



# CifrisChain 2019

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Hosted by:  
**Luca Cermelli**



# Agenda

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- Underlying technology
- Crypto Ecosystem
- ICOs & Venture funding
- Horizen and ZEN
- Infrastructure
- Application Platform
- Team Horizen
- Get involved!

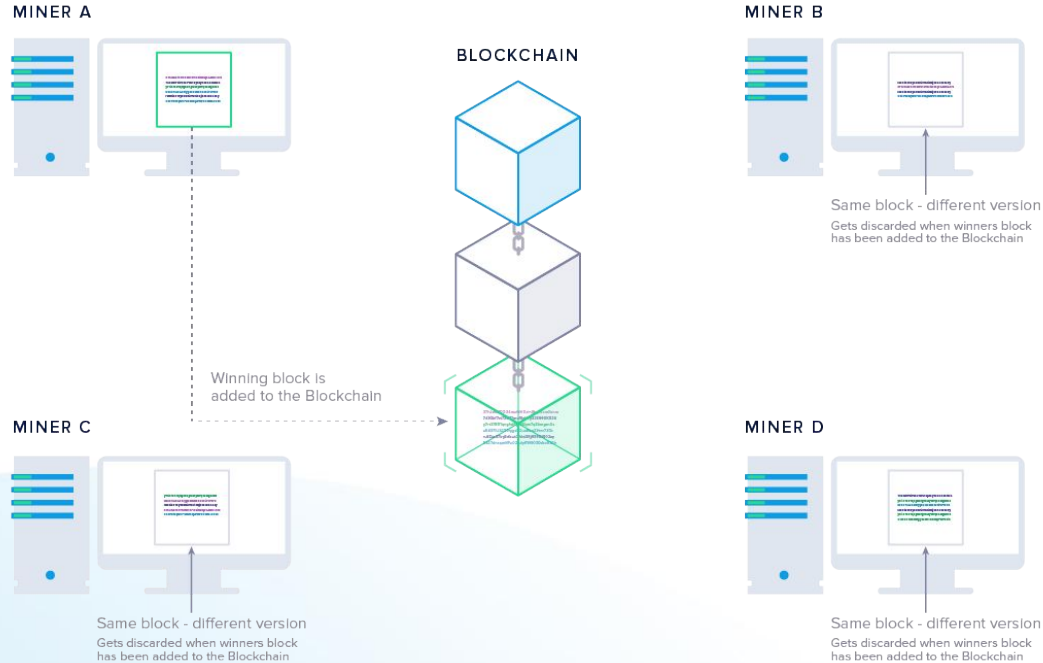


# What is a Blockchain?



- A blockchain is like a book
- Each block is like a page
- A blockchain is used to record information like transactions
- When a block is full, a transaction will be included in the next one

# Who Writes the 'Book'?

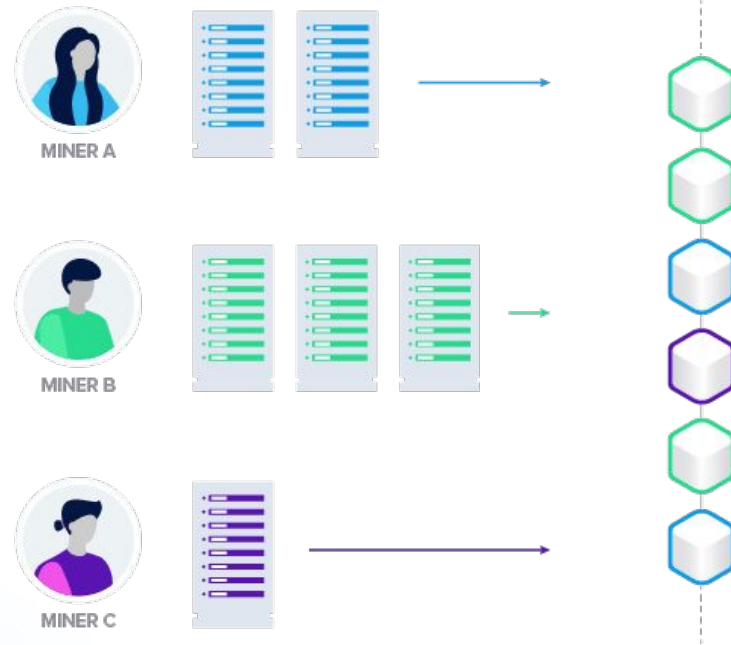


- Miners monitor the network for new transactions
- Verify and bundle transactions into blocks
- The fastest miner is the one able to add a block to the chain

