

# AI, Blockchain and Insurtech

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[www.BlockAsset.ventures](http://www.BlockAsset.ventures)

[www.Sussblockchain.com](http://www.Sussblockchain.com)

# Challenges

- Profit Margin and ROE (Returns to Equity) continue to drop
- To transform business via digital technology
- No clue where to start

# Meantime

- Every business is competing for the same customers
- Two ways to increase profits
  - 1. Leverage;
  - 2. More Complex Products
- Non Transparency and Complicated Products become the norm

# Challenges

- Everyone is competing to do it Faster, Better, Cheaper
- Everyone is competing to get ahead
- Trust is lost and becomes expensive
- No one wishes to collaborate
- Regulation becomes tighter
- Entrepreneurship is stifled

# 2008 Global Financial Crisis

- Central Banks employed quantitative easing
- Balance sheet increased four fold
- Most of the printed money channeled into assets purchases or speculations
- And the end result is higher asset prices, higher rental, and huge inequality

# World Riches 1% – In 2017

Controlled 50%  
of global wealth

Received 82% of  
the new wealth  
generated

Low Marginal  
Propensity to  
Consume

Leads to Margin  
Squeeze

Results in Low  
Growth

Where is the  
Future Growth?

# Entrepreneur Spirit and Collaboration

- Where do we start?
- Look to China, they start with ABCD and/or BASIC
- ABCD
- BASIC

# ABCD and/or BASIC

- **A** AI
- **B** Blockchain
- **C** Cloud
- **D** Data Technology

- **B** Blockchain
- **A** AI
- **S** Security
- **I** IoT
- **C** Cloud

# Loss of Efficiency

- When there are **too many rules and regulations**, we can no longer function efficiently
  - **Conflict of Interest Vs Alignment of Interest**
  - **Bounded by Geography Vs Being Borderless**
  - **Homogenised Vs Fractional Heterogenous Goods and Services**
  - **Rent Seeking Vs Society Benefits**

# Entrepreneurship and Collaboration

**How** to kindle the spirits in a tightly regulated environment with untrusted peers?

Through New Technology!  
And Inclusion!

# Garner Hype Cycle!

- Blockchain
- AI
- Security
- IoT
- Cloud
- Quantum Computing

IoT

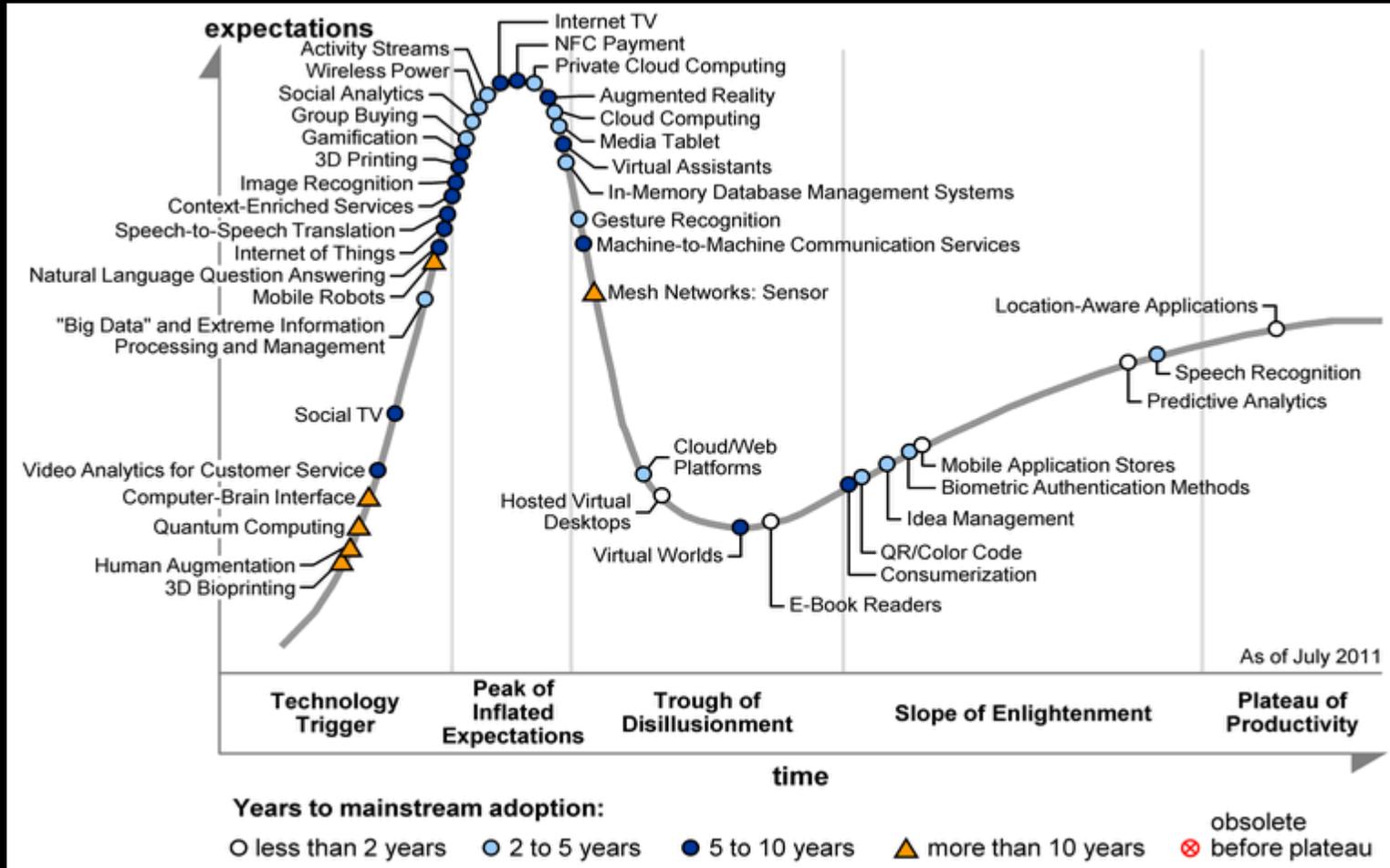
AI

Quantum

AI

Cloud

AI

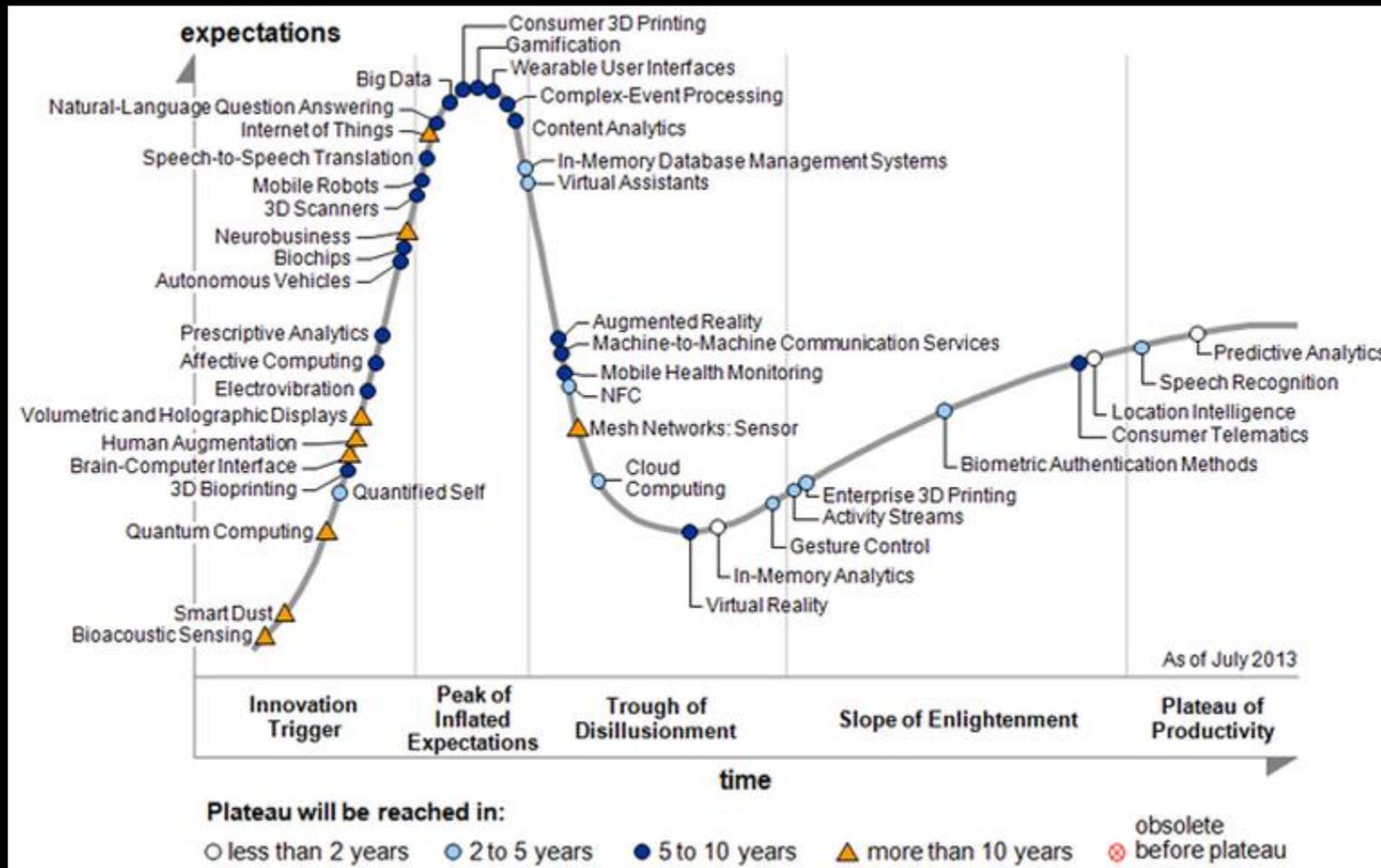


IoT  
AI  
Data  
Quantum

IoT  
AI  
Cloud

AI

AI

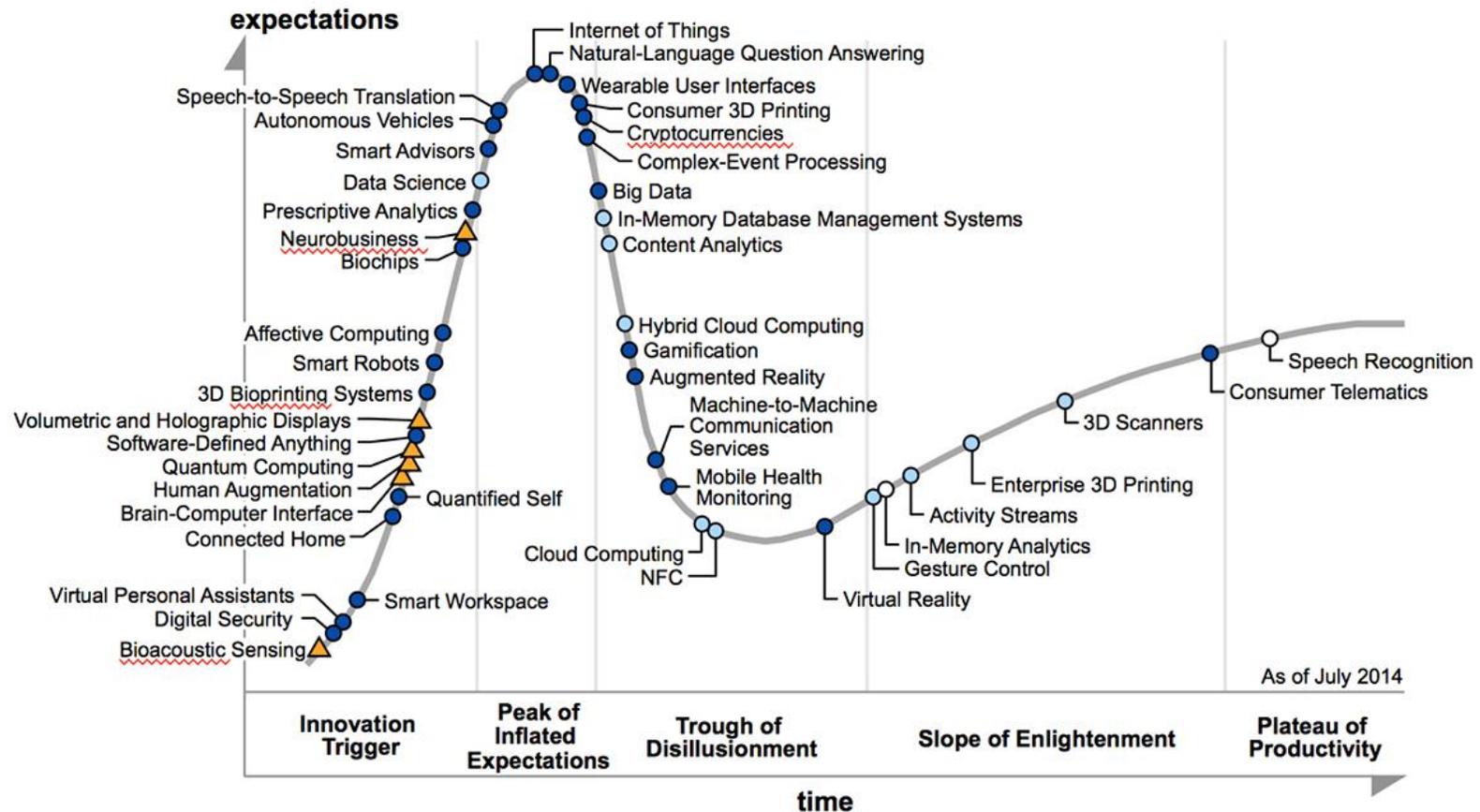


IoT  
AI  
Data  
Quantum

IoT  
AI  
Data  
Cloud  
Cryptocurrency?

