Blockchain is dead, long live blockchain
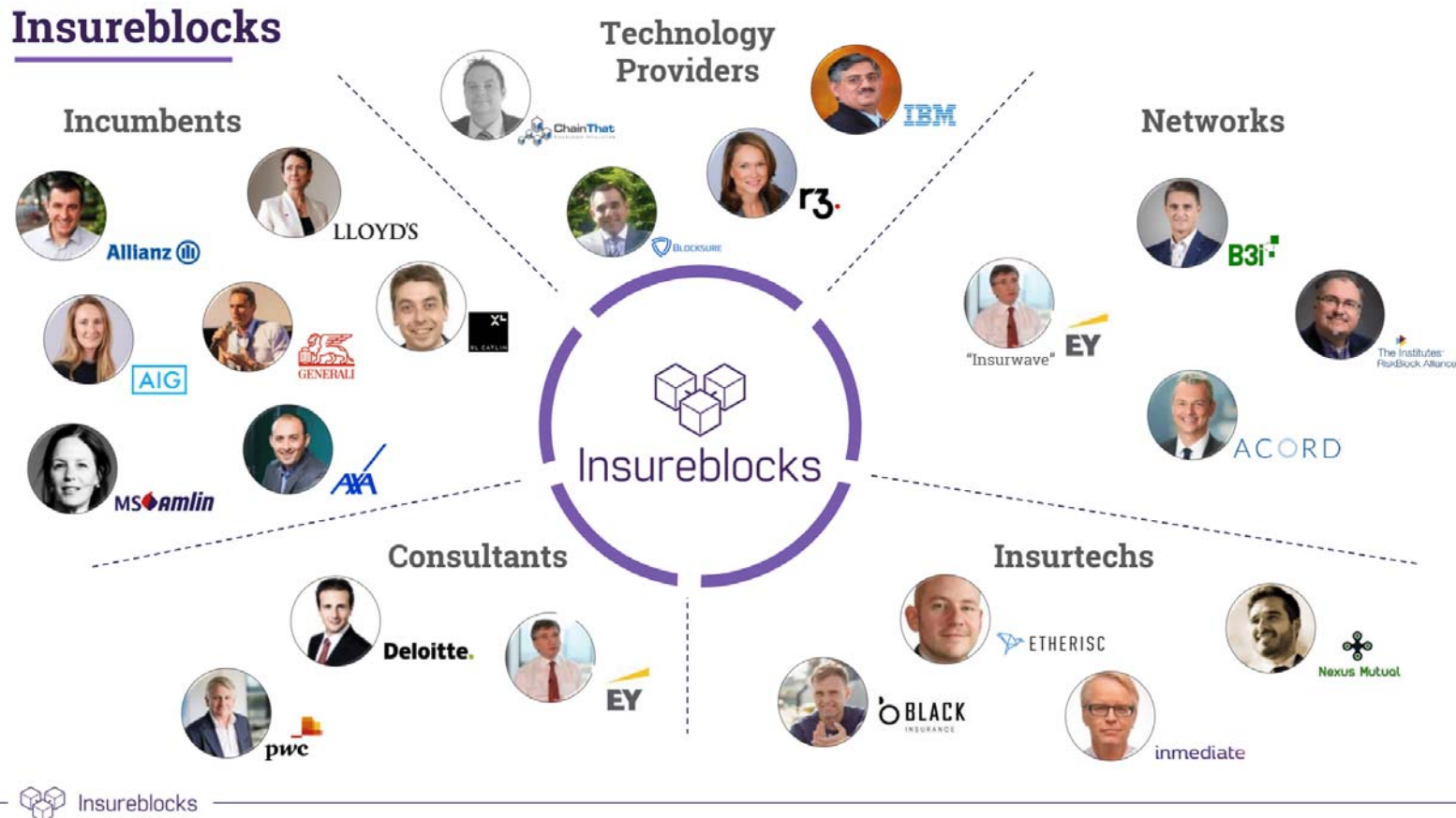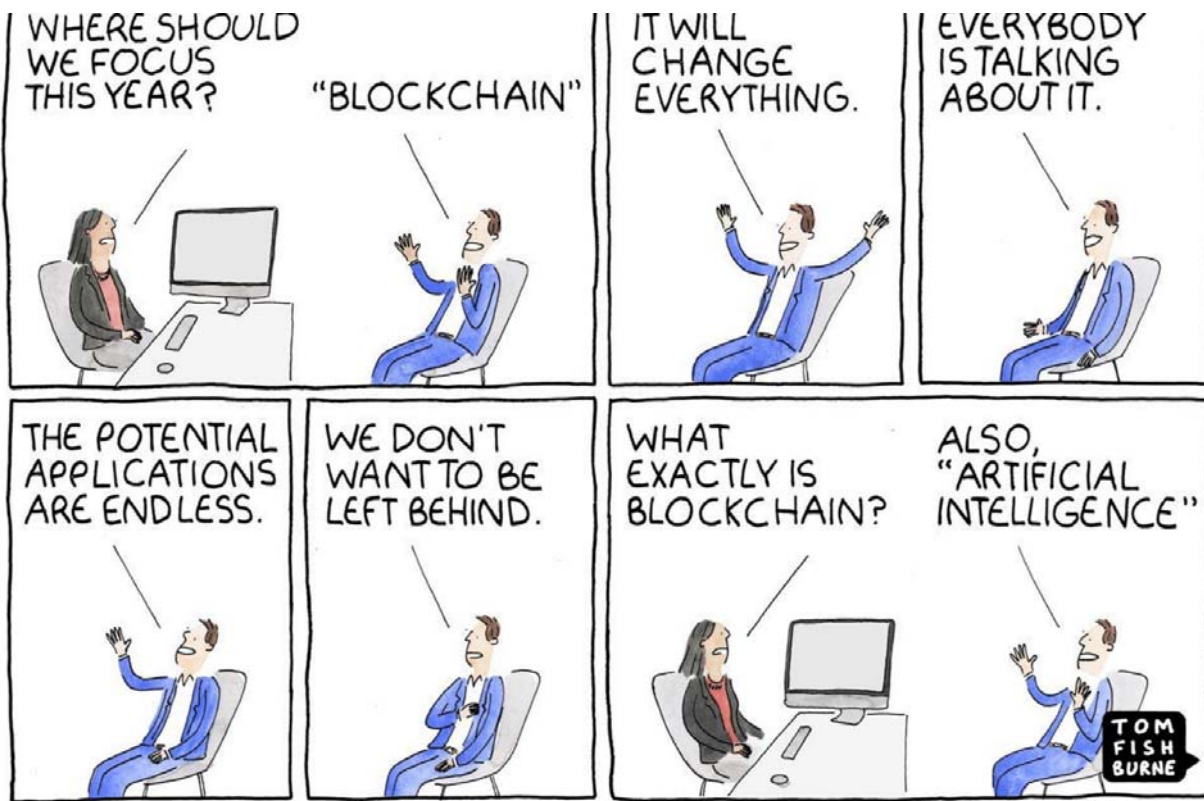
Walid Al Saqqaf – Founder of Insureblocks