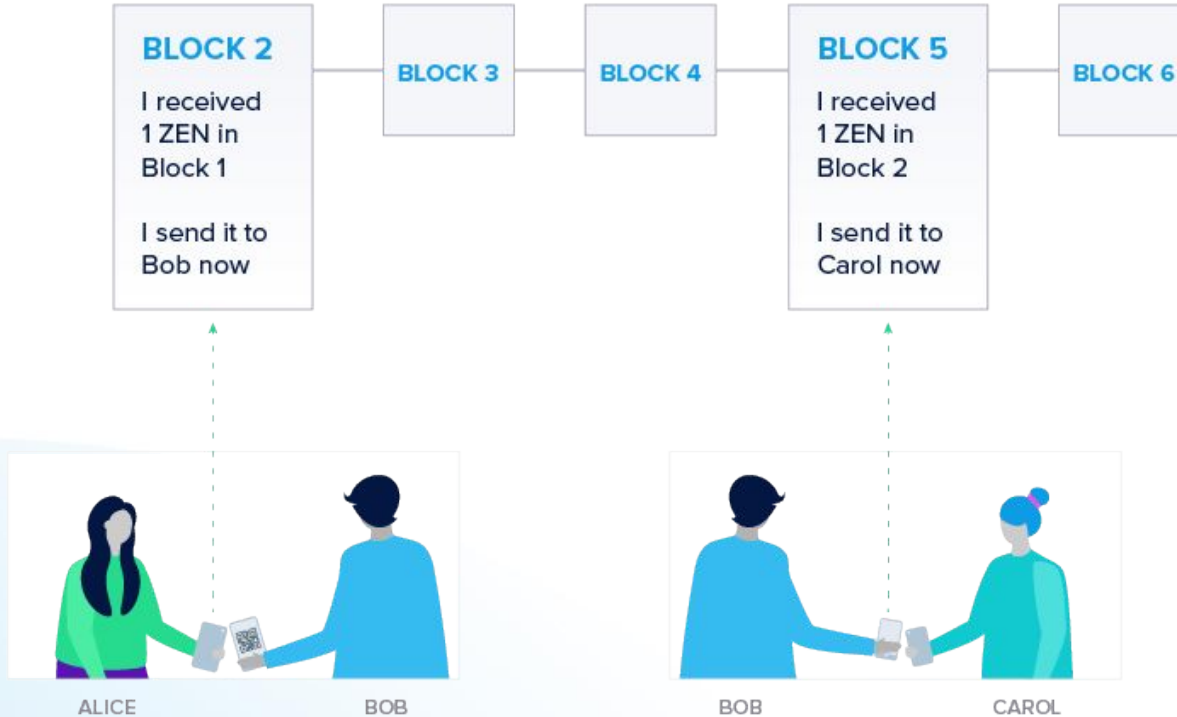
# Which Miner Gets to Add Their Page to the 'Book'?



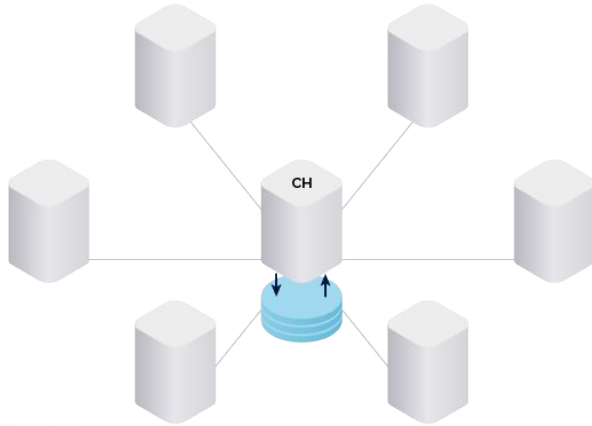
- Miners have to solve a computational task
- Solution is found by guessing solutions to that computational task (hashing)
- Chance of winning proportional to computing power