AI  
Data

AI  
Data



Plateau will be reached in:

○ less than 2 years

○ 2 to 5 years

● 5 to 10 years

▲ more than 10 years

⊗ obsolete

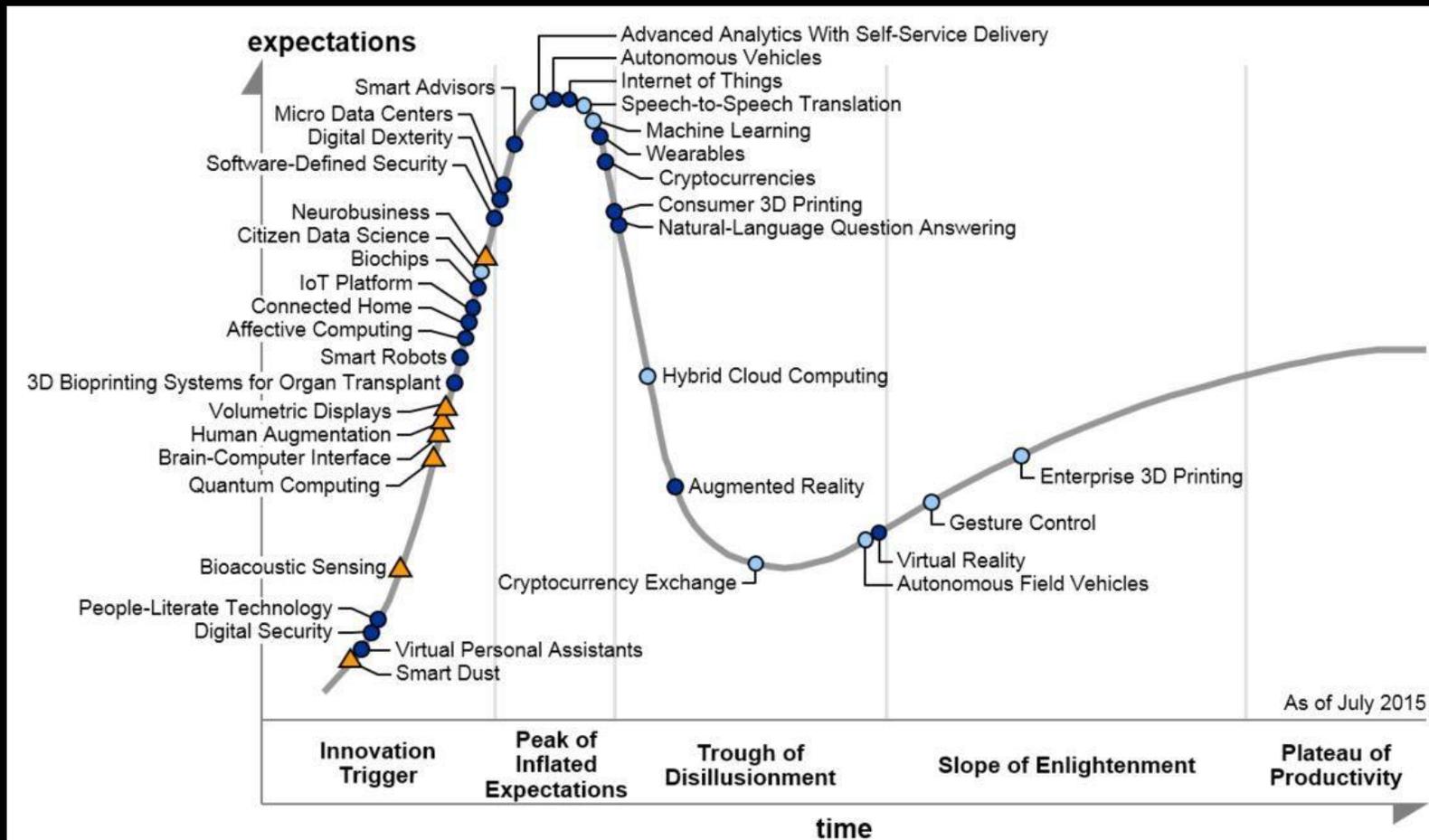
⊗ before plateau

IoT  
AI  
Quantum  
Data

IoT  
AI  
Cloud  
Data  
Cryptocurrency?  
Crypto Exchanges?

AI  
Data

AI  
Data



Plateau will be reached in:

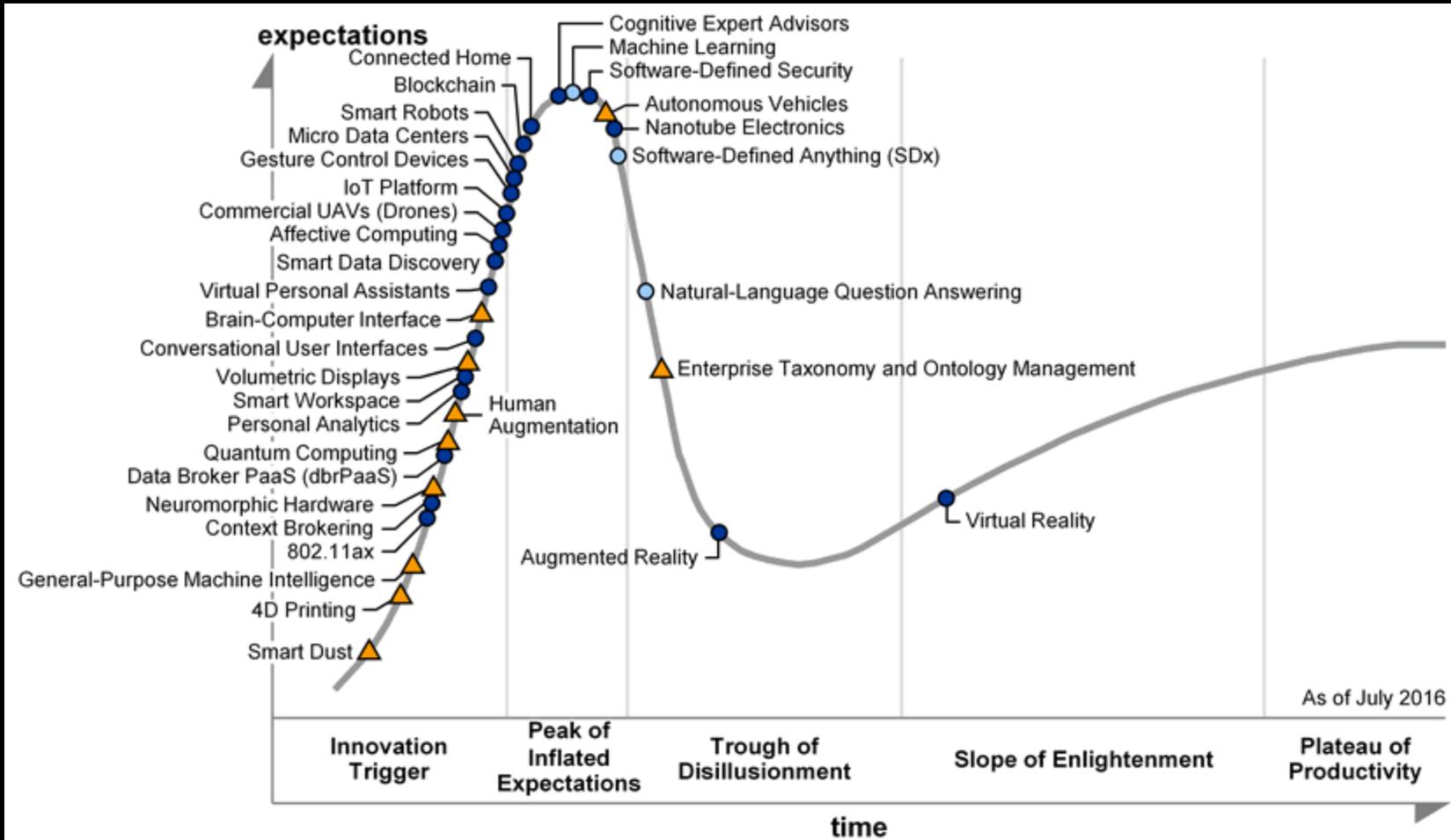
○ less than 2 years    ● 2 to 5 years    ● 5 to 10 years    ▲ more than 10 years    ⊗ obsolete before plateau

IoT  
AI  
Quantum  
Data  
Blockchain?

IoT  
AI  
Cloud  
Data  
Cryptocurrency?

AI  
Data

AI  
Data



**Years to mainstream adoption:**

○ less than 2 years      ● 2 to 5 years      ● 5 to 10 years      ▲ more than 10 years      ⊗ obsolete before plateau

IoT

AI

Quantum

Data

IoT

AI

Cloud

Data

Cryptocurrency?

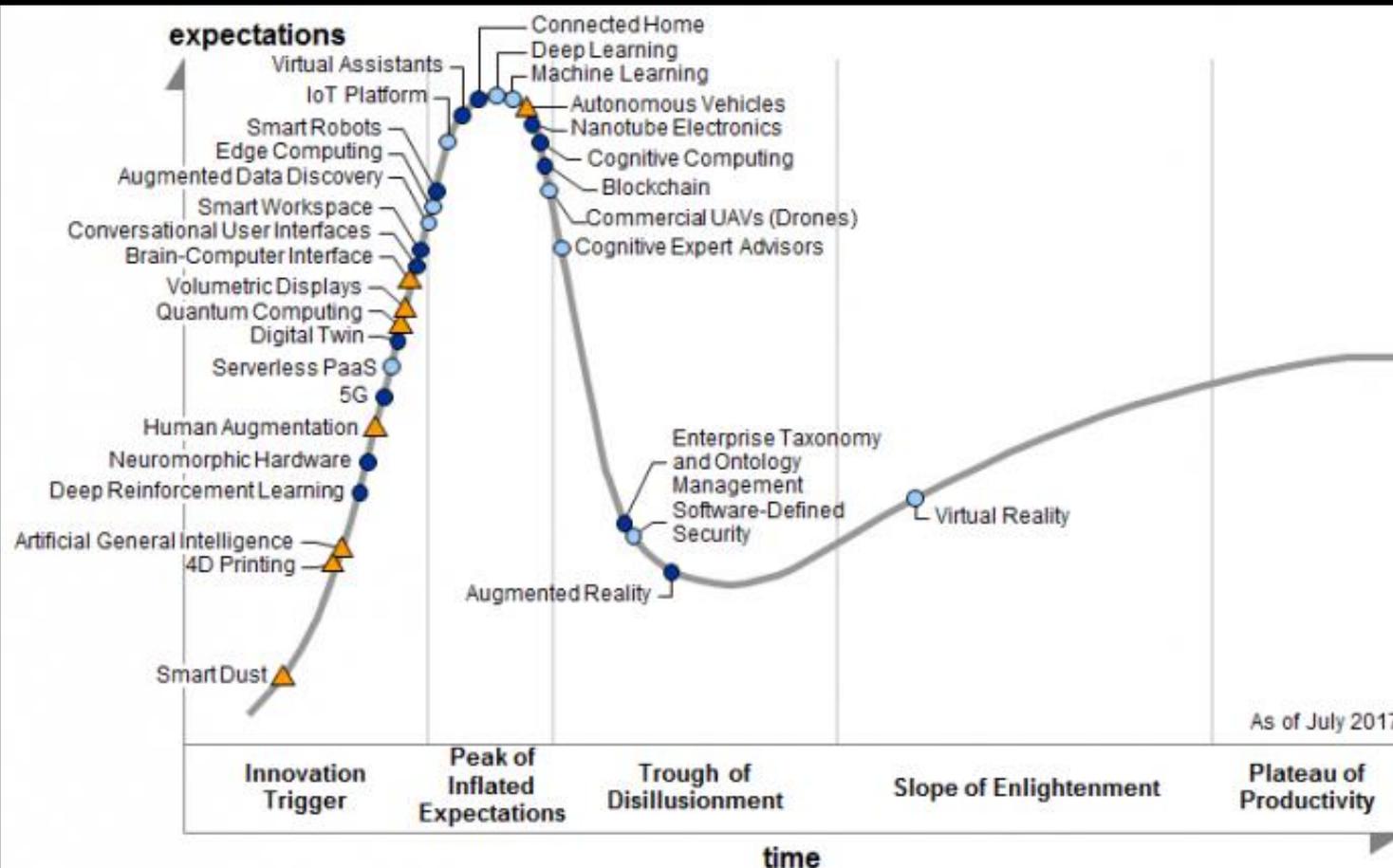
Blockchain?