Connecticut Captive Insurance Association

Hartford, 21st May 2019

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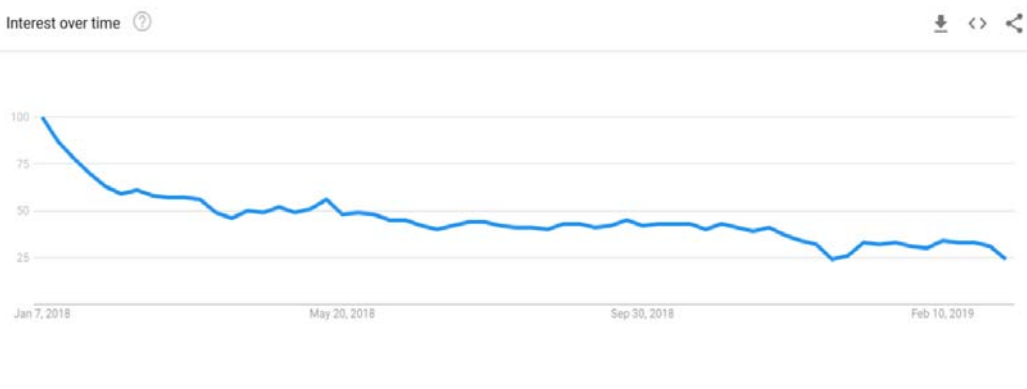— Insureblocks

Is Blockchain Dead?

— Insureblocks

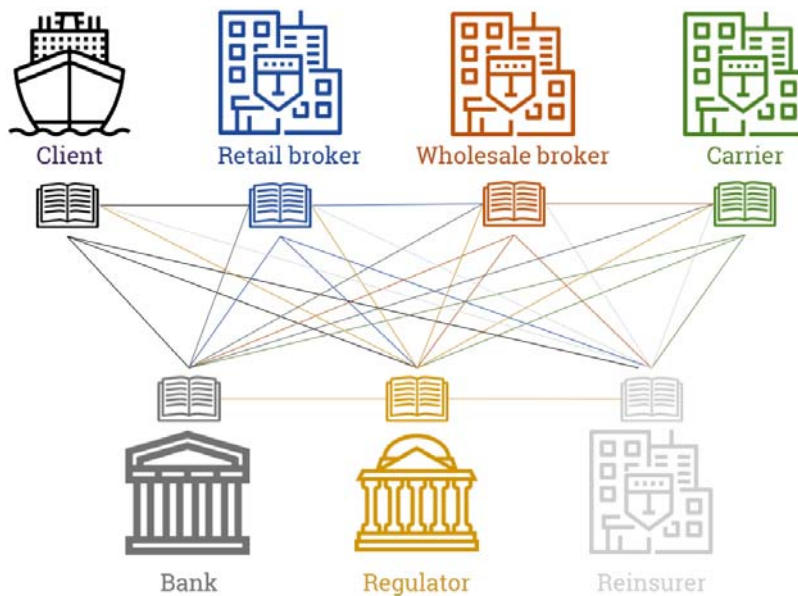# Is Blockchain Dead?