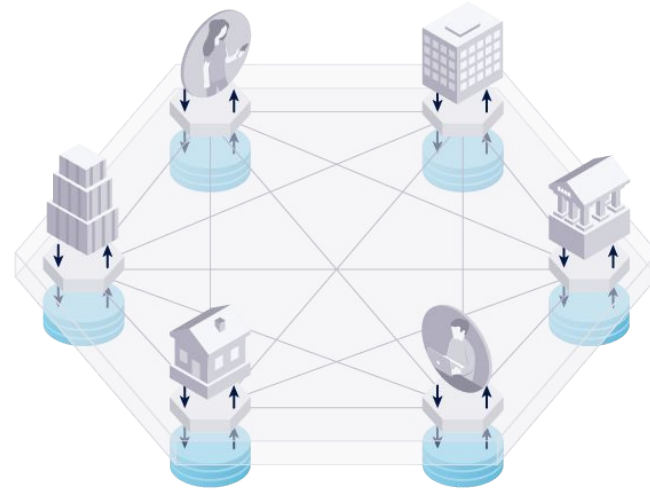
# Immutable Transaction History



# Why is this exciting?



**Current Centralized Clearing and Settlement  
used by Banks**



**Decentralized Clearing and Settlement  
with Blockchain**



# Crypto Ecosystem



- Thousands of cryptocurrencies are available today
- New cryptocurrencies are constantly being launched, everyday
- ZEN in TOP 100
- Available on all major exchanges:





# The Periodic Table of Cryptocurrencies



Bitcoin BTC '09																	Monero XMR '14	
Litecoin LTC '11	Bitcoin Gold BTG '17	NAME  TICKER  YEAR FOUNDED	<div>Payments/Currency</div> <div>Computing, Data Management &amp; Cloud Services</div> <div>Protocols, Exchanges &amp; Interoperability</div>	<div>Gaming, Media, &amp; Social</div> <div>Platforms</div> <div>Privacy Coins</div>	<div>FinTech</div> <div>Others</div> <div>Business &amp; Enterprise</div>	Ethereum ETH '14	Cardano ADA '16	EOS '17	NEO '14	NavCoin NAV '14	Zcash ZEC '15							
Bitcoin Cash BCH '17	Decred DCR '16					Ethereum Classic ETC '16	Qtum QTUM '16	Zilliqa ZIL '15	NEM '15	Enigma ENG '17	Bytecoin BCN '12							
Nano NANO '14	Dogecoin DOGE '13					Binance Coin BNB '17	Kyber Network KNC '17	0x ZRX '16	Aion AION '17	ICON ICX '17	Golem GNT '16	Augur REP '15	Aragon ANT '17	Power Ledger POWR '16	Storm STORM '17	Steem STEEM '16	Lisk LSK '16	Rchain RHOC '17
Dash DASH '14	DigiByte DGB '13	Waves WAVES '16	Huobi Token HT '13	Bytom BTM '17	Hshare HSR '17	Wanchain WAN '17	SONM SNM '17	Siacoin SIA '15	DentaCoin DCN '17	Aeternity AE '17	Substratum SUB '17	Tron TRX '17	Basic Attention BAT '17	Elastos ELA '17	Skycoin SKY '13	Zcoin XZC '15	Bitcoin Diamond BCD '17	
Gas (NEO) GAS '14	MonaCoin MONA '13	<div>NAME</div> <div>TICKER</div> <div>YEAR FOUNDED</div>	BitShares BTS '13	Loopring LRC '17	Bancor BNT '16	Ark ARK '17	Byteball Bytes GBYTE '16	aelf ELF '17	MaidSafe Coin MAID '14	IOTA IOTA '15	Cortex CTXC '17	Loom Network LOOM '17	Nebulas NAS '17	Status SNT '17	ReddCoin RDD '14	Horizen ZEN '17	Bitcoin Private BTCP '17	
Electro num ETN '17	USD Tether USDT '15		KuCoin Shares KCS '13	Gifto GTO '17	Quant-Stamp QSP '17	Mixin XIN '17	iEx.ec RLC '16	Storj STORJ '15	GXChain GXS '17	Holo HOT '17	Wayki-Chain WICC '17	Kin KIN '17	FunFair FUN '16	WAX WAX '17	Revain R '17	CloakCoin CLOAK '14	Komodo KMD '17	
			Ripple XRP '12	Stellar XLM '14	OmiseGo OMG '17	Populous PPT '15	Polymath POLY '17	Maker-DAO MKR '14	DigixDAO DGD '14	Request Network REQ '17	QASH QASH '17	Iconomi ICN '16	TenX PAY '15	Fusion FSN '17	Salt SALT '16	Ethos ETHOS '17	Monaco MCO '16	
		VeChain Thor VET '17	Walton-chain WTC '16	Stratis STRAT '17	Ontology ONT '17	Ardor ARDR '16	IOStoken IOST '17	Dragon-chain DRGN '17	Factom FCT '14	Centrality CENNZ '16	Ubiq UBQ '14	Emercoin EMC '14	Nuls NULS '17	Neblio NEBL '17	Syscoin SYS '14	---- ? Future		

