

BUSINESS INSURANCE[®]

WORLD

CAPTIVE FORUM

Blockchains in Insurance & Captives

#WorldCaptiveForum

JANUARY 30 – FEBRUARY 1, 2019

Our Panel

Steven Bauman, Head of Global & Captive Programs, AXA XL

Rocco Mancini, Vice President, Marsh Captive Solutions

Doug Alexander, Digital Enterprise Architect, AXA XL

Ashish Gadnis, Co-Founder / CEO BanQu, Inc.

Susan Joseph, North American Representative, B3i

Agenda

- What is Blockchain?
- Getting Started with Blockchain
- Practical Applications of Blockchain
 - BanQu
 - B3i

What is Blockchain?

Blockchain is the combination of three existing technologies:

- Cryptographic Keys
 - Creates a secure digital identity
- Peer-to-Peer (Distributed) Networks
 - Creates a shared system of records
- Protocols
 - Similar to a computer's operating system
 - Establishes the rules of the blockchain

What are Smart Contracts?

- A product of second generation blockchain technology
 - Blockchain 1.0: Distributed Ledger
 - Blockchain 2.0: Distributed Virtual Machine
- Blockchain Protocol = Operating System
- Smart Contracts = Computer Programs
- **Potential value** of smart contracts:
 - Manage multiple workflows without intermediaries

Are Bitcoin and Blockchain the Same?

- Blockchain is Bitcoin's "operating system"
- Blockchain protocols can create digital assets that are:
 - Scarce – can't be copied
 - Immutable/Secure – difficult to tamper with
 - Auditable – can be tracked by all parties
- Bitcoin is the oldest and most infamous example
 - Trial by fire

Is Blockchain Secure?

- Misleading headlines obscure the real problem:

\$1.1 billion in cryptocurrency has been stolen this year, and it was apparently easy to do

- \$1.1 billion worth of cryptocurrency was stolen in the first half of 2018, and it's relatively easy to do, according to cybersecurity company Carbon Black.
- "It's surprising just how easy it is without any tech skill to commit cybercrimes like ransomware," Carbon Black Security strategist Rick McElroy says
- The necessary malware, which even occasionally comes with customer service, costs an average of \$224 and can be as cheap as \$1.04 on the "dark web."

Is Blockchain Secure?

- Poor cybersecurity practices are a significant real problem
 - Ransomware and other cyber attacks continue to be successful
 - Usually demand payments in Bitcoin
 - Blockchain industry can benefit from a greater focus on risk management
- Blockchain, like any software, can have vulnerabilities:
 - If Blockchain Protocol = Operating System
 - Think vulnerability in Windows Operating System
 - If Smart Contracts = Computer Programs
 - Think vulnerability in Microsoft Word
- **Only as secure as underlying cybersecurity practices**

What have we done?

Blockchain Experiments to Live Platforms

What is Blockchain and do we care?

Blockchain R&D was an initial focus of our Digital innovation team

2016

First Blockchain POC:
6 weeks;
Ceded Reinsurance use case

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InsurWave: Successfully concluded 20 week POC

Joined InsurWave Marine Consortium

Joined B3i

2017

Real client, defined use case
Desire to lead the market; managing internal and external stakeholders!

InsurWave Phase 1 launch : Register of Assets; SMART contracts

B3i build production platform and funding raise

2018

What's the opportunity, what's the business case?

InsurWave Expand to new clients, increasing functionality

B3i live and expand

Ecosystems

2019 ...

Realizing business benefit disrupt AND IMPROVE (re)insurance

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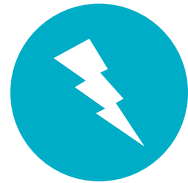
What have we learned?



Getting started – Education and communication is key. Leverage your partners, networks and those waiting in the wings. Lead with a business problem vs technology problem.



Working with consortia – Patience, patience and patience. Know when to lead, know when to follow. When in doubt, go smaller and faster.