AI

Data

AI

Data

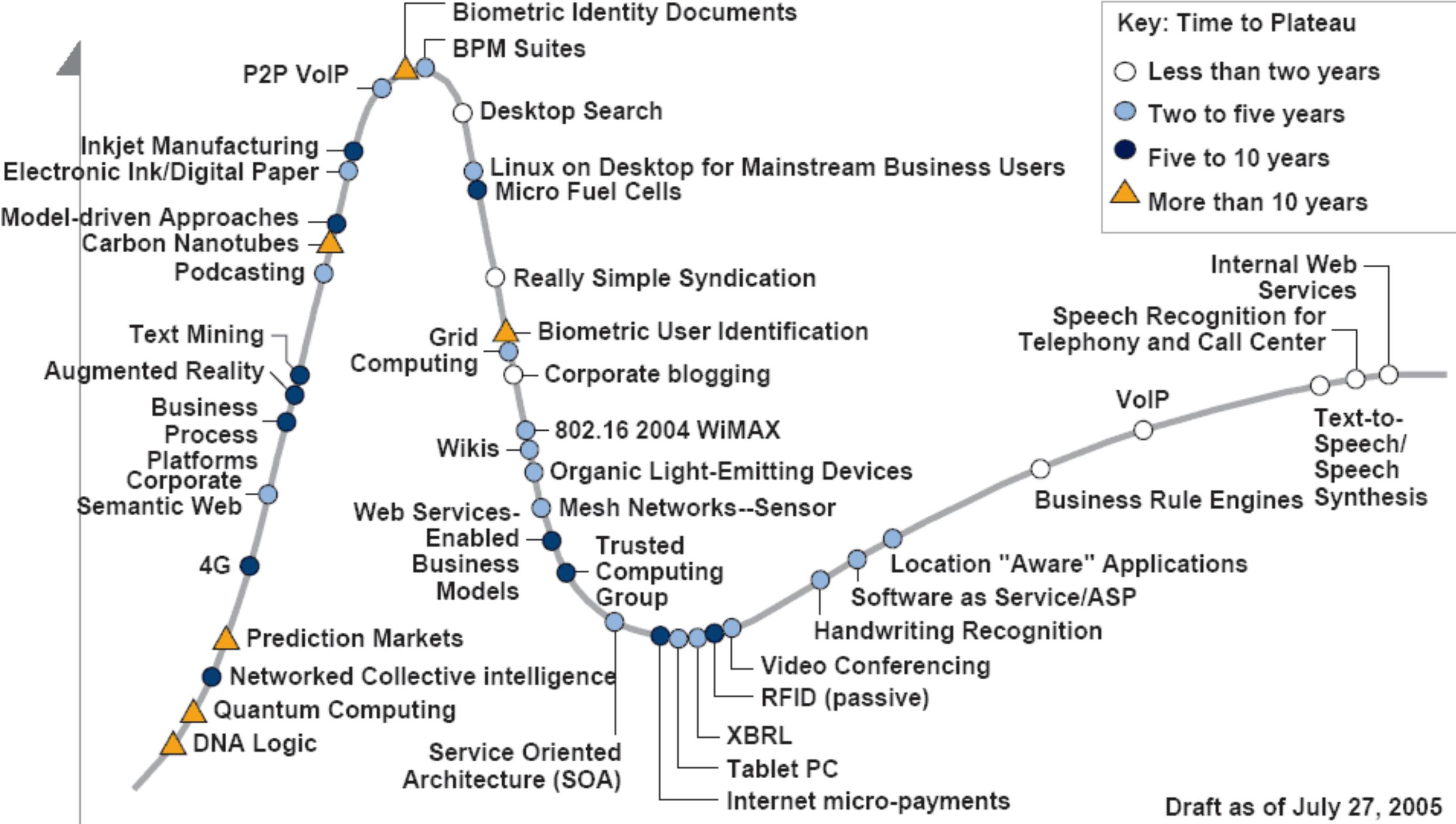


# How do we analyse?

- AI, IoT, Data and Cloud are already working through the cycle
- Security is still very much ignore
- Quantum Computing is a very expensive and difficult area
- An ecosystem approach is needed
- This is just a two dimensional analysis
- It cannot handle the Token Economy
- Why?

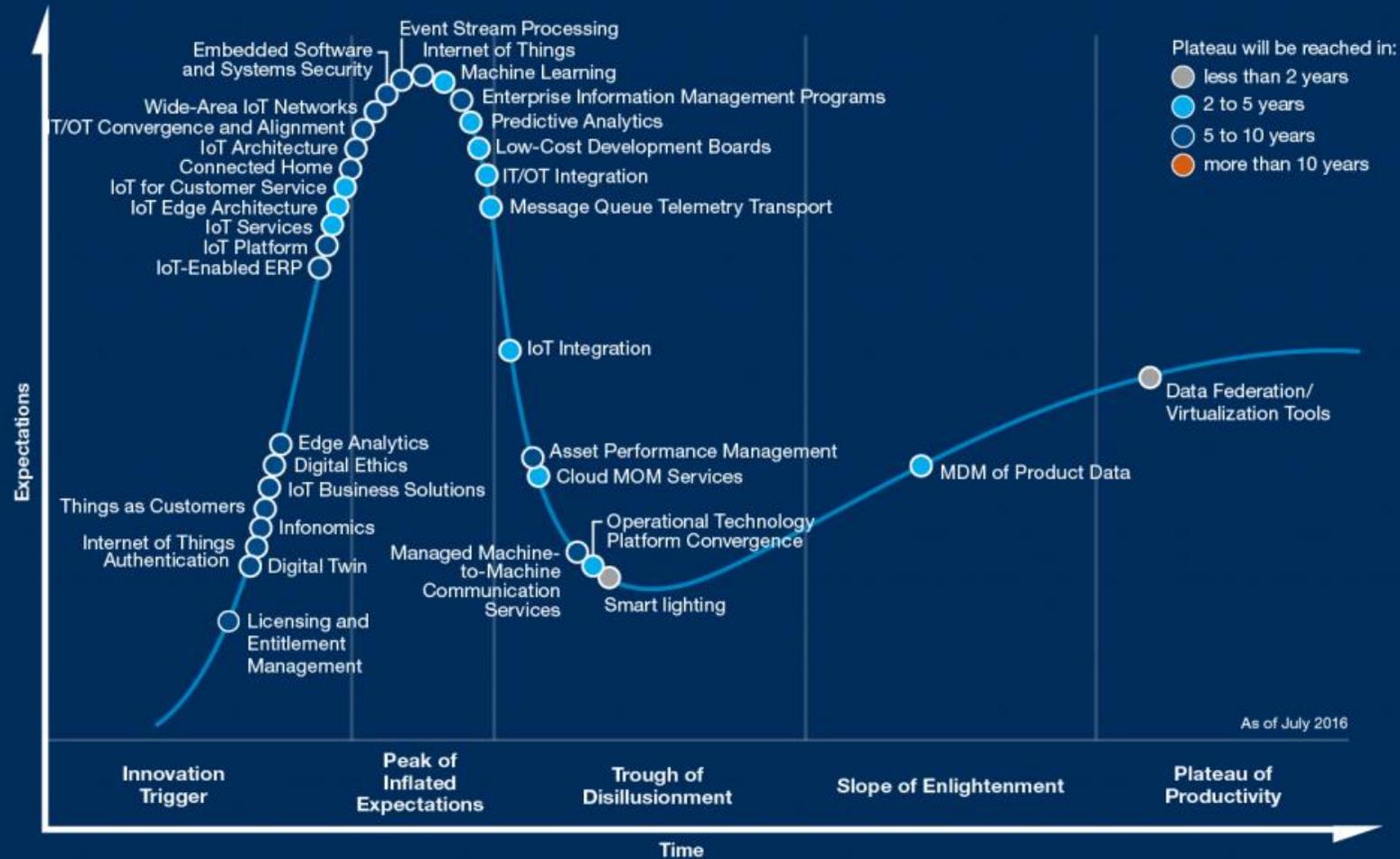
**Key: Time to Plateau**

- Less than two years
- Two to five years
- Five to ten years
- ▲ More than 10 years



Draft as of July 27, 2005

# Gartner Hype Cycle for the Internet of Things, 2016



[gartner.com/SmarterWithGartner](http://gartner.com/SmarterWithGartner)

Source: Gartner  
© 2016 Gartner, Inc. and/or its affiliates. All rights reserved.