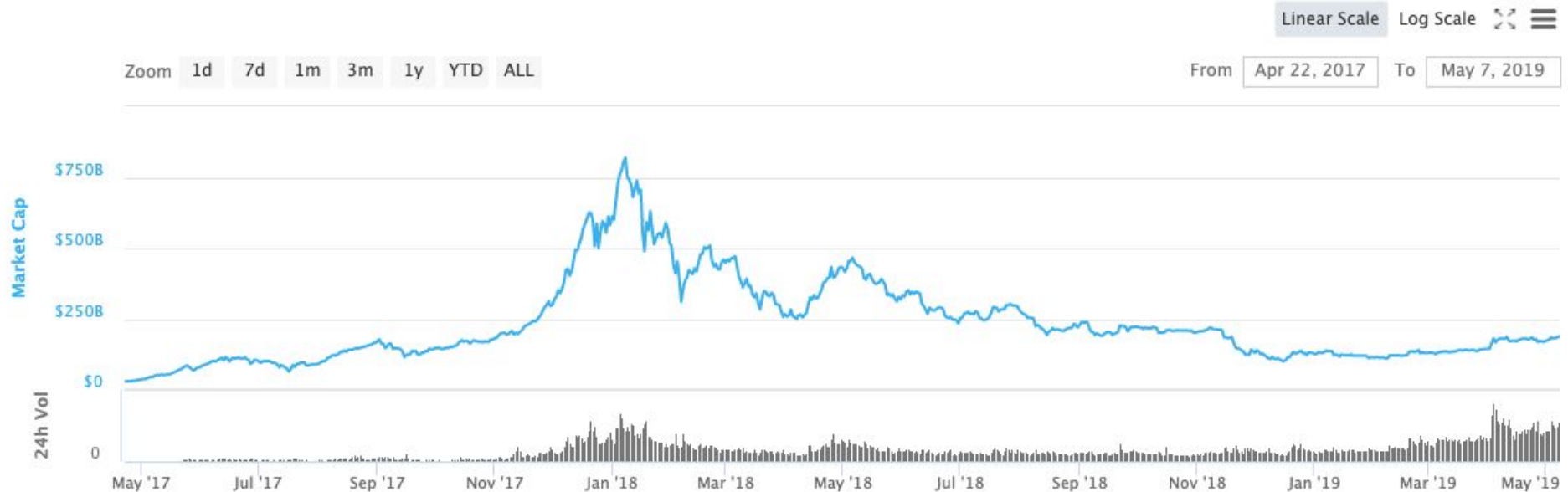
By Daniel Frumkin,  
<https://www.investinblockchain.com>