Overcoming obstacles – Inclusion with all concerned parties is key and have a business problem. Use dedicated resources vs hobbyists. Have senior business and technology personnel supporting.

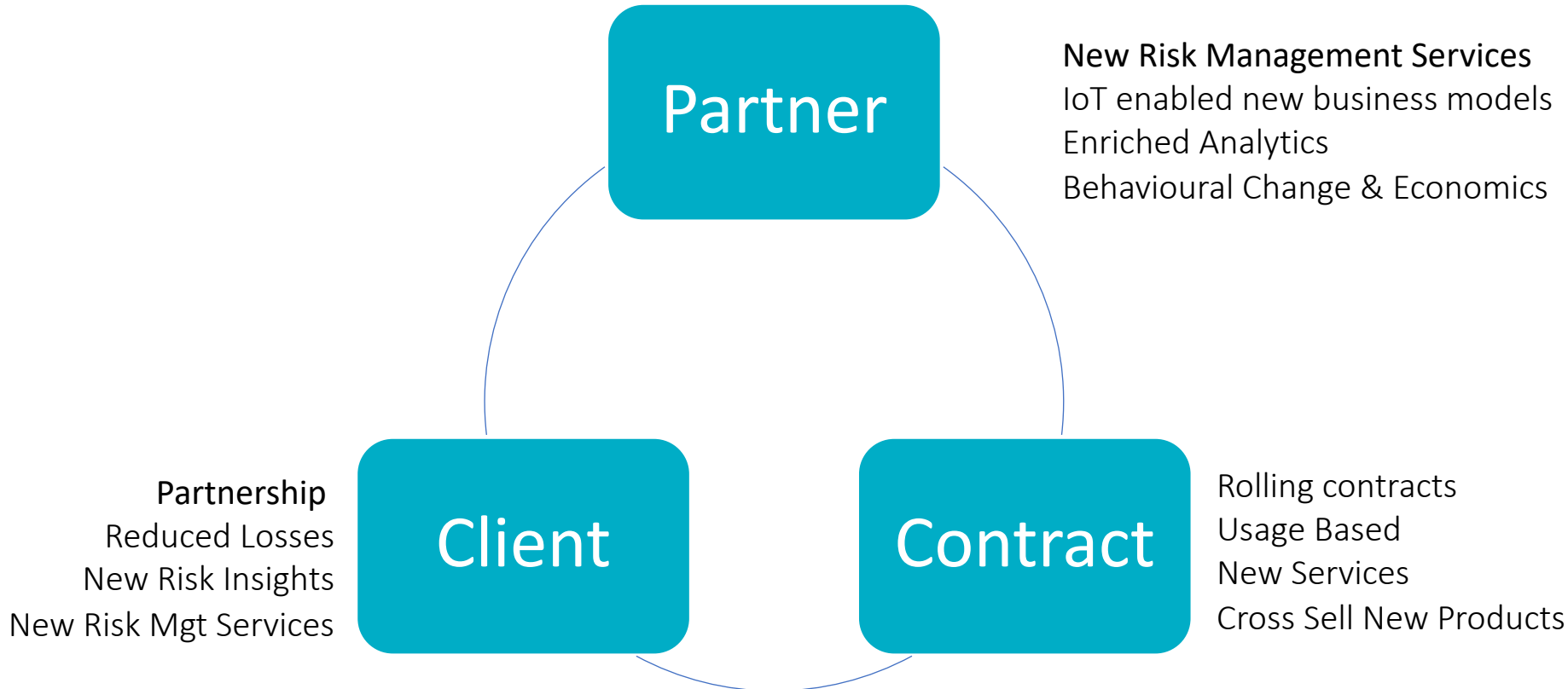


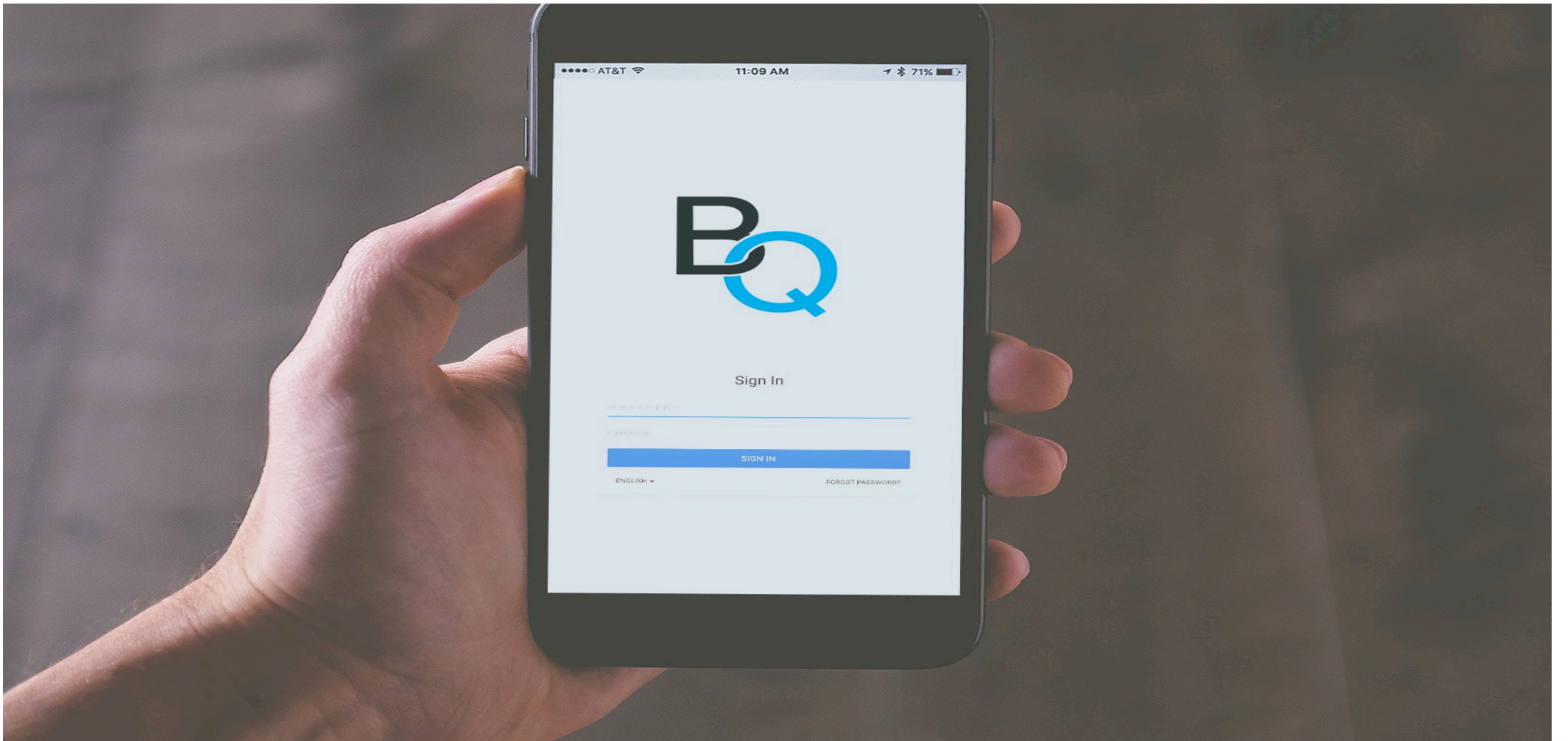
Working with startups – Individual results will vary, ensure you have a fit and alignment with desired outcome, success, and next steps. The novelty will wear off and you'll need a great working relationship. Know what the startups can and can't do. Remember the majority will fail / exit / pivot.

What do we want to do next?