"The bottom line is that despite billions of dollars of investment, and nearly as many headlines, evidence for a practical scalable use for blockchain is thin on the ground." – **McKinsey & Company**
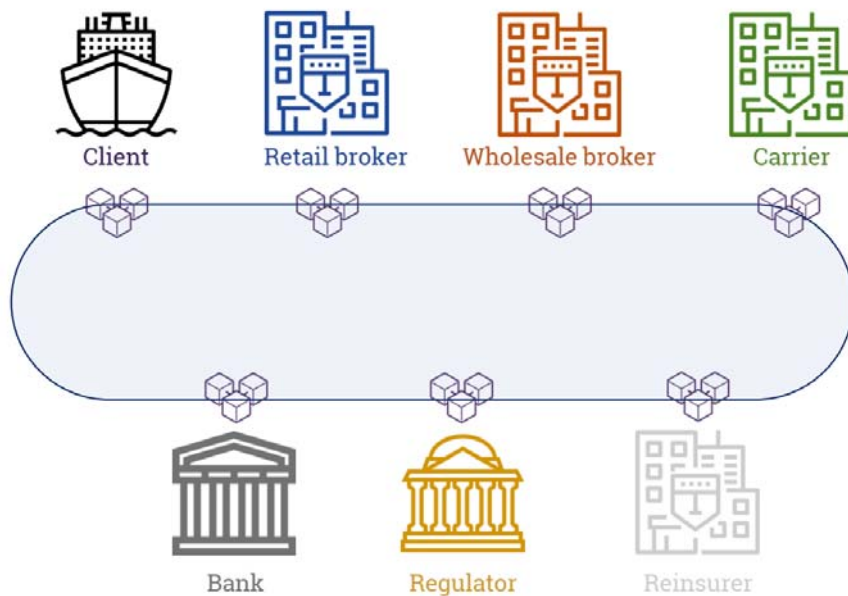
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The Problem

The way in which we exchange information today is inefficient, expensive and has both security and human error vulnerabilities.

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Lack of standardisation

Is blockchain dead?

Recalibrating our understanding of this technological solution

The great hype that swirled around Bitcoin/Crypto did a great service in making the world aware of this transformational technology's potential until January 2018, when all Crypto currencies and Bitcoin started their massive fall in value and interest in blockchain technology began to wane.

Bitcoin's Google Trend result from January 2018 to March 2019 shows it hitting a peak top score of 100 in January 2018 to a low score of 11 in March 2019. Blockchain's Google Trend over the same time period moved from a top score of 100 in January 2018 to a score of 24 in March 2019.

To top it off, McKinsey wrote a report titled "Blockchain's Occam problem," which essentially states that despite billions of dollars, corporate blockchains have achieved little. A few major insurance carriers that have experimented with blockchain have candidly admitted that 75% to 90% of their blockchain PoC (Proof of concepts) did not need a blockchain.

So what are we to make of all this? Pack up our interest in blockchain and see it as just a hyped-up technology that, like Daedalus, essentially flew to close to the sun and crashed?

This piece is not meant to hype you back up on the potential of blockchain technology but instead recalibrate your understanding of it and why it may not be dead after all.

Nascent technology

First, we have to remember that blockchain is still a nascent technology.

From 2016 to 2018 we saw a whole array of activity by enterprises rushing to launch blockchain PoCs. This was either due to the fear of missing out (FOMO) and/or for PR value. Essentially, what we saw was the launch of a large amount of PoCs that neither needed a blockchain platform nor were aimed at resolving a real business problem. What we had was a classic case of a hammer looking for a nail.

The second important point to bring up is that blockchain can't hit its

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Rekeying

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Where's Waldo?

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Trust?

"I can only trust my data"

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With Blockchain

A shared, distributed, auto replicated and permissioned based ledger

Client   Retail broker   Wholesale broker   Carrier

Bank   Regulator   Reinsurer

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What is Blockchain?

Blockchain is a digital ledger that provides a shared single source of truth between multiple trustless parties. Blockchain has the following attributes:

Distributed ledger

Tamper proof

Transparent & set data format

Consensus

Public

Private

Smart Contracts

Cryptographically secured

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What is a Smart Contract

- Codified business logic – "if X occurs, do Y"
    - X = objective trigger
    - Y = insurer's contractual obligations

- Contract is self executing / no human review is required
    - Contract is triggered by a deterministic event

- Oracles (e.g. flight or weather database)
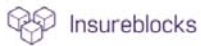
Challenges of the Insurance industry

- High costs due to administrative friction
- Regulatory reporting requirements
- Increasing number of complex contracts
- Paper processes
- Lack of standards
- Trust concerns with respect to data

Benefits blockchain can bring to insurance

- Reduced administrative costs and friction
    - Reduced friction through the elimination of reconciliations or re-keying of data
- Automatic contract terms and conditions
    - Self execution of contractual terms when verified event occurs (e.g. hurricane)
    - Reduced administrative costs
- Digital data exchange
    - Greater fluidity and efficiency in trading risks, value and assets in real time
- Trust in the data and its security
    - Increases contractual certainty and transparency of data
- Regulatory and compliancy transparency

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Decision criteria – when to use blockchain technology?

✓ Multiple parties generate digital transactions that change information in a shared repository

✓ Multiple parties update data and these actions need to be permanently recorded

✓ Participants need to trust that the recorded actions are verified as valid

✓ Intermediaries introduce an unnecessary complexity in communication and information exchange