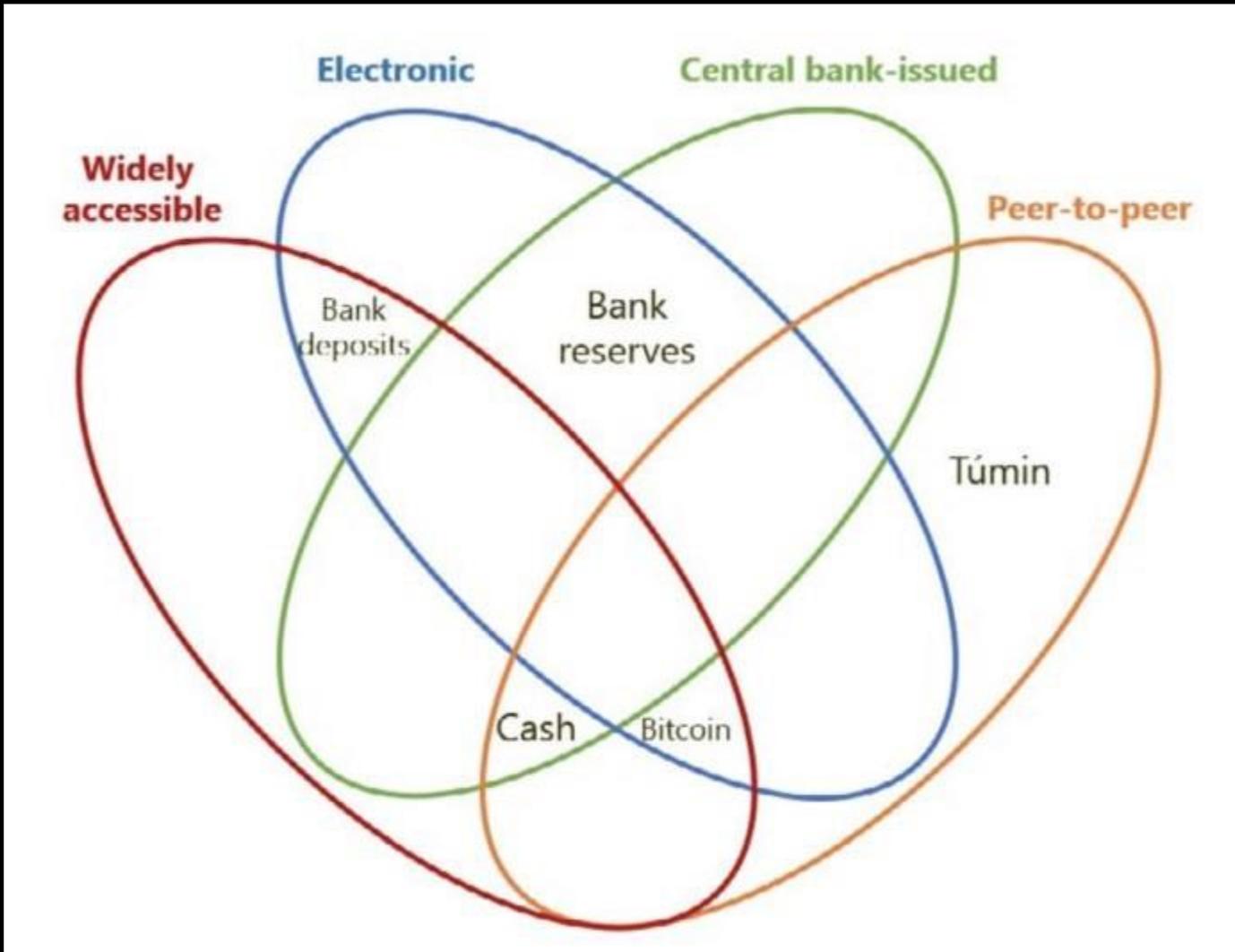
**Gartner.**

# Issues

- Security remains a major issue
- Technologists find it hard to understand crypto and blockchain
- VCs are trying hard to understand crypto and blockchain on a project basis and not from an ecosystem perspective
- And most importantly.....

The incumbents are  
unnecessarily afraid of the  
cypherpunks!

But they need not....



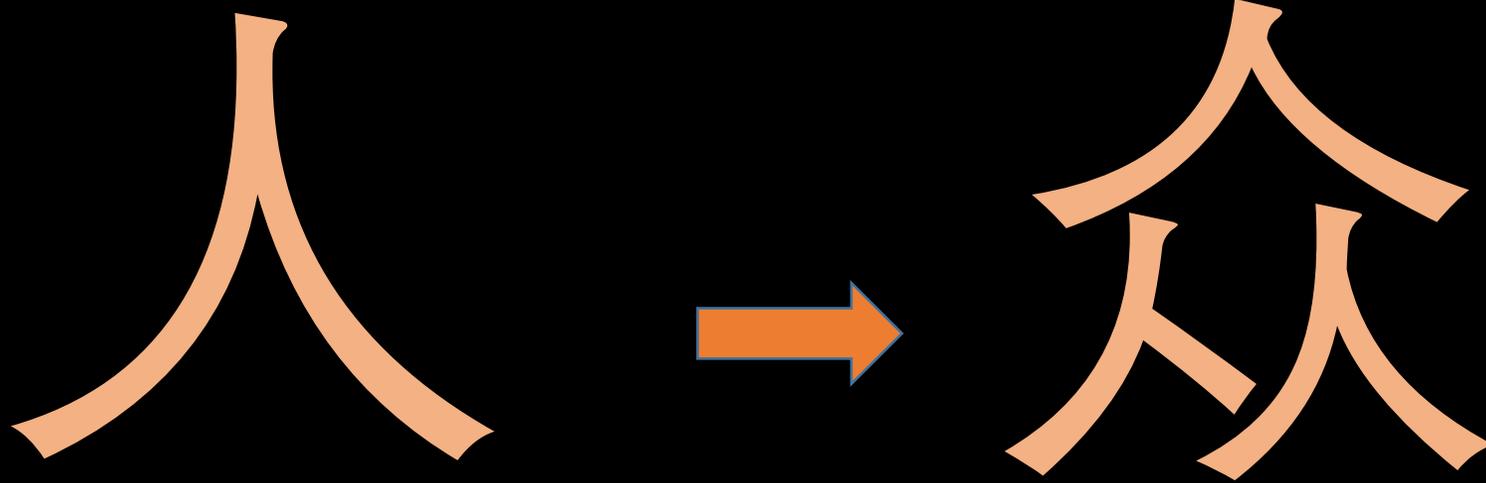
Tumin is an alternative currency in Mexico in the municipality of Espinal.

Tumin was first put in circulation in 2010 as a student project at the Intercultural University of Veracruz, where students were trying to find ways of strengthening the local economy

The Tumin has been described by journalists as reinvigorating the economy of the municipality, but has also been criticized by the Mexican National Bank for being an attempt to substitute the Mexican national currency, the peso.

The Mexican National Bank has in fact sued the developers of Tumin for acting against its monopoly on printing money, a lawsuit that is still on-going. The creators state that the accusations are invalid as Tumin do not replace money, but is rather an instrument for barter.

How do we **incentivise** global collaboration among the **Crowd**?  
(Three is a crowd and Community))



Me and I      Community

Untrusted?

Collaborate?

# The Token Economy

- Tokens are used
  - to Incentivise **Collaboration**
  - to Cross **Border**
  - to **Fractionalise and heterogenise**  
Ownership
  - for **Inclusion**

# Token Economy

- Blockchain 1.0
  - Payments, Consensus, **Bitcoin**
  - **Internet of Value**
- Blockchain 2.0
  - Smart Contract, Turing Complete, Decentralised Autonomous Organisation, **Ethereum**
  - **Internet of Smart Contract**

# Future Token Economy

- Blockchain 3.0
  - Large Scale Applications: **Convergence of Technology, Financial Inclusion**
  - **Internet of Inclusive Technology**

# Back to BASIC: Blockchain is Driving ASIC

- Convergence of Technology:
  - AI, Security, IoT, Cloud (ASIC)
- **BASIC: Blockchain** is driving **ASIC**
  - Higher cost of Hacking
  - Privacy
  - Large Data Base
  - Inclusive Tech

# Decentralised Autonomous Organism

- No legal entity: not a company
- Fractional Micro-Ownership of Non Securitised Digital Assets (like a cow)
- Close to zero marginal cost for scaling and expansion
- Close to zero cost of trust or lower cost of trust
- Easier to cross border

# Blockchain Value Proposition

Reducing the Cost of Trust: **Improves Collaboration**

Easier Compliance: **Stimulates Entrepreneurship**

# A Tokenised Future

- The Future is not just about managing a company but **building ecosystem**;
- the Future is not just about being a leader but being an **innovator**;
- the Future is not just about building a workforce but **empowering collaborators**;
- the Future is not about more regulations, but about **designing good Token Models**.

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# From Ping An to Platform : Technology Innovation for Growth

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# 1 PA Biometrics : World-leading technologies

## PA Facial recognition



- **99.8%** accuracy, the world's **No.1**
- **800mn+** usages
- **200+** scenarios
- **100+** clients

## PA voiceprint recognition



- **99+%** accuracy
- **50mn+** voiceprint records
- **10+** scenarios

## PA Micro-expression



- **54** complex micro-expressions
- **1-second** recognition
- **300k+** loan approvals

## PA Big Data



- **880mn** people
- **26K** data fields
- **3,300+** data fields per person average
- **730mn** credit inquiries

# 1 PA Biometrics : Diverse and extensive scenarios

## Financial scenarios



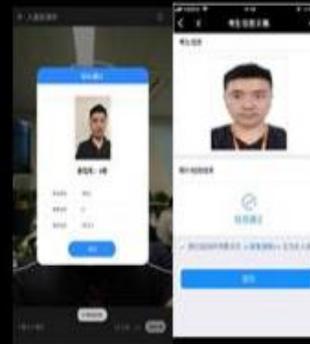
- **Small loans: 30mn+** face recognition-based identity authentication, fake identities down from **29%** to 0%
- **Large loans: 300,000+** micro-expression approvals, efficiency up **10%** while errors down **5%**

## Health care scenarios



- **Checkup identity verification: 50,000+** times
- **Social health: covering 14** cities

## Life/service scenarios



- **Exams: The post-graduate entrance examination in Shenzhen in 2018, to cover 1mn+** exam takers in Guangdong next year
- **Real estate administration bureaus: 9** locations, **1.30mn+** times of services

## Security scenarios



- **Airport security screening: 140mn+** identity check at Shenzhen Airport
- **Community in Guangzhou: 38mn** call-ups

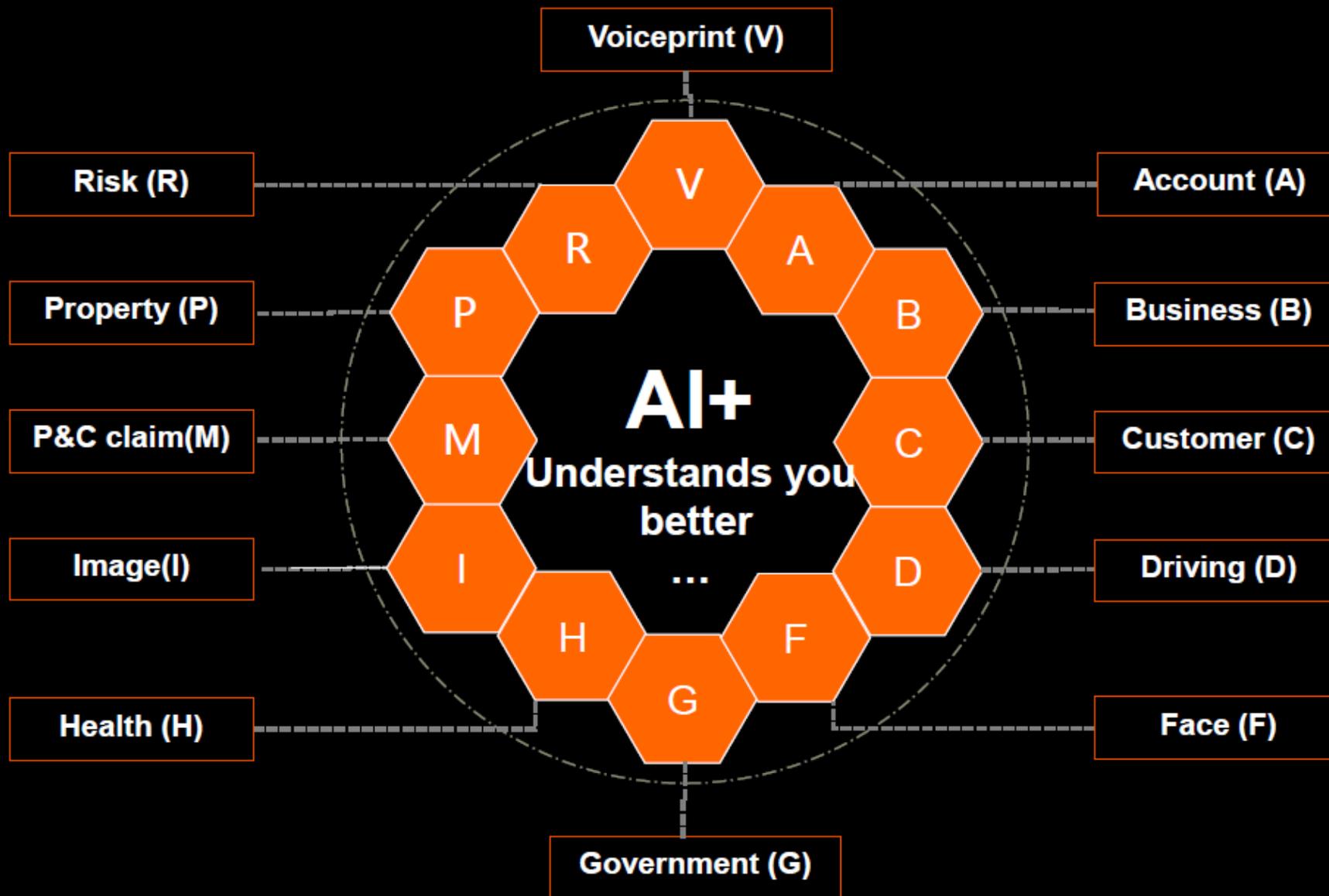
## 2 Big data: 1+N ecosystem partners



	Finance	Health care	Auto	Real estate
<p>430mn+ internet users 310mn+ app users</p> <p>1.4mn+ life insurance sales agents 20K+ outlets 60K+ customer service agents</p>	<p>Credit data of 880mn+ people 143mn+ financial customers (online)</p> <p>400+ banks 2,000+ non-bank institutions</p>	<p>180mn users</p> <p>Social Health Insurance in 257 cities 42K+ clinics 2,000+ hospitals</p>	<p>32mn+ daily active users 38mn P&amp;C users 1bn+ claims photos</p> <p>26,000 4S stores 100,000 garages 34,000 used-car dealers</p>	<p>21mn+ users</p> <p>300+ developers 150+ cities data 2.50mn+ second-hand houses</p>