# Serious Amount of Capital



<https://coinmarketcap.com/charts/>

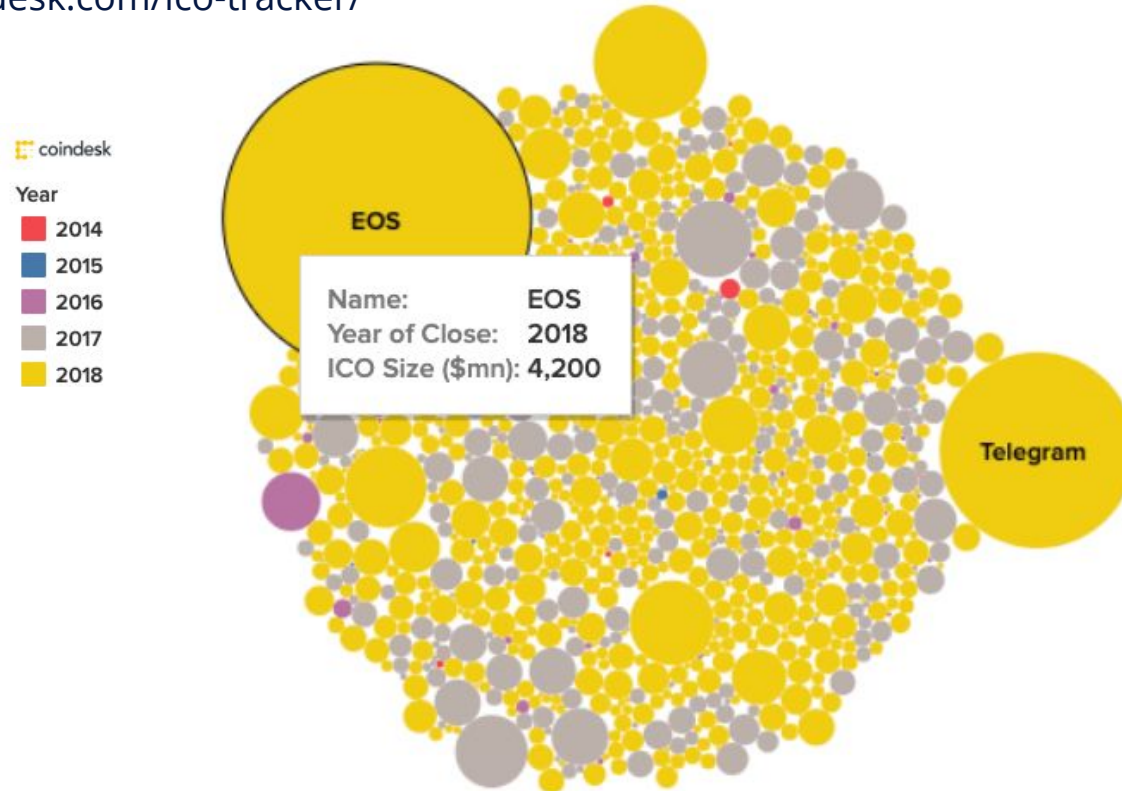
## Total Market Capitalization



# Crowdfunding Explosion



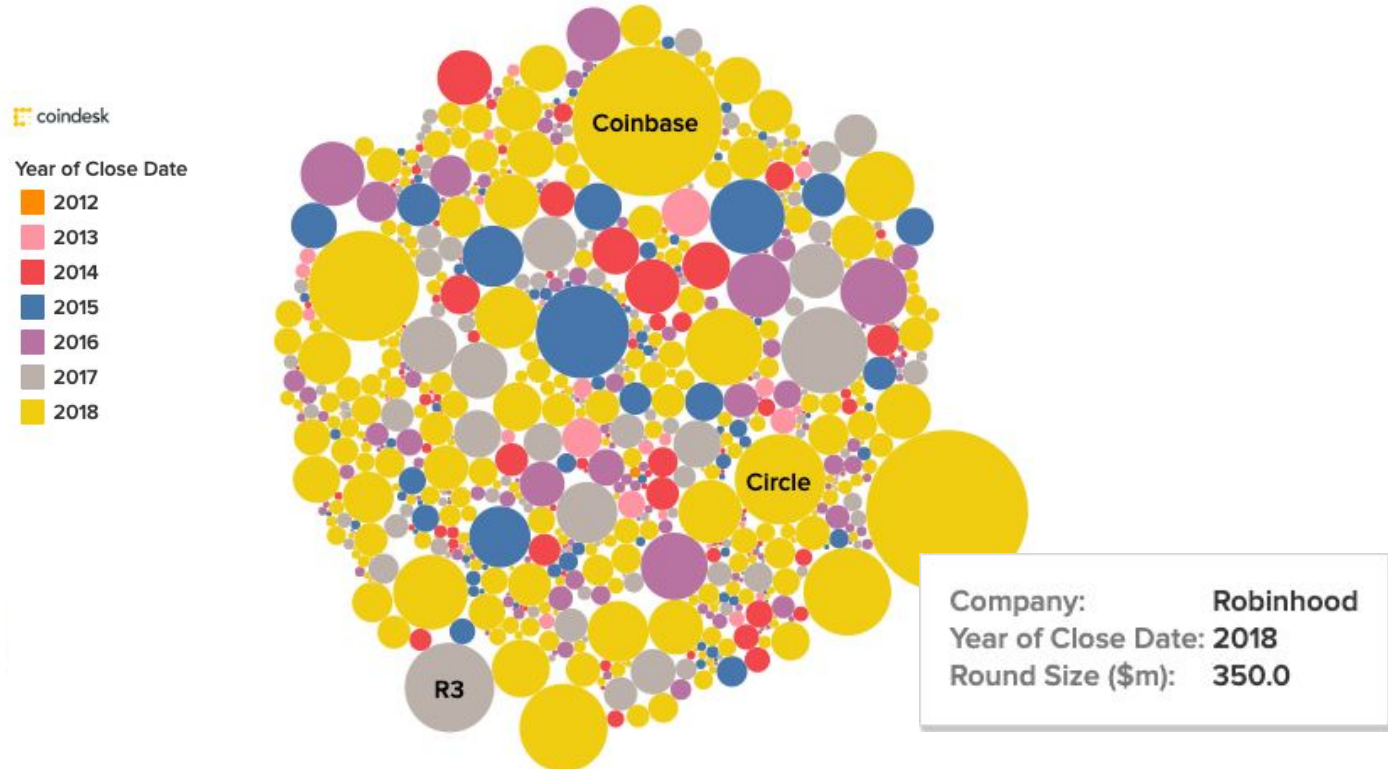
<https://www.coindesk.com/ico-tracker/>



# Venture Funding Explosion



<https://www.coindesk.com/bitcoin-venture-capital/>



# Why Does Horizen Exist?



## Most of blockchains have serious problems:

- They are not scalable
- They are not resilient
- They don't offer privacy options
- They can't be used for complex applications

**Horizen is adopting and developing a combination of technologies to solve these problems.**





Phase 1

# Currency

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The Launch of ZEN



# ZEN - The Currency

- Launched in May 2017 by:

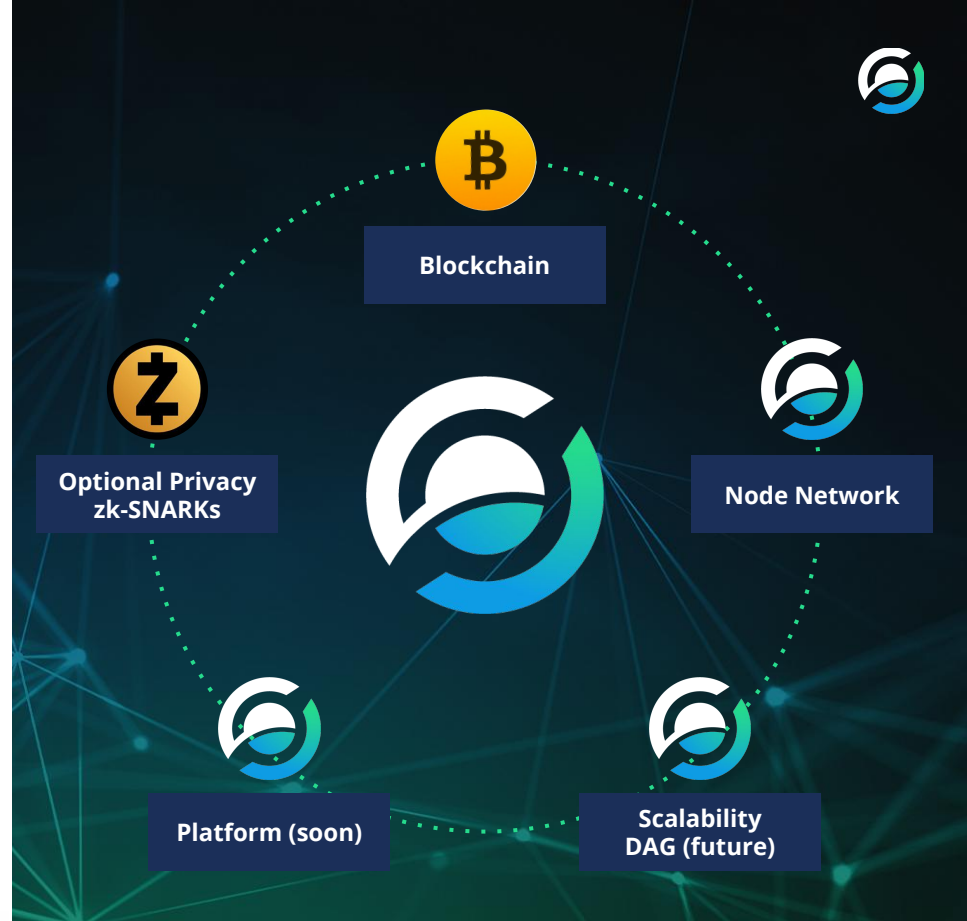
Rob Viglione



Rolf Versluis



- Equihash-based PoW blockchain with sustainable funding model
- Cutting edge privacy technology 'baked-in'
- Building upon the ideas of our peers to create an inclusive ecosystem



21 million max supply, no premine, no founders reward, no ICO



Phase 2

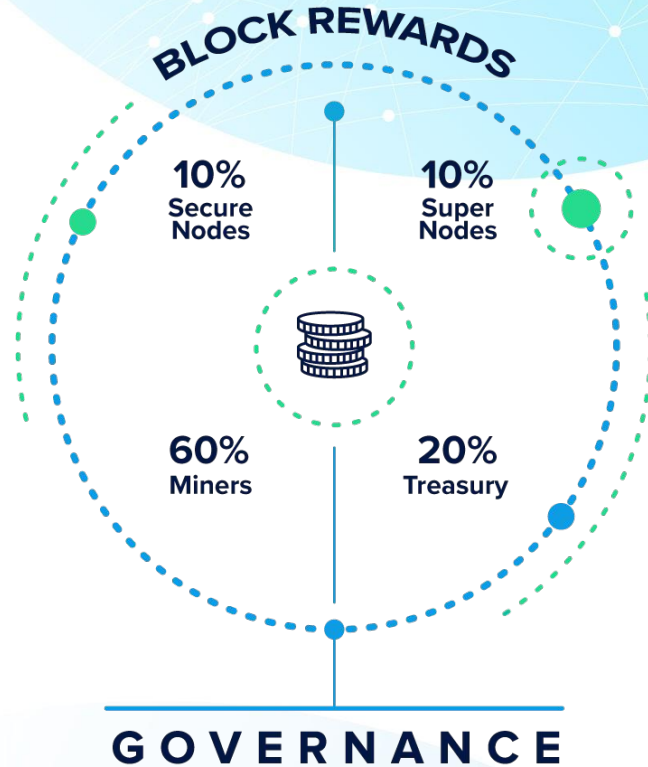
# Infrastructure

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Incentivised creation and  
management of infrastructure

# Horizen - Infrastructure

- November 2017, Horizen launched a multi-tiered node network
  - Secure Nodes (42 ZEN)
  - Super Nodes (500 ZEN)
- One of the largest node networks in the industry
- Not your typical MasterNode system
- Infrastructure with a purpose!





