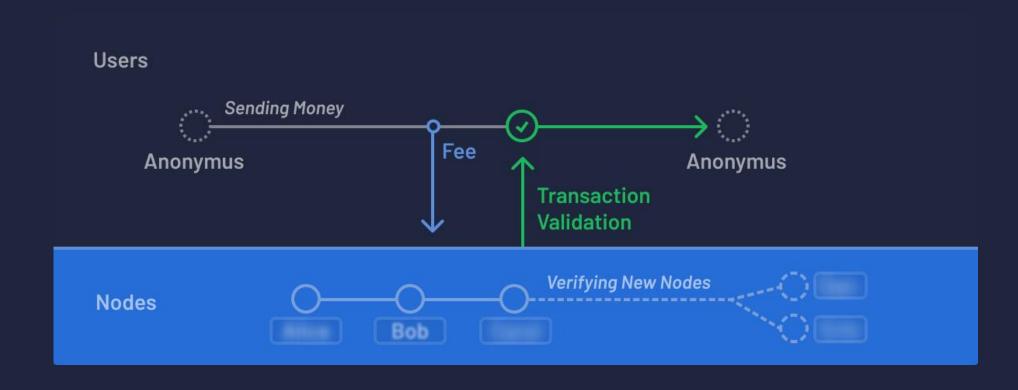
 Q_{Nodes}



All variables are internal to the network and the goal is to keep the intrinsic price level stable

$$P_{Tagions} = \frac{V \cdot M}{Q}$$

Tagion Business Model – Incentivising Nodes





Value Proposition

A borderless monetary system that enables private and zero transactions at near-zero transaction fees

Fair trades and fair decentralized exchange of digital currencies with full transparency to order-depth, high liquidity, automated price discovery, matching and settlement

A genuine democratic governance model that secures a healthy and trustworthy network

A decentralised and **intelligent money supply** algorithm supporting an efficient market

Technological advantage over current DLTs being scalable, having efficient use of data by DART and allowing parallel execution.



Adoption

Value adding services and applications

Partners and communities applications and services

- Brokers (E-money and Fiat)
- Central Exchanges (on- and off ramp)
- Transaction based services

Tagion sponsored application & service

- Wallet
- Merchant Software
- DEX Settlement Service

Tagion Network (technology and nodes)

- DEX Protocols
- Transaction Protocols
- Consensus and network mechanism
- Scripting Engine
- Data storage (DART)

Focus on ecosystem enablement and growth in user adoption through value providing services

Test adoption strategies with a geo-based incentive model made to fuel growth and drive community building.
The main target group being merchants and end-users in Denmark and Ukraine.

Enablers

Focus: Bottom-up and providing real value and usability through partners



Tagion Roadmap and Accomplishments

≈ Q1 2021 Launching main network

≈ 03 2020

Open-sourcing the Tagion Core library

≈ April 2020

Launch of open test network

October 2019

Implemented β -version of HiBON and HiBON-RPC

July 2019

Filed patents for Gossip protocol and DART

January 2019

Implemented α -version of scripting engine

December 2018

Formed the core principles of the node governance model

October 2018

Implemented a-version of Gossip protocol

July 2018

Implemented β-version of HBSON (now HiBON) data format

January 2018

Redesigned network to use Hashgraph instead of Blockchain

July 2017

Tagion project is formally started by the three founders

≈ Q3 2020

β-launch of the Tagion Network

≈ June 2020

α-launch of the Tagion Network

≈ December 2019

α-launch of developer package and test node

September 2019

Formed the core principles of the economic governance model

April 2019

Implemented a-version of DART

December 2018

Successfully tested Hashgraph implementation in closed network

November 2018

Implemented α-version of Hashgraph consensus protocol

August 2018

Implemented α -version of transaction API

April 2018

Confirmed that our design is not violating any patents

December 2017

Blockchain-based proof of concept network tested

2015 - 2017

Ideation of BitCuits by Carsten Bleser Rasmussen



Tagion Wallet and Merchant Software

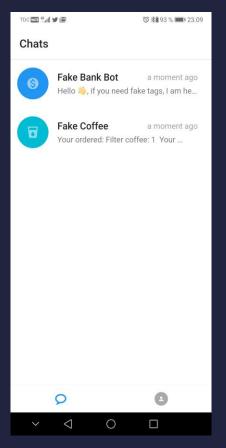
Commercial Applications:

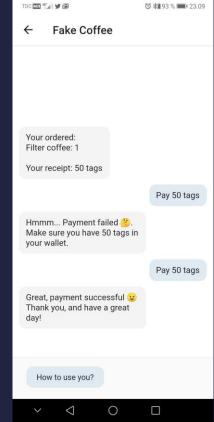
- Consumer Wallet and services
- Merchant Software and Services
- DEX services

The founders are all equity owners of I25S ApS in Denmark, where these applications are being and planned to be developed from. I25S is a commercial entity separated from the Tagion organization, which is non-profit.

The value driving adoption for merchants are: Better customer service and automation and significant lower transaction costs.

Status: first prototype for Android and IOS wallet





Screenshots from Android App





Theis Simonsen - CEO and co-founder

Theis is an experienced strategist, developer, lecturer and executive. Prior to Tagion, Theis served as a senior consultant at KPMG and an external lecturer at Copenhagen Business School. He has driven and founded other companies as well.