<p><b>PA Big Data</b></p>	<p><b>29 years</b> of business, <b>880mn+</b> people, <b>26,000+</b> data fields <b>70mn+</b> businesses, <b>300+</b> partners</p>
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### 3 PA AI+Brain: AI+understands you better

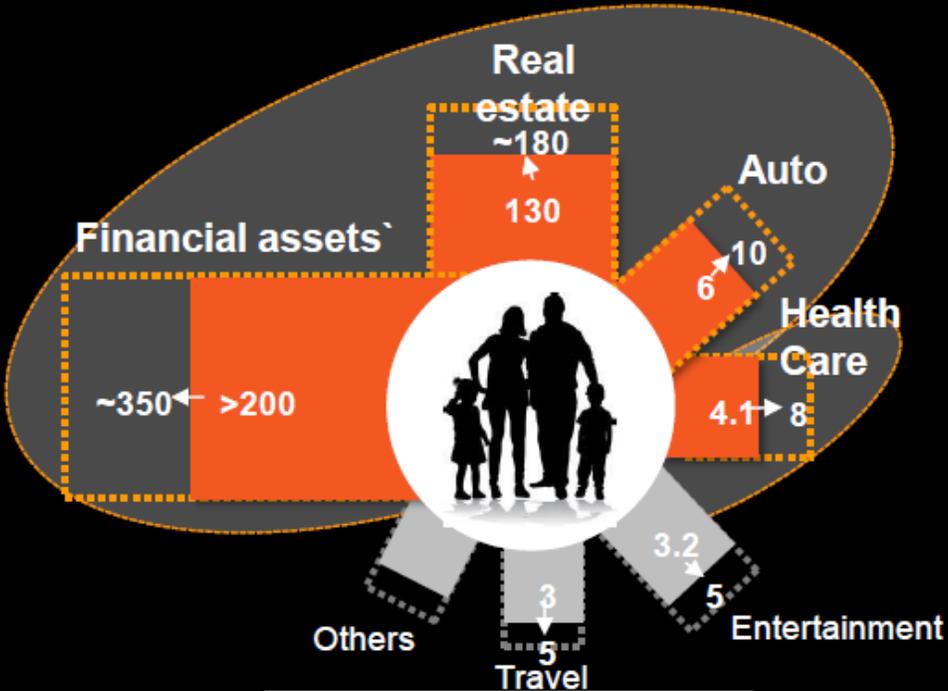


# Focus on 4 key ecosystems, potential market reach 550 Tn by 2022

Current market

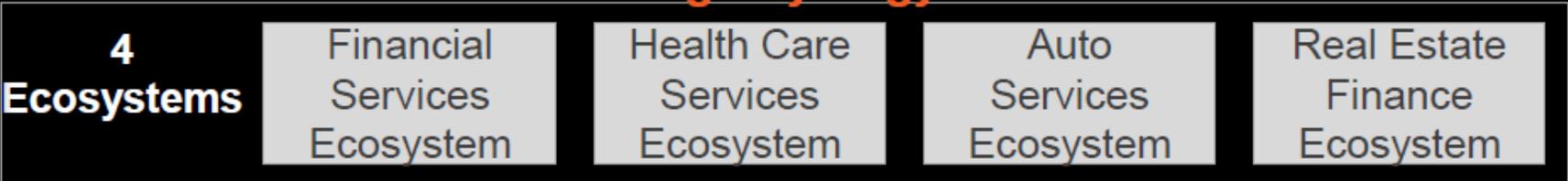
2022 Market

Unit: Tn



4 Key ecosystems add up to 550 Tn by 2020

Traffic entrance  
Strong demands  
High Synergy



# OneConnect: Intelligent superfast claims solution for P&C Insurance

## Intelligent claims solution for auto insurance



Signed  
Contracts  
with

**7** entities



### Intelligent vehicle type recognition

Unique vehicle type + unique part; image processing and grouping



### Loss recognition and precise pricing

**20mn** spare parts

**5mn** work hour items

**60,000** vehicle types



### Intelligent management

Intelligent management of investigators, whose probability of arrival within 5-10 minutes is **90%**

Multiple positioning technologies; 80% of cases are positioned within **50m**



### Intelligent risk prevention

**500+** risk factors

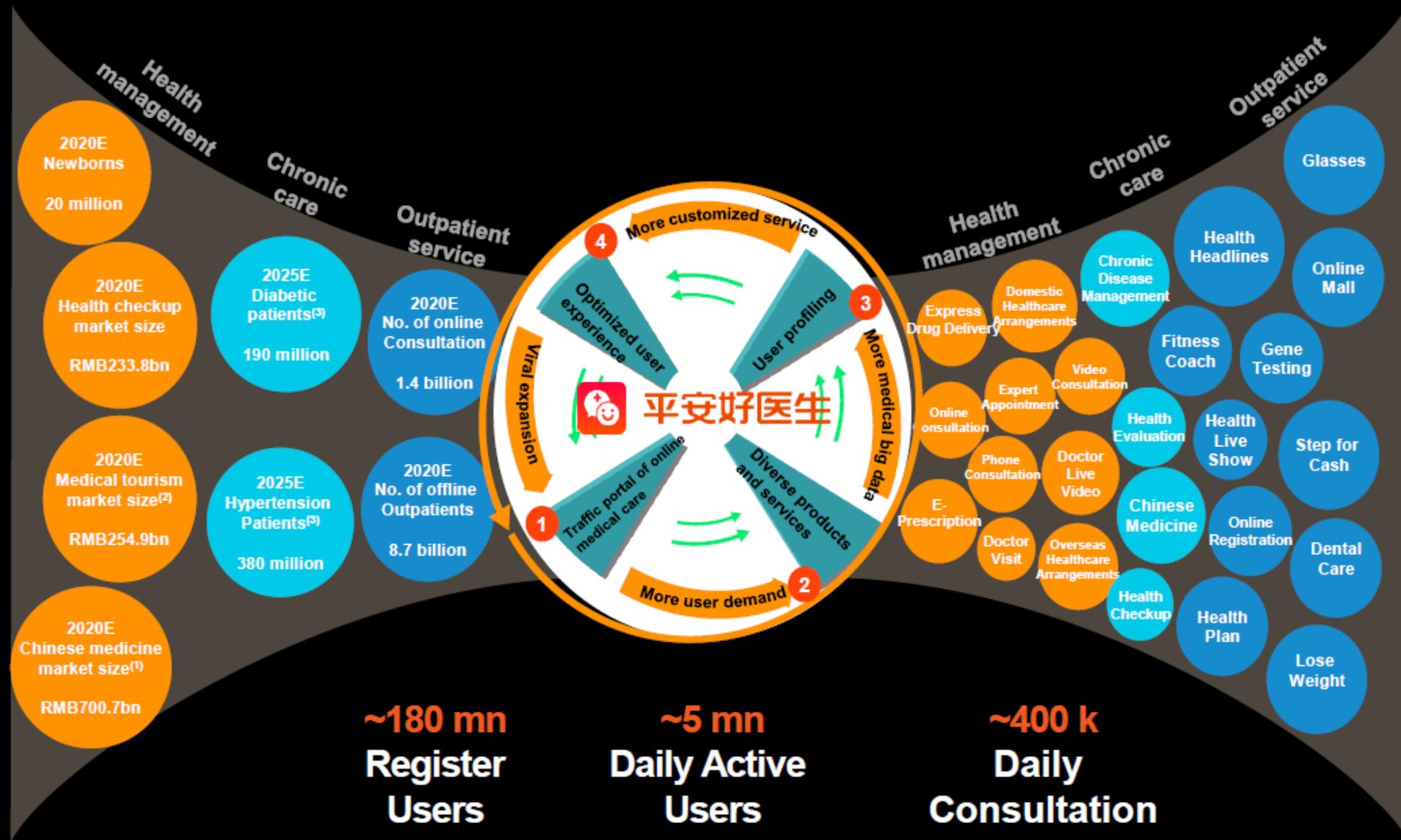
**30000+** risk rules

**100+** risk models

**85%** prevention rate of anti-leakage rules

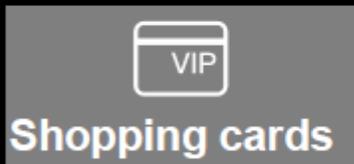
**60%** prevention rate of anti-fraud rules

# Ping An Good Doctor: started in 2014, is traffic portal to healthcare



Source: Frost & Sullivan analysis, the fifth National Health Service Survey, National Health and Family Planning Commission, Economist Intelligence Unit  
 Note: <sup>1</sup> Only including non-medical wellness promotion with Chinese medicine and excluding medical treatment services with Chinese medicine provided by medical institutions. <sup>2</sup> Referring to the overall market size including services of consultation and inquiries, translation, visa, appointment, transportation, accommodation, and service tracking. <sup>3</sup> Data of hypertension and diabetes relates to the prevalence rate of such diseases reported by patients themselves who are 15 years old or above

# Health care ecosystem: Health-tech revenue models



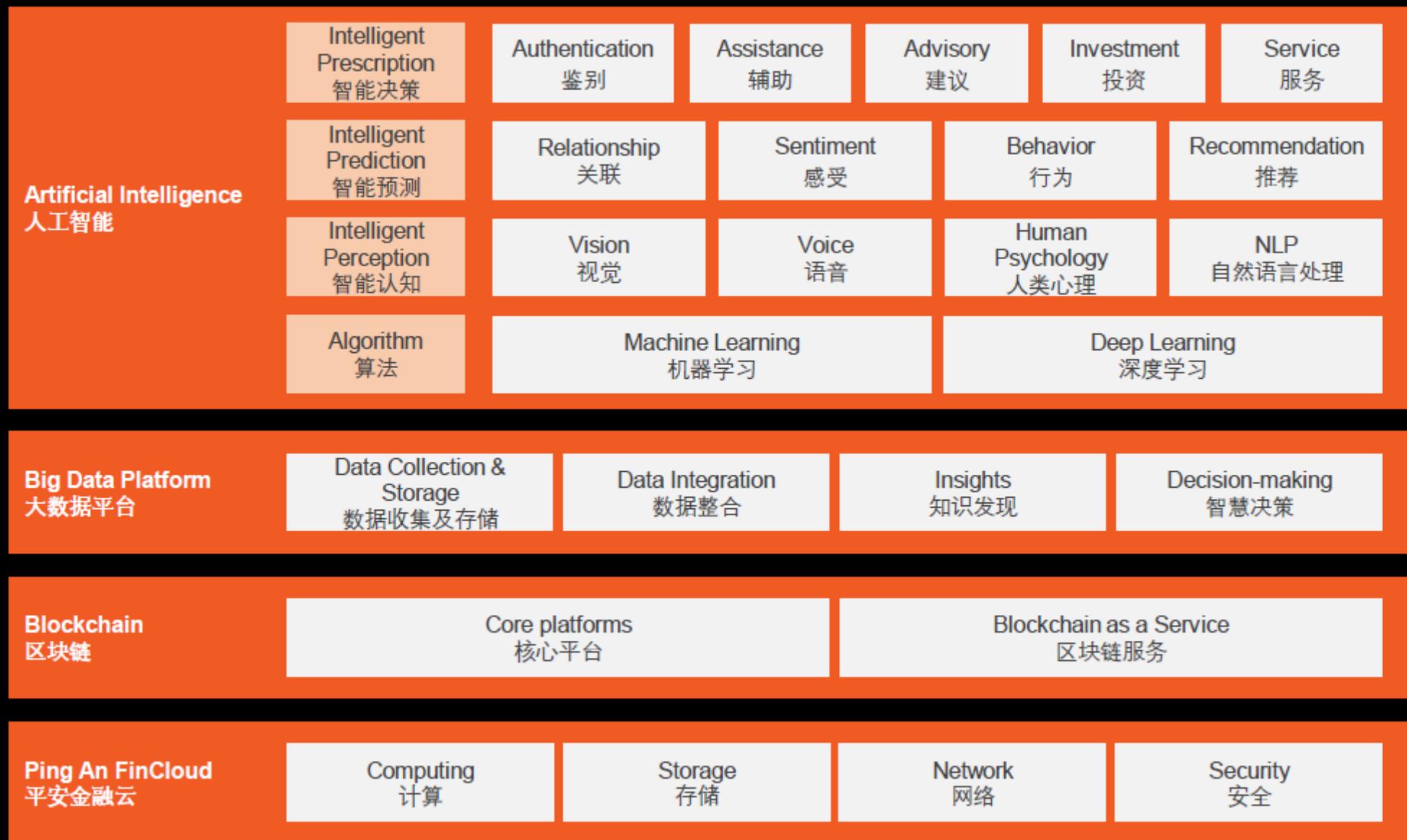
# Real Estate Finance Ecosystem: The compressed margin has propelled players to make improvements, creating empowering opportunities for better efficiency & experience