Move from Payer to Partner

Blockchain is an enabling technology for our ecosystems







B3i

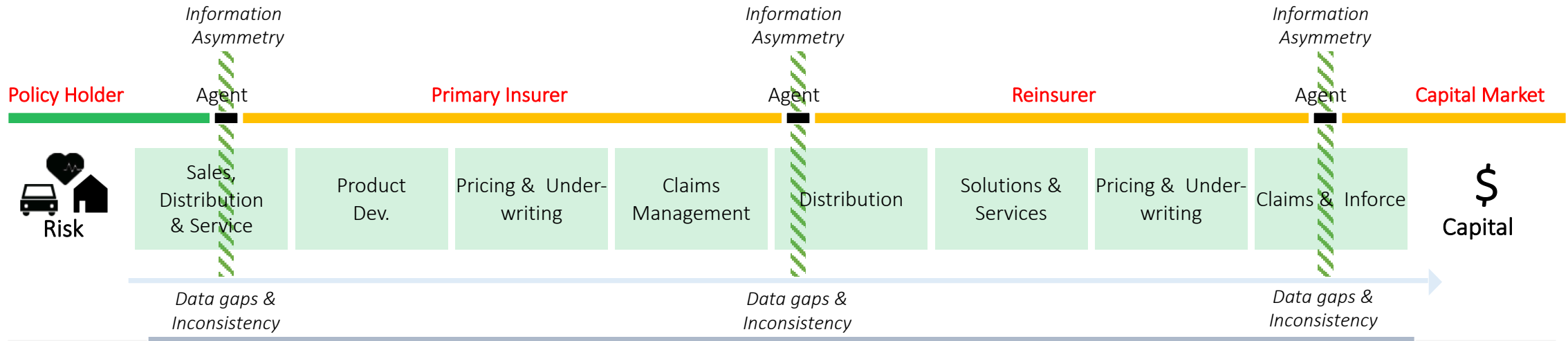
B3i

WORKING TOGETHER ON THE INSURANCE DIGITAL ECOSYSTEM

Susan Joseph | North America Representative
January 2019

Building the insurance digital ecosystem

Challenges in re/insurance value chain



Problems

- Sequential and non-integrated procedures
- Lack of standardisation, integration & automation
- Asymmetric information and poor audit trail
- Poor risk accumulation control

Solutions

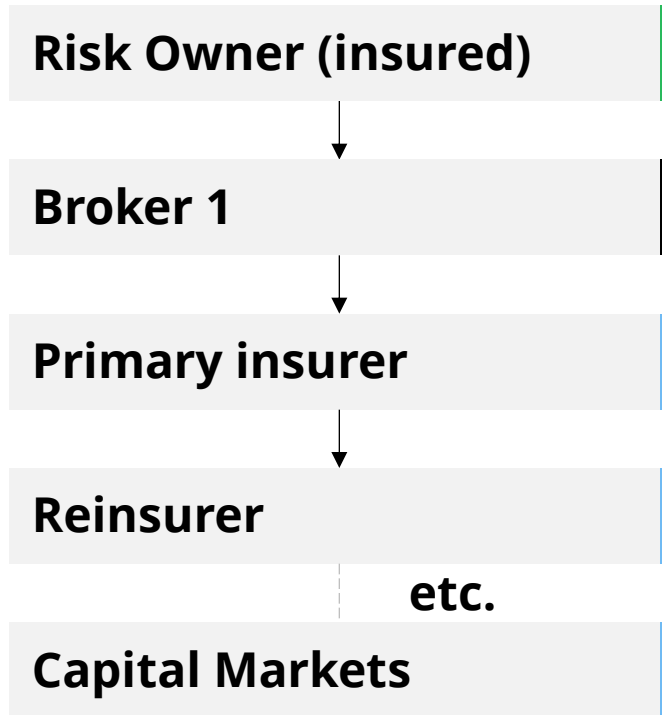
- Decrease operational risks
- Reduce complexity and transaction costs
- Install shared networks in stead of proprietary
- Improve end-customer experience

The Challenge

Build an efficient market place participants transparently compare price and value whilst preserving a one-to-one client service relationship