✓ Enhanced security is needed to ensure integrity of the system

▶ If these conditions are (largely) met, Blockchain is likely to be more suitable than a standard database or other solution
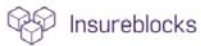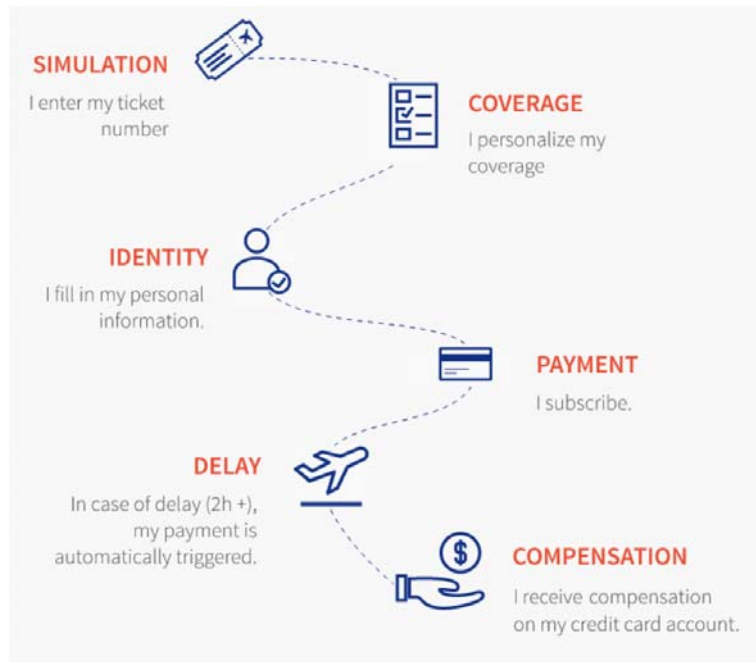
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Key barriers to overcome

Technology

Regulatory

Process

Change

Knowledge
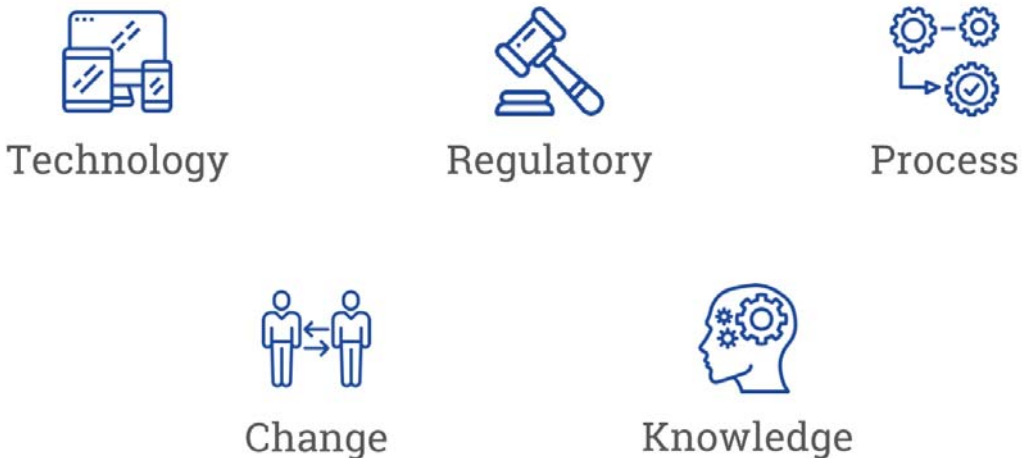
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Insurance blockchain ecosystem(s)
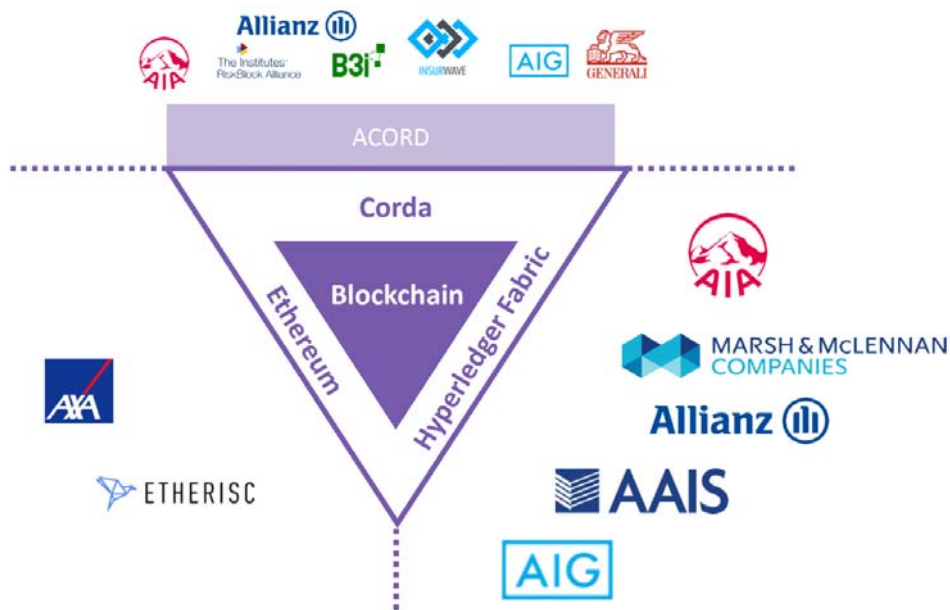
Insurance case studies – Auto Claims

fizzy
Powered by AXA

SIMULATION
I enter my ticket number

COVERAGE
I personalize my coverage

IDENTITY
I fill in my personal information.

PAYMENT
I subscribe.

DELAY
In case of delay (2h +), my payment is automatically triggered.

COMPENSATION
I receive compensation on my credit card account.

