Today’s Presenters

Jim Fister
Principal
The Decision Place

Glyn Bowden
CTO, AI & Data Practice
HPE

Richard George
CEO
HLPS
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SNIA-At-A-Glance

185 industry leading organizations

2,000 active contributing members

50,000 IT end users & storage pros worldwide
What We Do

Educate vendors and users on cloud storage, data services and orchestration

Support & promote business models and architectures: OpenStack, Software Defined Storage, Kubernetes, Object Storage

Understand Hyperscaler requirements
Incorporate them into standards and programs

Collaborate with other industry associations
Agenda

- The Digitization of Value
- Digital assets
- Payments anywhere
- Exchanging currency for digital value
- Zero Trust Transactions and Secure Wallets
- The enabling technology stack
- What’s next?
The Digitization of Value
Converting IRL assets to digital value
About HLPS

Company Health Life Prosperity Shared Ltd (HLPS)

www.hlps.me

- HLPS is a UK based fintech company which specializes in developing use cases to solve societal problems. HLPS digital asset solutions introduce liquidity, mobility and efficiency into sectors where value is locked up in real world assets and processes are cumbersome and complex. Our DASICHAiN digital value exchange technology will revolutionize the way citizens engage with governments and consumers with business in the Web 3.0+ World.
First Principles: Great Ideas Often Solve No Problem

The problem is process inefficiency - disrupt it!
And Always Consider an Idea…
How Can a Physical Object Have a Digital Value?

Value is defined by an item’s scarcity (supply v demand) but we have come a long way from haggling in the market over chickens or responding to TV ads at fixed prices. Intermediaries often personalize offers; nothing is as it seems.

Banks have been virtualizing wealth for 100s of years – e.g. In days of reserve asset ratios and like pre 2008 creating often unsustainable debt and instruments of doom such as CDOs (now back in a different name). The masses are enslaved by debt (and many countries too) and we all work to satisfy it.

Virtual wealth can be represented by a mutually agreed token.

Bank notes are not currency, they are contracts or IOUs – “I promise to pay the bearer on demand the sum of…” £x is printed on every British note. NB it is a contract!

So let’s look at digitizing both the value AND the contract! Let’s call it a smart contract and let’s make it self-executing with rules enshrined in code.
Unlocking Real World Assets – Making Liquid the Illiquid!

- Transactions are traditionally cumbersome
- Libra? And digitizing currencies?
- Financial inclusion is on its way
- Digital assets can be associated with real world assets
  - Anything that has value can be digitized and that value exchanged
- Fractions and utilization determined by smart contracts & transactions
Digital Assets

Born in the digital environment, but have a value?
The Future of Digital Value and Stages of Value Shift

- PHASE 1: 2017 Early stages of testing
  - STOs linked to real estate and some disasters.
- However, like pre Dot Com crash some great work on foundations
  - investment (gold rush) but lots of cool ideas but little traffic/solution adoption
- Backlash from regulators followed
- Too early
Phase 2: Digital Assets in Hybrid Solutions

Digital assets within solution transactions that relate to local currency value
- Not necessarily exchanged externally to third parties

Disruptors will start being disrupted.
- Digital currency launches from central banks and perhaps Libra will start securing adoption
Stage 3: Breaking Out – The Value Shift Accelerates

- Digital assets are freely traded through digital exchanges and secondary markets
- The SEC/FCA etc regulate them
  - Why not be consumer focused???
- Consumers become introduced to receiving, holding and exchanging digital assets
  - As well as currency for goods and services.
Stage 4: Mass Adoption and Automation

- Millions of types of assets are traded peer to peer
- Demand is matched to supply at any moment.
- Individuals achieve the best possible value at exactly the moment we need
- Wallets contained in mobile devices
  - Gathering, holding and transacting on our behalf?
Born in the Digital Environment, How to Define Value?

How can a digital item be made scarce, and so have value?

Limit distribution!

Protect the item with a lock and key! (Encryption and certificates)

Restrict the distribution of the key

Depends on identity management
The Fashion Shoe Principle

- Special edition trainers have proven to be an appreciating asset.
- Fractionally digitised and certified with the history of its transactions.
- Value can be subdivided by associating non-fungible digital assets that represents it and only it.
- Retains scarcity whilst accelerating liquidity.
- And all nicely wrapped up in rules governed by smart contracts.
Influencers of all types, organisations, peers, family etc
AND asset rules
- Q: Can I exchange my carbon credits for filling my car?
  - A: Yes
  - Condition: If you are charging a Tesla or filling a Honda with Hydrogen
  - A: No
  - Condition: If you are filling up your gas guzzling V8!
- Influencing behaviour and restricting utility by rules means value appreciation
So What if I Own an Asset and Need to Borrow?

- Hey! Why not borrow from yourself and set your own settlement terms for repayment to recover the digital asset later?
- Inspired by Scott Nelson at Sweetbridge by the concept of self-borrowing as a means to improve cashflows in a supply chain rather than going into expensive bank debt or factoring
- Payment holidays in exchange for asset release backs because I suffered job loss or sickness with a right to recover my assets later
And What About the Government Services?

- Once digital assets become mainstream, interoperability and regulatory obstacles overcome.
- Governments can regulate for purposes of automated taxation on millions of large or micro transactions, executing digitally.
- The benefits to government and local government are enormous in efficiency terms.
Payments Anywhere
Pay with your phone, your watch, your clothes, your body?
The IoP, IoT and IoMe

- Receipts and payments of digital assets to and from mobile wallets
- IoT devices could reward or receive and create digital markets
- Securely: Anywhere, anytime
- Physical connectivity?
- Can my body calculate?
Exchanging Currency for Digital Value

Tokenizing the governments tokens
Exchanging Currency for Digital Assets / Value

Prove your identity

Provide the payment details

Agree on the terms of the transaction

Commit the deal and immediately exchange values

Provide the means to acquire the asset

Issue confirmation that deal has completed for audit
Zero trust transactions + Secure wallets

You don’t trust them, they don’t trust you. No problem!
BUT: Is this AI and Bots in Action? 
Can I Trust Intermediaries with My Data and Value Transfer?
The Enabling Technology Stack
Blockchain and friends
Enabling Technology Components

- Digital ID
- Payment Method Token
- Transaction
- Tamperproof Ledger
- Asset Token
- Digital ID
- Authority Manager
- Identity Manager
- Contracts
- Digital Content Storage
- Digital ID

Transaction Storage
What’s Next?

Move it all online?
Summary

- Financial transactions are changing
- Personal transactions OWNED by the person making them
- Identity and Ownership need to be digitized
- Peer to Peer and Decentralized is driving the personal revolution
- Data is the new currency everything!
- This is a journey and we are iterating quickly!
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Q & A