	<u>Pain points</u>		<u>Product/Service Offering</u>	<u>Impact</u>
 <b>Developer</b>	<ul style="list-style-type: none"> <li>▪ Difficult land acquisition</li> <li>▪ Lack of cost control</li> <li>▪ Weak project management</li> <li>▪ Low de-inventory rate</li> </ul>		<ul style="list-style-type: none"> <li>▪ E2E project management from design to sales based on BIM</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cost cut by 10%</li> <li>▪ Time cut by 5%</li> <li>▪ Full process close-loop management</li> </ul>
 <b>Serviced residence owner-operator</b>	<ul style="list-style-type: none"> <li>▪ Lack of cost control</li> <li>▪ Weak project management</li> <li>▪ Low de-inventory rate</li> </ul>			
 <b>Agency</b>	<ul style="list-style-type: none"> <li>▪ Difficult houses/customers acquisition</li> <li>▪ Low transaction efficiency</li> </ul>		<ul style="list-style-type: none"> <li>▪ House/customer acquisition &amp; management tool based on AI &amp; big data</li> </ul>	<ul style="list-style-type: none"> <li>▪ Monthly transaction increase to 1.5 per person, 10 times vs. industry average</li> </ul>
 <b>Broker</b>	<ul style="list-style-type: none"> <li>▪ Weak management skills</li> </ul>			
 <b>Consumer</b>	<ul style="list-style-type: none"> <li>▪ Inconvenient use of information</li> <li>▪ Unsatisfactory transaction experience</li> <li>▪ Limited funding support</li> </ul>		<ul style="list-style-type: none"> <li>▪ Online operating system &amp; real time marketing tracking &amp; forecast based on AI, big data &amp; cloud tech</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unified entrance</li> <li>▪ E2E online operating</li> <li>▪ All data traceable</li> </ul>
 <b>Government</b>	<ul style="list-style-type: none"> <li>▪ Lack of regulatory information</li> <li>▪ Complicated process</li> <li>▪ Low service level</li> </ul>			

# The ABCD of Ping An

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# Will the old economy underperform?

- Politics of Inclusion
- After Effects of Quantitative Easing
- Security Concerns
- New Paradigm
- Will the Digital Natives Invent Their Own Games?
- What really is the driver of the 4<sup>th</sup> industrial revolution?



# Mottainai

- *Mottainai* has come to be thought of as an all-encompassing Japanese term for the four Rs: reduce, reuse, recycle and respect.
- Easter Island: aware that they were almost completely isolated from the rest of the world, must surely have realised that their very existence depended on the limited resources of the small island.
- Reflects the feeling that arises from the awareness of both the interdependence and impermanence of all things.
- May be the real and only reason is this:
- **We simply cannot afford!**

Been trying "minimalist living" for a year now and I'm still trying to get rid of items. I'm almost there soon...

Charlotte Anne de Peralta, Blogger



I don't even own a mop!



# As an Investor

- Where is the systematic risk?
  - Serving the top of the pyramid?
- Where are the opportunities?
  - Serving the entire pyramid?
  - Inclusive Fintech?
  - Improving economic efficiency where government and business organisations fail?
  - Leapfrog economies?

Forthcoming:

Published in a new book  
by Stanford Asia Pacific  
Research Centre later this  
year.

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**Decentralization Technology and Distributed  
Innovation:  
Token Economy and Leapfrogging**

**Stanford Asia-Pacific Innovation Conference**

**Oct 26 – 27, 2017**

**David LEE Kuo Chuen<sup>1</sup>**

Presented 25 October 2017

Revised 30 March 2018

**Abstract**

The catch-up of developing economies to advanced economies has been slower than predicted, but decentralisation and distributed innovation may be changing the picture. Countries like Singapore and Myanmar, with the appropriate innovation policy, may soon leapfrog more advanced economies. This paper will describe three types of innovations that are happening in Asia that have gained momentum: centralised, decentralised technology and decentralised governance. Examples of growth of centralised FinTech companies in China and decentralised FinTech policy response from Singapore will be used to illustrate the efforts in innovation. Finally, we will describe the potential of the self-organised token economy with decentralised governance and technology that may propel the developing economies to a new level of economic activities. The paper argues that open innovation, in particular, user innovation embracing decentralisation may eventually solve the pain points of catch-up theory of Creative Destruction in Development Economics. Decentralisation via the Token Economy has great potential to level the playing field for those that are small, less endowed, and with a weaker degree of access.

**Keywords:** Decentralisation, Distributed, Innovation, Bitcoin, ICO, FinTech, Blockchain, Token Economy

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<sup>1</sup> Singapore University of Social Sciences, [davidleekc@suss.edu.sg](mailto:davidleekc@suss.edu.sg) and Stanford Fulbright Visiting Scholar 2015. Paper was presented to Stanford Asia Pacific Research Centre Innovation Conference.

# AID:Tech

Transparency Engine Protocol  
for the New Economy



[t.me/AIDTech](https://t.me/AIDTech)



[tge.aid.technology](https://tge.aid.technology)



[@aidtechnology](https://twitter.com/aidtechnology)