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Insurance case studies – Reinsurance

B3i

The Blockchain Insurance Industry Initiative

MASTER DATA

CEDENT   BROKER   REINSURER

COMMUNICATION

■ PRIVATE   ■ SHARED
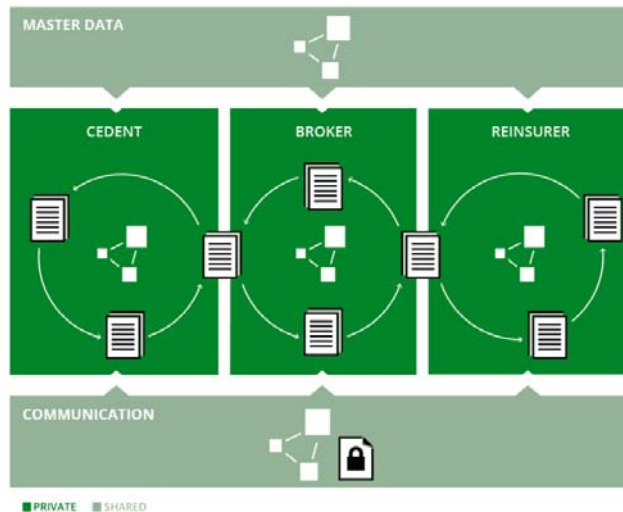
- Shared ledger
  - Single source of truth
  - No rekey
- Smart contracts
  - Builds premium schedule and the associated payables and receivables
  - Distributes materialised updates of losses to reinsurers

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Insurance case studies – Marine Insurance

Insurwave takes clients, brokers, insurers, and third parties and connects them to distributed common ledgers that capture data about identities, risk, and exposures, integrating this information with insurance contracts.
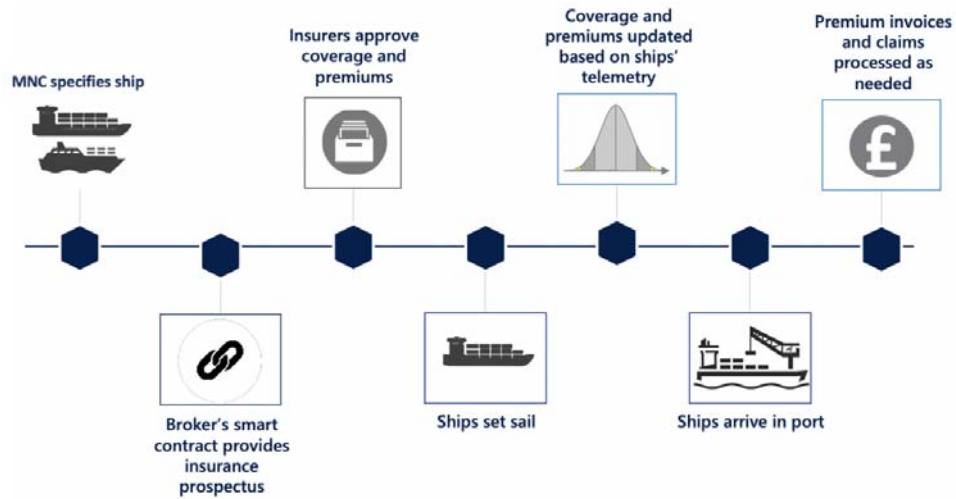
Blockchain will provide unprecedented visibility to accurate ship and coverage data across the entire maritime market landscape

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Captive insurance case study – Allianz (ⅱ)
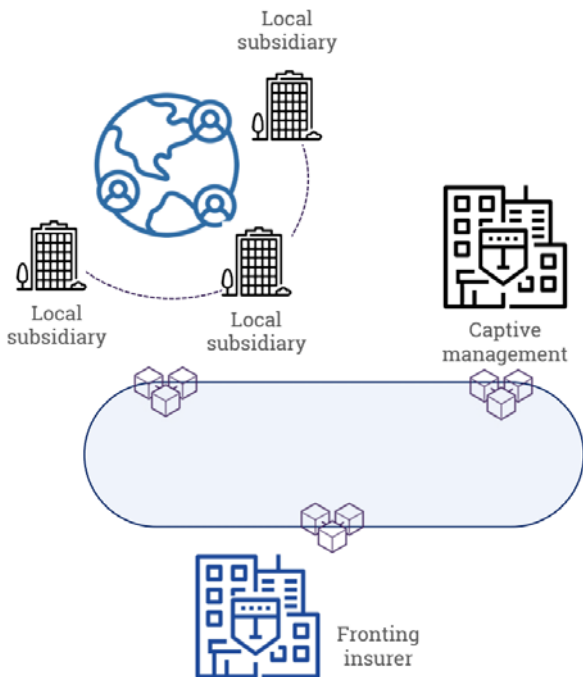
- Blockchain connects all parties involved in the captive insurance program

- Allianz's blockchain captive insurance program focuses on professional indemnity and property with local subsidiaries in the US, China and Switzerland

- Focuses on annual policy renewals premium payments and claims submission and settlement

- "Automated processing replaces the exchange of thousands of emails and massive data files. Each process is transparent and can be tracked in real-time. Our customers benefit from increased speed, reliability and auditability."