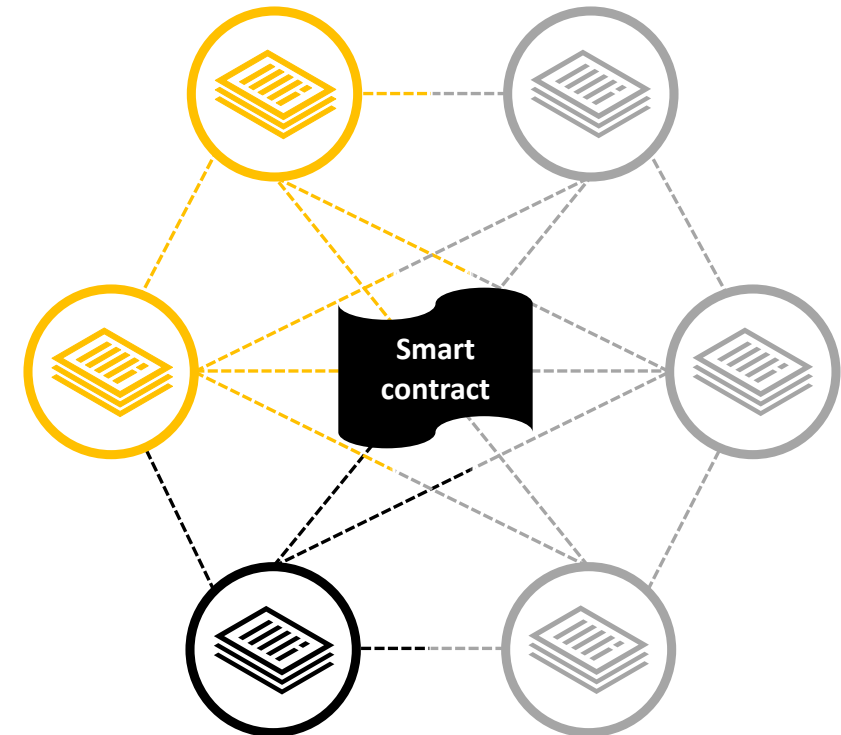
Enable the industry to truly act as a network