Phase 3

# Technology

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Enabling the creation of distributed  
products and services

# Horizen - Technology



- A **decentralized sidechain platform** for enabling business applications
- Academic research on **DAG** for scalability enhancements
- Research and development on **ZK Snark**-based technology
- Research and development on enhancements of **consensus algorithm and protocols**





Distributed Applications,  
Products and Services

Technology Platform

Infrastructure

ZEN



# Horizen R&D and Engineering Team

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**Alberto Garoffolo**  
Director of R&D



**US  
TEAM**



**ITALY  
CORE TEAM**



**UKRAINE  
TEAM**



## Product and Engineering



Rob Viglione Rolf Versluis Alberto Garoffolo Maurizio Binello Pier Stabilini Pierre Schiro Franck De Girolami



Robin Guyard Cronic James  
McCourt Cordingley Johncarlo  
Maddalena Spencer  
Whetstone Sergii Makukha Vadym  
Fedyukovich



Nicola Onassis Allan Dumaine Andrey Sobol Oleksandr  
Iozhytsia Alberto Sala

## Legal & Finance



Dean Steinbeck Kirk Phillips Jordan Bass Cogent Law Fenwick & West

## Marketing



Rosario Pabst Lucy Wang Jonathan  
Teplitsky Linda Bucksey Marko Orčić Medar Erica Barnes Wachsman PR

## Business Development



Rowan Stone Levis Caycedo Arno Pfefferling Andreas Wideroe Vano  
Narimanidze Jonas Rubel Ruben Elizondo Hugh Ayara



Angie Villarreal Alex Zabuga Guan Yin Jonghun Hong

## User Experience



Gustavo Fialho Nathan King Tuan Ho

## Operations



Luca Cermelli

## Advisor



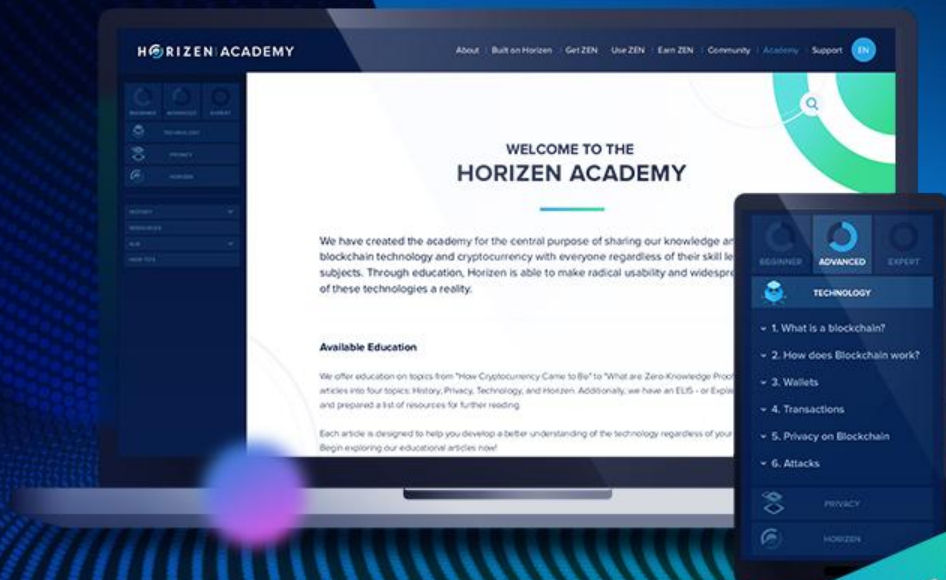
Charles Hoskinson



# KNOWLEDGE IS POWER

EVERYTHING YOU  
NEED TO KNOW  
ABOUT BLOCKCHAIN  
AND PRIVACY

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