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Captive insurance case study – GENERALI
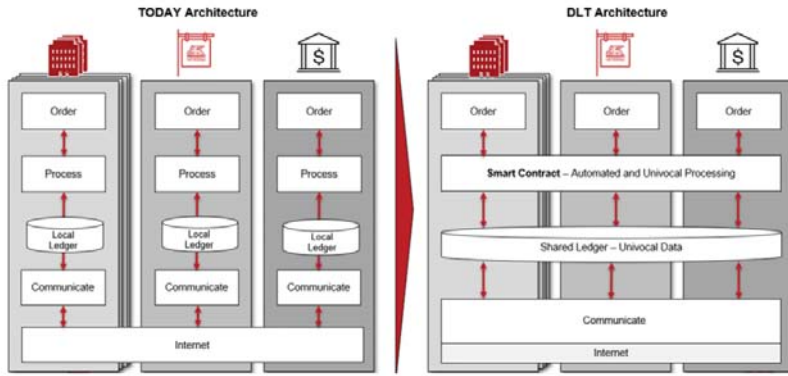
- Generali Employee Benefits (GEB) is an employee benefit solutions provider
- Prototype in 2018, involving major agricultural firm Syngenta, as well as Spanish, Swiss and Serbian local insurers. It allows participants in the reinsurance process for captive or pooling services to access the same data and reduces processing errors through smart contracts and automated reconciliation.
- Greater transparency – increases data quality and processing of data
- Move away from batch executions
- Reduction of human errors – eliminating multiple reworks of the same data
- Increased efficiency and speed - accounts payable are automatically shared between the involved parties, enabling cascading to the Treasury and Banks with no manual intervention required.

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Captive insurance

- Launch a pilot program allowing new captive insurance companies to register with the Secretary of State using blockchain technology.
- The pilot program is designed to test the functionality of the emerging technology in state regulatory processes.
- The pilot will also include a review and revision of relevant statutes, rules, regulations, and bulletins to ease blockchain implementation.
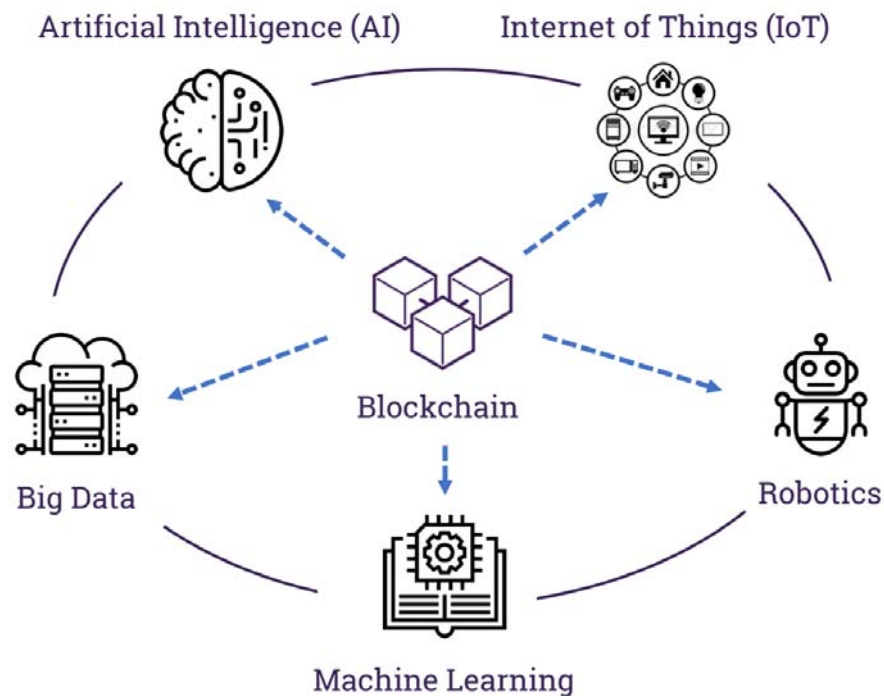
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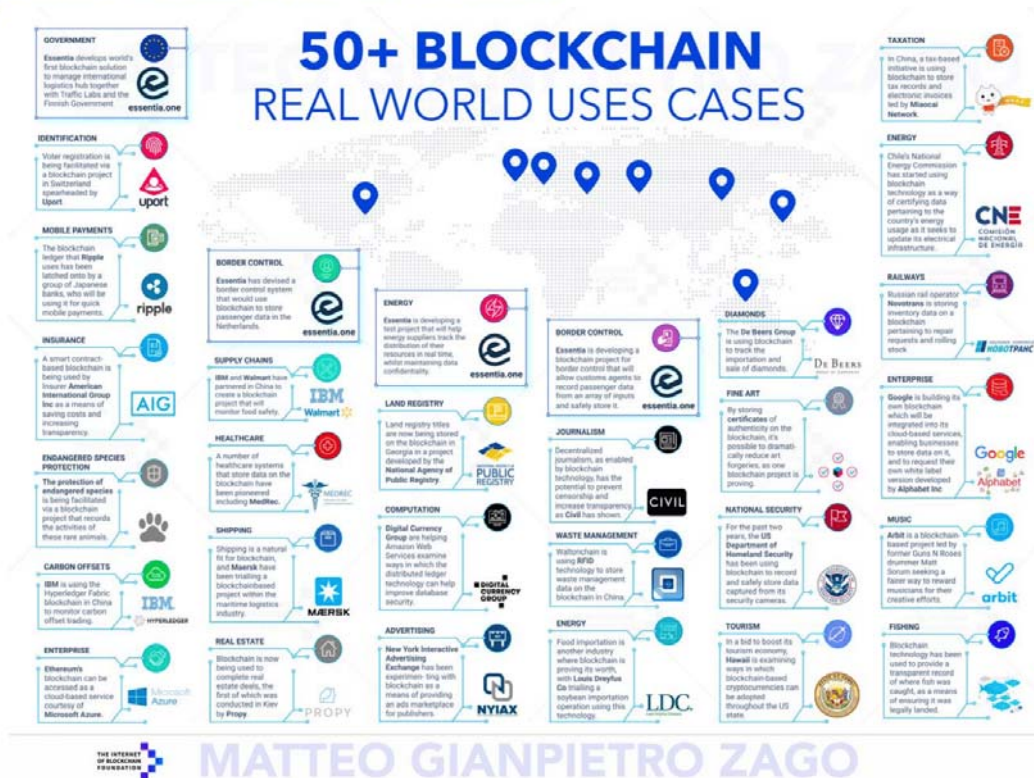# Insurance case studies – Learnings

- Have a clear business case, not a hammer looking for a nail

- Customer centricity is key!