# Problem



## 2.4 Billion People Lack a Legal Identity



Everyone must have a legal ID by 2030



Remittances



Welfare



Aid



Donations



Ownership  
of data



Healthcare



# Market Size



**Remittances** - USD 600bn  
**Welfare** - USD 217bn  
**AID** - USD 161bn  
**Healthcare** - USD 371bn



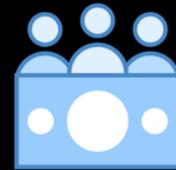
Remittances



Welfare



Aid



Donations



Ownership  
of data



Healthcare





BLOCKCHAIN TECHNOLOGY

# Blockchain Startup AID:Tech Joins Hands with PharmAccess to Improve Maternal Care in Tanzania



Published 44 mins ago on June 3, 2018

By **Angeline Mbogo**



## First Baby born On the Blockchain

# Worlds 1<sup>st</sup> Blockchain company to have two government investors



**Enterprise Ireland & SGINnovate (government investment arms) investment signing May 28th 2018, Dublin, Ireland.**



# SENTINEL CHAIN “COW TOKEN”

Unlocking the Crypto-Economy To  
Serve the Under-Served

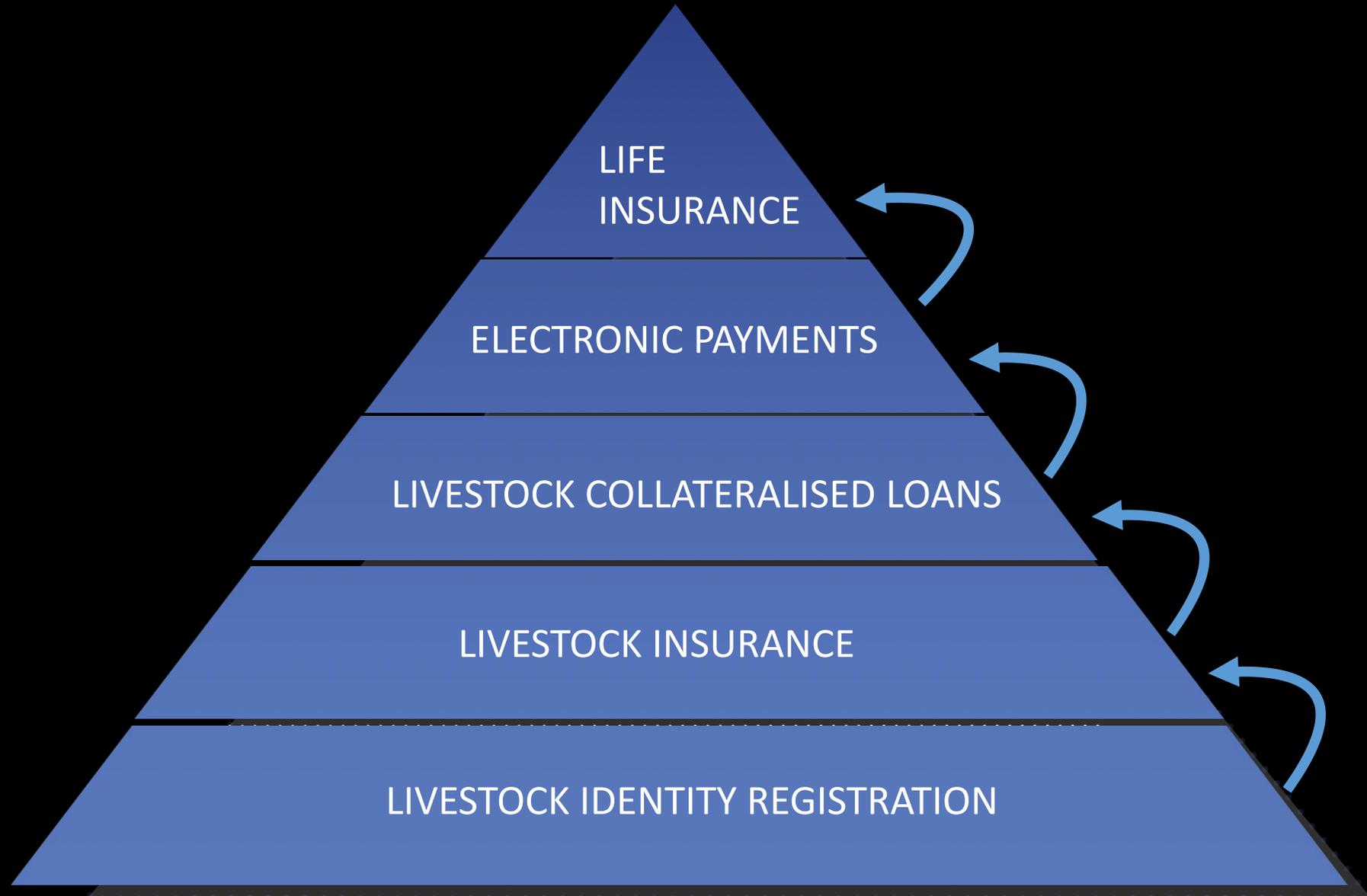


# CROSSPAY LIVESTOCK TAG

- Tamper-Proof
- NFC-enabled
- QR Code Registered



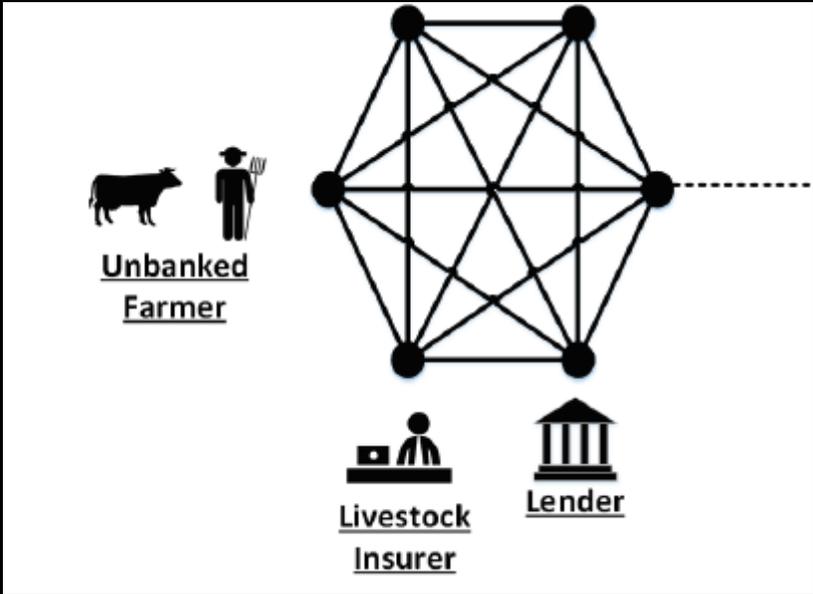
# NEW FINANCIAL INCLUSION MODEL



# Cow Token: Inclusive Blockchain Design

## Cow Token

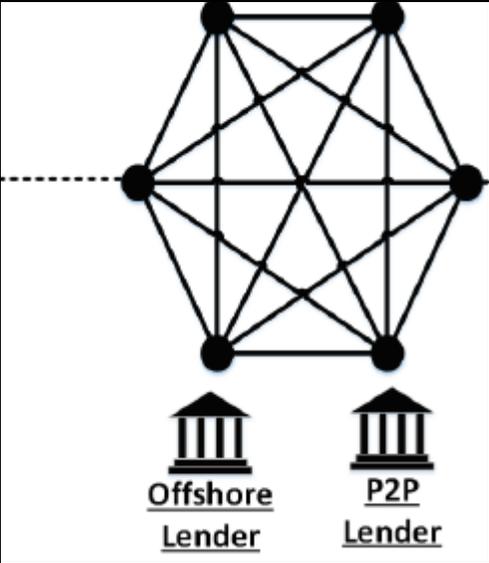
Onshore: a Private Blockchain  
Centralized Governance  
Decentralized Technology



Token exchange via smart contract

## Domestic Cow Token

Onshore: a Consortium Blockchain  
Centralized Governance  
Decentralized Technology



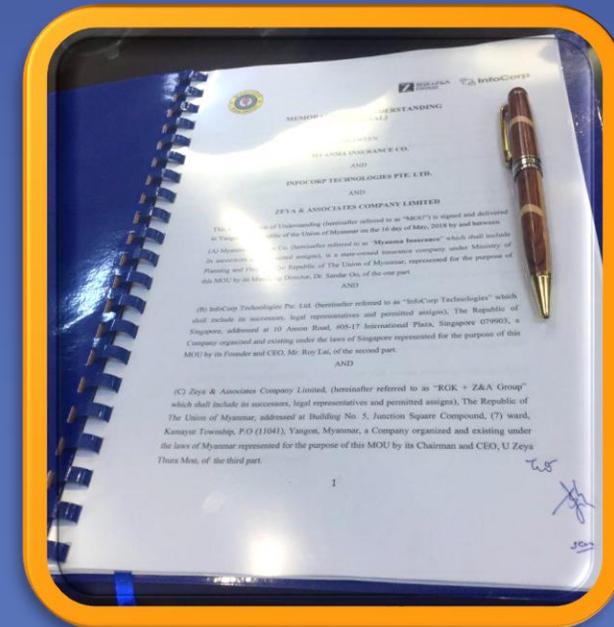
Token exchange via smart contract

International Cow Token  
Offshore: a Public Blockchain  
Decentralized Governance  
Decentralized Technology

ERC20:  
Borderless  
Fractional  
Digital Asset  
Ownership

# PARTNERSHIP WITH MYANMAR GOVERNMENT

MOU signing with Myanmar Insurance



# JUPITER CHAIN: ARCHITECTING A SMART CONSENTABLE DATA EXCHANGE

Jed



Ernie Teo, CTO JEDTrade, Jupiter Chain



JUPITER CHAIN



Jed



FINANCING IS A  
GIVEN

OUR USE CASES:  
REGIONAL SPECIFIC IMPLEMENTATIONS WITH  
A NEED TO COMMUNICATE AND TRANSFER  
VALUE ACROSS LOCALITIES



JUPITER CHAIN



Untailored  
financing  
solutions

Smart

## Access to (financial) services on the platform

- A user requires a financial service (such as a loan)
- **User grants consent for a data assessor** smart contract to decrypt info
- Smart contract returns assessment results to financial service **without revealing the granular data**

## Big data analytics

- An entity wishes to collect big data to perform analytics
- Smart contract serves as a **data subscription provider**
  - Looks for and requests consent from users who fit profile
  - **Pay out users periodically for feed of data**
  - Anonymizes data to provide to entity
  - Collects tokens from entity to pay out to users

# Your Own Data

- Only SMS is used on the phone
- Key transactions and purchases are recorded for user on the blockchain
  - Regardless if a loan is taken or not
- Lender will record loan and loan repayments on the blockchain
  - This becomes part of user's credentials for future interactions on the platform

# Medishares

- [Medishares](#) is without a doubt the world's first “mutual insurance” market on Blockchain. The Medishares utilize the blockchain system to add trust to all the transactions on this platform. Use of the blockchain technology considerably improves performance and decreased the operational price for insurers.
- As the “Medishares” platform is actually an Ethereum centered, open source, decentralized platform, it offers all tools needed for contract users and creators to get into the mutual help contract. This platform is primarily owned and operated by a foundation as well as its affiliates based in Singapore. The platform utilizes Function modules that include a settlement module and participation module.

# Use Application/Cases Scenarios

- “Mutual Aid Contract” For Critical Illness:
  - The majority of insurance policy for critical illness is done upon the finalization of “claim settlement” inquiry. Using Medishares platform, platform and companies can create particular critical illness help contract depending on “smart contract” template.
- “Mutual Aid Contracts” For The X-Sport Fans:
  - X-sports are continually turning into significant activities for individuals who look for exciting experiences. Through the Medishares, users of diving community or associations can generate “mutual aid contracts” which target the diving fans.
- “Mutual Aid Contract” For Different Illness:
  - The Medishares utilizes cryptography meshes, for example, unknown illness “mutual aid contracts” for protecting the privacy of the user. On top of that, the methods provide impartial and reasonable mutual aid to the members.

# Successful Model in Digital Economy

- **3Cs**: Community, Compassion, Creativity
- **5D's**: Digitalisation, Disintermediation, Democratisation, Decentralisation and Diminishing Oneself
- **LASIC** Business Model: Low Margin, Asset Light, Scalable, Innovative and Compliance Easy

# FinTech Engineering

- Stable Coin
- <https://www.forbes.com/sites/shermanlee/2018/03/12/explaining-stable-coins-the-holy-grail-of-cryptocurrency/#37e8dd0e4fc6>
- Token

# Tether

- [Tether](#) is 100% backed by fiat currency assets in a reserve account. The conversion rate is 1 tether USDT equals \$1 USD. The Tether Platform is considered to be fully backed if all tethers in circulation is less than or equal to all fiat that is held in the bank account.
- *Advantages*: Comes close to a like-for-like swap from fiat to crypto, well integrated and established
- *Disadvantages*: Centralized, not trustless, audit refusals
- Classification: Asset-Back or Claimed to be
- Others: Petro by Venezuela Government (backed by a barrel of oil)

# Dai by MakerDao

- [Maker](#) is a decentralized autonomous organization that is pegged against the U.S. dollar, but is completely backed by ETH. Their stable coin is Dai and each one is worth \$1 USD. Stability is maintained through an autonomous system of smart contracts. To receive Dai, you send your tokens to the Maker platform to lock those tokens up.
- *Advantages*: One of the first in the space (First Mover Advantage), backed by ETH (which is on the blockchain and therefore transparent, unlike Tether)
- *Disadvantages*: Highly complex, slow-moving, large pool of reserved needed
- *Classification*: Autonomous adjusted crypto-backed

# Nomins: Havven

- **Havven**
- [Havven's](#) structure provides stability by building a system that backs itself with two coins. The first coin is called Nomins which is the stable coin. This what you would use for everyday transactions.
- The tokens sitting in reserve are called Havvens. A fee for each transaction completed with Nomins will go back to the company. The fees are then distributed back to the Havven token holders who are rewarded for maintaining the system that backs itself.
- *Advantages:* Fully decentralized, fast-moving, business-oriented team
- *Disadvantages:* Very new and therefore unproven and may need more centralization
- *Classification:* Seigniorage shares system with autonomous adjustment of coin supply and over collateralisation.

# Basecoin

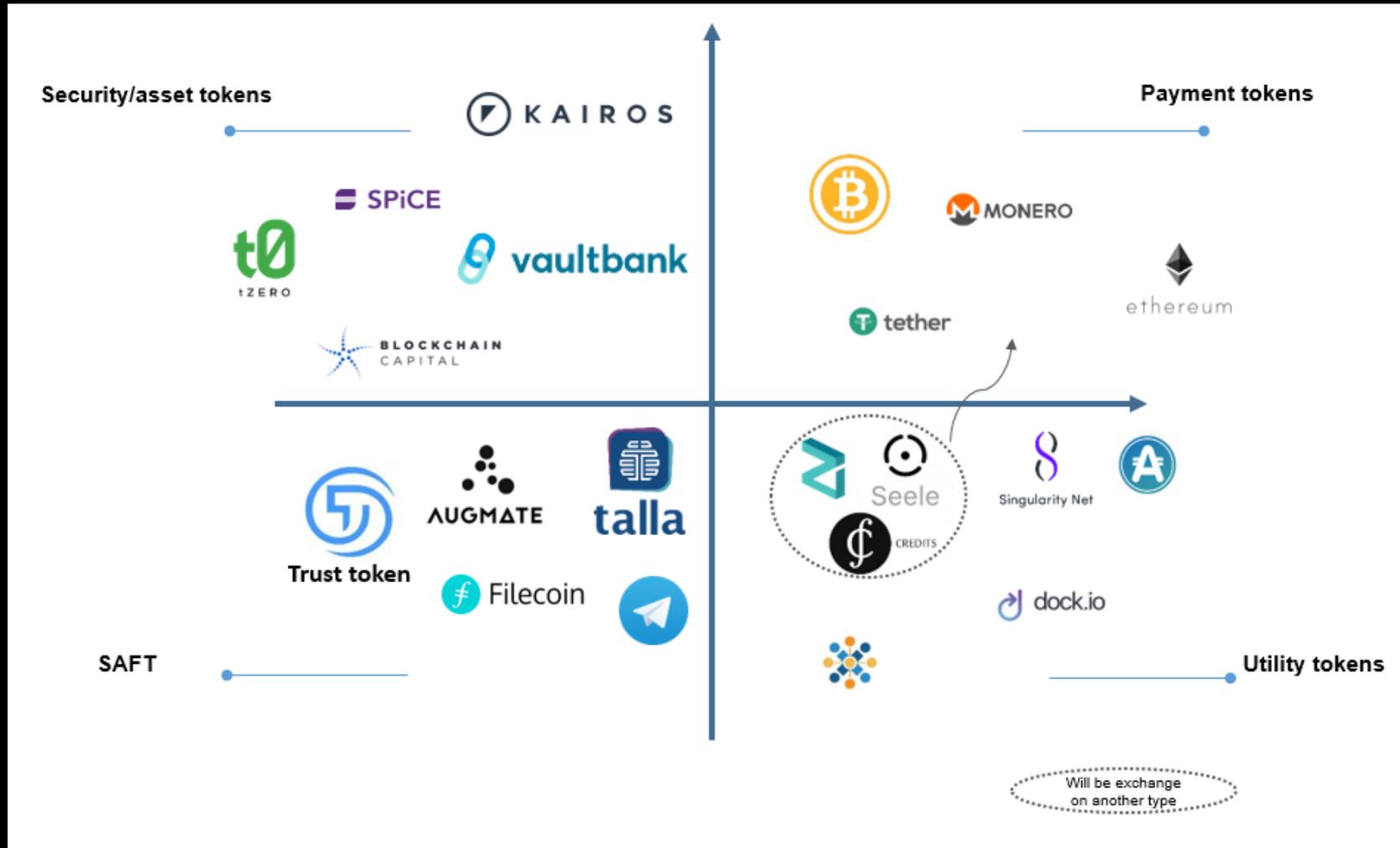
- [Basecoin](#) also pegs their price to \$1 USD. However, their approach uses consensus to contract and expand supply of their coin. When coins are trading for less than \$1, coins are contracted by allowing coin holders to buy bonds. Coins used to buy bonds are destroyed. Supply decreases and price increases. They do the opposite to expand supply.
- *Advantages*: Backed by prominent funds, Ivy League developers
- *Disadvantages*: Requires faith in the protocol—base bonds process
- *Classification*: Seigniorage shares system with community adjustment of coin supply.