Theis received an M.S. in Information Technology from I.T. University of Copenhagen.

His drive and passion for making a difference in the world and democratising the financial system make him a perfect spearhead for Tagion.



Kristian Vestergaard - CCO and co-founder

Kristian brings 20+ years of experience as an engineer, software architect and leader to the team. Having started in an IBM's call centre, he quickly raised to software engineer and analyst before working as an external tutor and consultant for IBM and PwC.

His desire to seek new adventures brought him to audio world leader Jabra serving as a Director, Digital Strategist and Architect in Jabra. His knowledge of the informational structures and business understanding earned him a seat at the GN Netcom board.

In the early days of the Tagion journey, he simultaneously worked as GDPR consultant and Enterprise Architect at the largest power producer in Denmark, Ørsted.

His commitment to the project is best reflected in the sacrifices he has brought to the project by working two jobs to fund not only himself but also four further full-time Tagion team members.



Carsten Bleser Rasmussen - CTO and co-founder

Carsten is the technical cornerstone of Tagion and responsible for low-level architecture and core network concepts – with more than 20 years of experience in low-level programming and ASIC design it is hard to find a person more capable of the task.

Before his Tagion days, he was co-founder and CTO at Polaric Semiconductor, specialising in design and engineering of NFC and Bluetooth microchips and leading an international team of over 15 engineers and chip designers. Prior to Polaric, he designed ASIC chips for Nokia.

Carsten received an M.S. in Electromagnetic Field Theory from the Technical University of Denmark.

Carsten has a brilliant ability to combine deep technological understanding with visions for everyday applications. A talent that made him part of the Giga core team. Giga that later was sold to Intel in one of the biggest acquisitions in Danish business history.



Tobias Ambs-Thomsen – CMO

Tobias has over two decades of experience in visual communication and marketing in a variety of roles in advertising agencies and large companies, including creative lead, and marketing director.

Stirring a marketing department in growth is no strange thing to him. Before he turned to decentralised networks, he was Marketing Director at ACT.Global. A company that during his stay grew from 10 to 70 employees and moved from one to international seven markets as diverse as India, Thailand and Germany.

Tobias has a degree in graphical communication from Danish School of Media and Journalism and is probably one of the few kids that used to swap away from TV-shows in favour for commercial blocks.



James Godfrey – CIO (Chief Investment Officer)

James has vast experience within banking for more than 35 years and from the last 20 years as an executive being managing director for Mizuho International and Nomura International. He worked within credit trading in Euro, Yen and USD in corporates, financials, SSA and CDS both in London, HK, Tokyo and NY. He started as 19 years old at the floor at the London stock exchange as a dealer.

The last couple of years James has gotten into Blockchain revolutionising the banking industry, where he started as head of Capital Markets in BlockEx.



Vladislav Pazych - Digital Marketing Manager

Vlad, having started his career while still attending high school, has versatile experience in UI design, full-stack web development and with indie game development. He has, through his career, contributed to multiple high-stake commercial and open-source projects. This variety gives him unique perspective for marketing products as complex as a DLT and cryptocurrency. Vlad's main responsibility in Tagion is to build an active community of developers



Oleksandr Sushko - System Engineer

Alex brings years of experience in application and system-level engineering. He has used most of his career creating complex B2B enterprise solutions. Prior to Tagion, Alex worked in a Polish company TERG S.A, taking the lead in development of multiple vital in-house applications. Alex quickly outgrew all his prior roles and now directs his talent to writing state of the art software for Tagion Core. Alex has a degree in Computer Science from Kyiv Polytechnic Institute.



Oksana Perederii - Marketer and Office Manager

Oksana spends her time spanning diverse tasks areas among these are being avid participant in all marketing discussions and in the forming of the marketing and adoption strategy.

Prior to Tagion, Oksana has experience from being a Project Manager at Polaric Semiconductor and from various marketing related roles for Together Networks, Kyiv Post, and MIZOL. Oksana holds a Master's degree in Enterprise Economics (Environmental entrepreneurship) from Taras Shevchenko National University of Kyiv.



Leif Bloch Rasmussen – Systems and governance

Leif is an associate professor at Copenhagen Business School within IT and economics. He has spent his career as an academic worked with Commons, IT Governance, cybernetics information systems and converging of technologies i.e. nanotechnology and IT. Innovation and entrepreneurship. For Tagion: governance, Commons.



Richard Kastelein – Strategy, PR & Media

Richard is a Canadian living in the Netherlands whose media career has taken him from the Canada's arctic in the Native press to the sunny Caribbean, and Europe. He has written for Harvard Business Review, Wired, Venturebeat and the Guardian and his work has been translated into Dutch, Greek, Polish, German and French. He holds an honorary Ph.D. at Jiangxi Ahead Institute of Software & Technology (Blockchain Faculty) in China and is the publisher of Blockchain News, Director of both Token. Agency and Blockchain Partners. He is also an advisor to Francis Ford Coppola's Decentralized Pictures (American Zoetrope) in Hollywood and several other projects.









Project Management Team



Shane McQuillan - Founder & CEO, TrustedIn Trading















Sam Kawtharani - Corl co-founder and Fintech Advisor







FinBlox Labs

Project Management Team



Michael Harboe - Strategic Advisor, CEO at Virsabi







Michel Avital - Professor at Copenhagen Business School