- You can't replicate existing business processes onto the blockchain you need to reinvent them

- Blockchain works with friends, it's all about the ecosystem

- Do not boil the ocean, start small and focus and expand. Minimum viable product to a Maturing Loveable Product. Take an iterative approach

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Blockchain & new technologies – the new stack

Artificial Intelligence (AI)

Internet of Things (IoT)

Big Data

Blockchain

Machine Learning

Robotics

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Blockchain non-insurance use cases

Blockchain non-insurance use cases

Ecosystems of Ecosystems

🍇 **IBM Food Trust™**

TRAD+LENS

M O B I

B3i

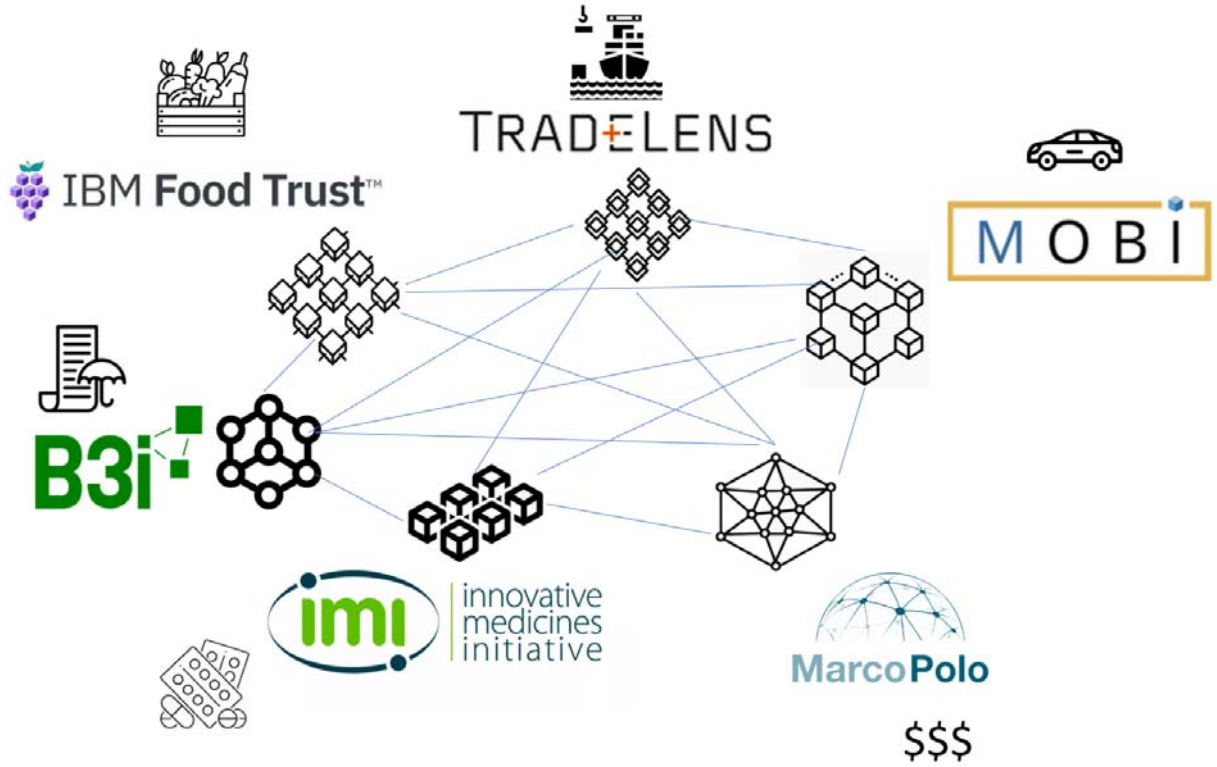**imi** | innovative medicines initiative
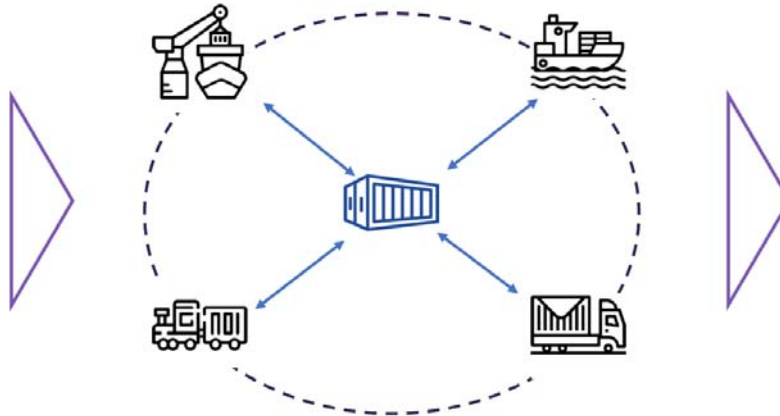
MarcoPolo

$$$

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Similarities to Containerization

Need for ships, trains, trucks and port terminals to align themselves in order to offer a standardized method of transport of goods

- 1956 cargo cost $5.86 per ton to load

- 2018 cargo cost $0.16 per ton to load

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Get on the education curve!