# Government Backed

- Money Supply (Treasury) Based: Project Ubin (Singapore), Jasper (Canada)
- Commodity Based: Petro (Venezuela)
- Virtual Currency: FED Coin (USA)
- Non Money Supply Based with Expiry Date: ???
- China, Russia, etc

# Type of Tokens

<https://medium.com/swlh/types-of-tokens-the-four-mistakes-beginner-crypto-investors-make-a76b53be5406>



# SAFT

- An SAFT is different from a Simple Agreement for Future Equity (SAFE), which allows investors who put cash into a startup to convert that stake into equity at a later date.
- Developers use funds from the sale of SAFT to develop the network and technology required to create a functional token, and then provide these tokens to investors with the expectation that there will be a market to sell these tokens to.
- Because a SAFT is a non-debt financial instrument, investors who purchase a SAFT face the possibility that they will lose their money and have no recourse if the venture fails.

- 

Read more: [Simple Agreement for Future Tokens \(SAFT\) Definition | Investopedia](https://www.investopedia.com/terms/s/simple-agreement-future-tokens-saft.asp#ixzz5OOq75Jyu)  
<https://www.investopedia.com/terms/s/simple-agreement-future-tokens-saft.asp#ixzz5OOq75Jyu>

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# Token Economics: Rights



## Token Rights

Digital tokens being sold in ICOs confer a combination of rights to holders

### Payment

Token is the only way to make payments on the network



GNT are the only way to pay for services on the network.

### Access

Token provide the ability to use the platform itself



LSK is needed to pay transaction fees on the network.

### Profit or Fee

Holders get a portion of revenues or profits



Holders of TIME earn the fees from Labour-hour tokens.

### Contribution

Tokens needed to play certain roles on the platform or app



1ST allow holders to determine who won gaming matches

### Block Creation

Tokens determine who secures the blockchain



KMD holders select the notary nodes who secure the blockchain

### Governance

Holders influence features, project direction, protocol details, or more



DGD holders determine how DigixDAO funds are spent

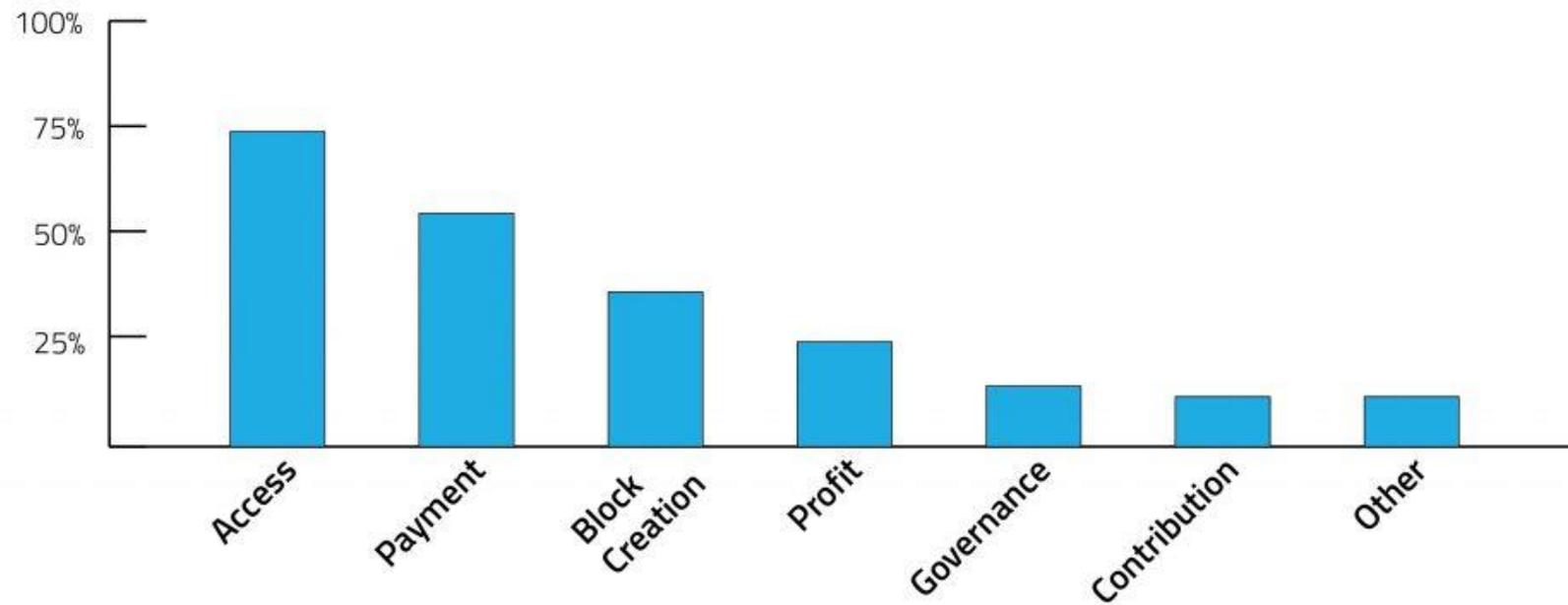


**Matt Chwierut**  
SUSS Fellow  
ICO/ITS Guru

# Token Rights



Distribution of token rights across token sales in the past four years



Source: Smith + Crown analysis. Includes all ICOs that ended between 2013 and March 1st, 2017 and that raised over \$30,000 USD. Tokens can have more than one right.

# Token Economics: Hybrid Legal or Crypto Structure

- US Security Regulation: Under the Howey test four-pronged test, an instrument is a security if it A) involves an investment of money or other tangible or definable consideration used in B) a common enterprise with C) a reasonable expectation of profits to be D) derived primarily from the entrepreneurial or managerial efforts of others.
- Another US legal question: Is Blockchain a transfer agent?

# Token Economics: Creating Legal Air Gap

- In countries where tokens are not securities:
  - **Award of Contract**: A legal entity (e.g. Pte Ltd) awarded a contract by a client (blockchain) to write the code for the blockchain, and subsequently have an ICO/ITS of the resulting blockchain with tokens.
  - **Commodity Sales**: A foundation (e.g. Swiss GmbH-LLC) initiates a sale of a commodity (Fuel/Token) required to run the blockchain on an open source platform.
  - **CODE**: Centralized Organized (CO) legal entity spends the tokens collected from the Decentralized Entity (DE) blockchain ICO/ITS and the CO also collects the revenue generated after the project of building the app as an example.
- **Plain Vanilla Token Allocation**: Tokens are first mined by allocators and allocated via a computer algorithm that does not specify any specific public addresses to receive funds.

# Is ITS & DAO Structure all Bad? – Lior Zysman

- Flows of funds are recorded real-time on an open blockchain.
- The new JOBS Act Title 3, which opens investment in startups to individuals, requires startups to publish financials once a year; in contrast, blockchain accounting guarantees their investors financial reporting all year long.

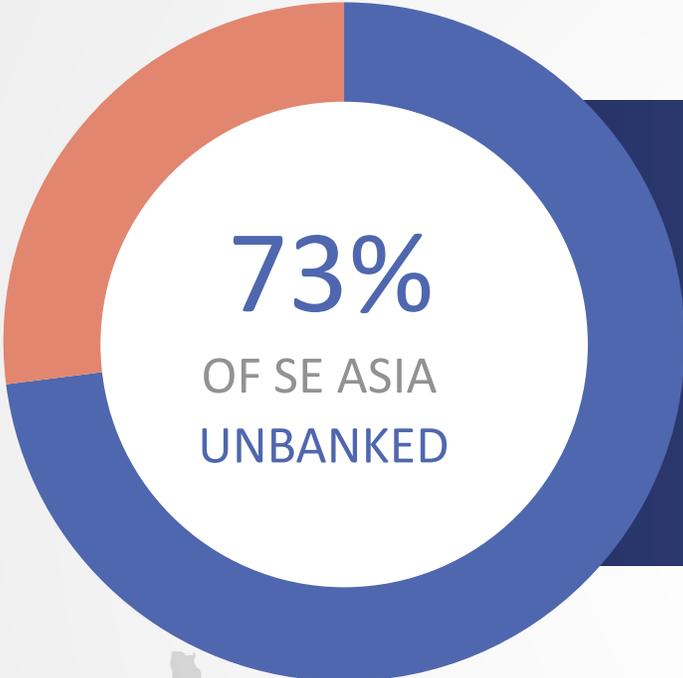
# Is ITS Structure all Bad? – Lior Zysman

- The Act also requires businesses to publish a business plan once a year.
- In contrast, some ITS's are powered by transparent open-source code that any machine on a distributed network can run.
- The funds the ITS directs are also published on the blockchain, and the by-laws themselves that determine the relationship between the ICO/ITS participants are embedded in the code.
- The execution of those bylaws and the ITS's accounting don't depend on familiar figures, like the CEO or an auditor, although the status of humans on the edges of the network or curators has never been debated in case law and might be replaced using formal verification methods.
- Given all this, investor expectations, a big concern for lawmakers and regulators, are being met directly by the ITS's code, perhaps for the first time in corporate history.

# Initial Token Sales (ITS's) or Initial Con Offerings (ICO's)

- Many Scams! Buyers Beware!
- Risk and Complexity Classification
  - High Risk?
  - High Complexity?
  - Definitely high uncertainty of outcome!
- Who should invest?
  - Certainly not for widows and orphans
  - Definitely not for speculators
  - Absolutely not a traditional instrument and not advisable for the public or even sophisticated investors
  - Who? Members of the community that know the community well
  - Who? Those who understand that these are experiments
  - Who? Those who can mentor the companies and blockchain angel investors
- How much allocation to one's portfolio?
  - Prepare for zero return of capital
  - A learning portfolio
  - It is not part of the traditional portfolio but possibly the new alternatives

# MAJOR UNBANKED DEVELOPING COUNTRIES IN ASEAN



438 MILLION  
ADULTS WITHOUT BANK  
ACCOUNTS



>100%  
MOBILE PENETRATION  
RATE



UNBANKED  
SITUATED  
IN 6 MAIN  
COUNTRIES:



Myanmar



Cambodia



Laos



Indonesia



Philippines



Vietnam

# What Decentralised Tokenisation is **Not**

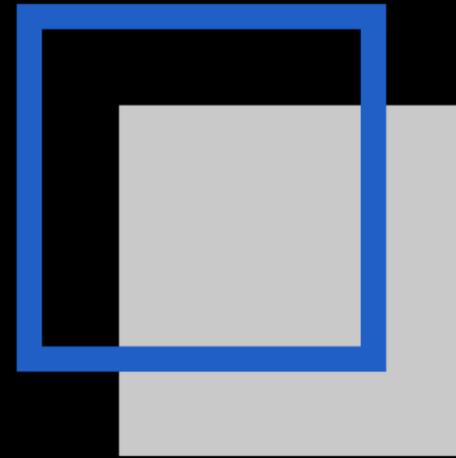
- Repacking old economy into the token economy
- Using token to **bypass** IPO regulation
- **Fundraising** as the sole objective
- **No contribution** to decentralisation
- Not **using the technology** to serve new users
- Just a means to extract more **speculative value**
- It **scores low** on 3Cs, 5Ds, LASIC

# Breaking Down the Silos

- AI (Computing Power and Big Data) – Production Efficiency
- Blockchain – Collaboration Efficiency
- Blockchain is mathematically-based trust machine that enhances collaboration relationship among untrusted peers through consensus.

# The Era of Decentralised Entrepreneurship and Collaboration

- **Production Efficiency** is not sufficient for growth anymore.
- **Collaboration Efficiency** is a priority to break these barriers and bring down the silos.
- **BASIC, with a new meaning, is the future for Decentralised Entrepreneurship and Collaboration!**



Block  
Asset