Past: Insurance process



Asymmetry, duplication, redundancies

Future: B3i enabled future



Efficiency, transparency, privacy, speed, positive customer experience



Risk owner



Risk taker

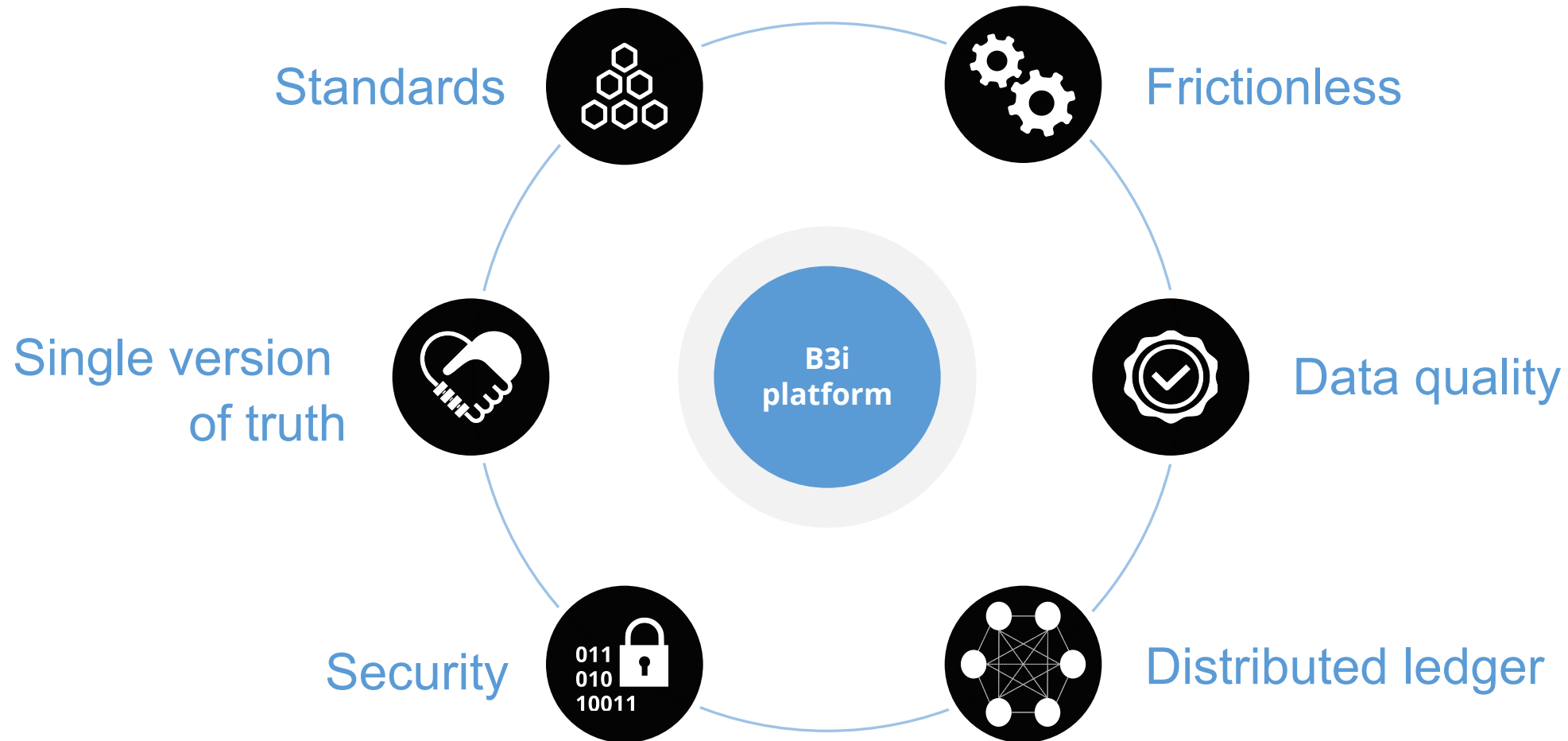


Broker



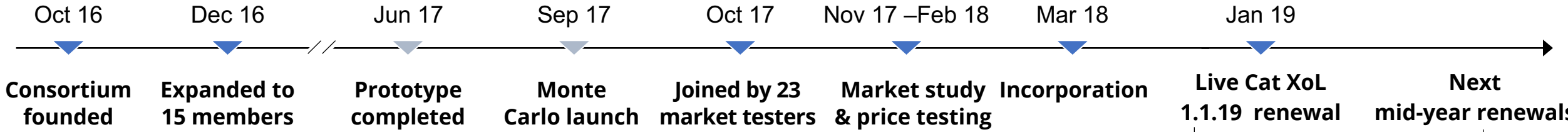
Direct peer to peer connection

Use Distributed Ledger to combine different capabilities



Advantages of information sharing and trading efficiencies without disadvantages of concentration of data and power

B3i – The Network becomes the Marketplace



B3i's deployment strategy



A three-wave build strategy reflecting industry priorities, data volumes, diversity and complexity

	Underwriting <i>Contract certainty</i> <i>Faster quoting</i>	Claims <i>Claims and fraud prevention</i>	Accounting <i>Faster settlement, improved liquidity</i>
Reinsurance <i>Wholesale insurance-to-insurance (global market)</i>			
Commercial Insurance <i>Wholesale insurance-to-corporate (regional market)</i>			
Primary insurance <i>Retail insurance-to-consumer (local market)</i>			

- Integrated value chain approach : UW > Premium / Claims > Accounting process cycles
- B2B2C go-to-market strategy : start with more standard contracts with lower data volumes
- Partnerships : collaborate to address diverse primary insurance contract types (incl. jurisdiction, language)

2019 - property

Commercial Insurance – minimum viable product scope