- Blockchain has arrived to insurance
- Latency period is shrinking
- Get on the education curve
  - Attend conferences
  - Read, read, read
  - Play with the technology within your firm and join a consortium (e.g. B3i)
  - Listen to thought leaders on Insureblocks & get our insights on this market

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- Cross industry and technology educational podcast
- Consultancy service:
  - Blockchain education
  - Identifying a business case and building a PoC / Prototype
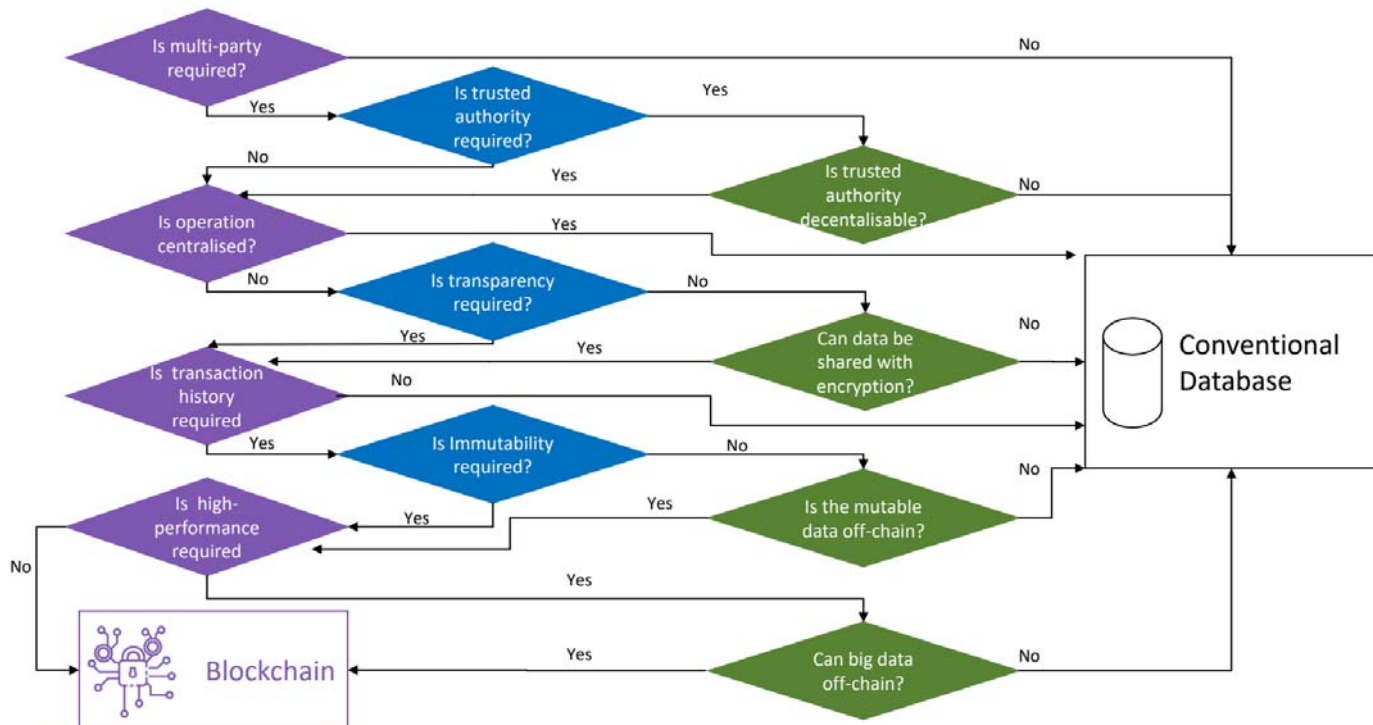 - Blockchain strategy

Contact Details

- Insureblocks.com

- Walid Al Saqqaf: walid@insureblocks.com

APPENDIX

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Decision criteria – when to use blockchain technology?

Suitability Evaluation Framework; Lo, Xu, Chiam and Lu (2017)

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Overcoming barriers – top tips! (1/3)

The power of networks and communities – collective action, sharing knowledge, ideas and selling the change with representation from all stakeholder groups

Community agreement on the need and potential for huge improvement to efficiency, quality and growth throughout the insurance value chains; the high-level "what" understood – deliver on this

People aspects are key focus on what needs to be improved and why
Technology is an enabler to improvements rather than the sole reason for change

Education, education, education
Why block chain? What it means? What helps the change?

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Overcoming barriers – top tips! (2/3)

Generating buy-in from all stakeholder groups – a network needs participation from clients, brokers, insurers and reinsurers – not forgetting regulators ,TPAs, etc...

A solid business case is key:
What moves the needle for the policyholders, our company and the market?
With specifics (Growth, Quality, Efficiency)

Don't try to boil the ocean, pick tangible and valuable use cases

Deliver something that can be used and evaluated
PPT - does not count

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Overcoming barriers – top tips! (3/3)

Be clear on the regulatory/compliance issues/adherence
Work closely with regulators

Learn from the experiences of ACORD, Ruschlikon, etc.

Integration with existing technologies and standards vital – build on existing standards,
Make it easy for us to adopt

Standardisation is desirable, but it should not limit the ability to be flexible

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