



ExpertInsights@IBV

Building trust in insurance

Blockchain to the rescue

IBM Institute for Business Value

Beyond banking

The innovative distributed ledger technology known as blockchain is often associated with banking and the financial markets industry. Indeed, blockchain's strengths in data integrity and security, record-keeping and efficiency have the potential to help restore trust in an industry still recovering from the global economic crisis of 2007-2008. But blockchain's benefits aren't limited to any single industry. Insurance is another industry that grapples with trust issues, and it is following close behind banking in evaluation and adoption of blockchain technologies.

Insurance we trust

Blockchain isn't just another technology flash-in-the-pan. A handful of start-ups are already using production blockchain to improve efficiency and trust in unemployment insurance, property and casualty and travel insurance. Known as insurtechs, these startups are having an impact. Collectively, they're gaining market share, media attention and investors.

Insurance has always been built around trust. From the middle ages to today, craftsmen's guilds have collected money that served as insurance. In the event of a fire, robbery or death, the guild would serve as a safety net for the craftsman or his family.¹ And because it was the craftsman's own guild, trust was generally not an issue. When a major earthquake struck San Francisco in 1906, for example, one insurance company, which had its records completely destroyed, paid out settlements based solely on the words of the claimants.² Talk about trust!

Compare that to what frequently happens today. Insured people and businesses are reluctant to submit legitimate claims because they're afraid insurers will react punitively. Data substantiates that fear. A study in the US found that the average premium increases by 41 percent for drivers who make a single auto insurance claim of USD 2,000 or more. The increase jumps by an average of 93 percent if a second claim is filed within the same year.³

Of course, lack of trust can be reciprocal. Fraud by customers and contractors is estimated to cost the insurance industry USD 80 billion annually.⁴ Dealing with fraud adds time and expense, while reducing trust systemically. In fact, an absence of trust exists in most multi-party interactions in the insurance industry. This lack of trust isn't only between consumers and providers, but between any pair of parties that are involved, such as doctors, repair shops or independent appraisers. Anyone who provides input to insurance claims may be affected.

Subrogation innovation

Blockchain has several advantages over traditional technology. As an example, consider how blockchain might be used to improve subrogation in settling claims in an auto accident. The pain points of subrogation are well-known: It is time consuming, reveals an incomplete view of relevant data for each insurer, requires manual processes and is not trusted. These pain points can impede negotiations, possibly requiring an arbitrator, adding additional cost and time.

Using traditional technology, it is often difficult for two insurers to agree on a claim. With blockchain, insurers can collaboratively assemble relevant records and documents, such as insurance cards, police reports, photographs, adjuster assessments and towing and body shop receipts. The data then can be shared among the carriers, subrogation teams and adjusters transparently and immutably. Blockchain provides trust in the evidence being shared.

Here comes blockchain

Blockchain holds the potential to improve trust and transparency in several ways. Trust is required in relationships among customers, insurers and service providers in the auto claims process. It's also necessary for verifying the authenticity of shared transaction data, such as repair estimates or exchange rates that are applied in cross-border premium or claim payments.

With these circumstances in mind, blockchain can improve the efficiency and transparency in the insurance industry in several ways. It can:

- Reduce friction in existing business processes across insurance ecosystems that include insurers, reinsurers, customers, regulators and other organizations.
- Introduce new, simpler products, contracts and business models.
- Decrease risk and provide greater clarity, mutual understanding and the ability to verify authenticity.

Consider travel insurance. With blockchain, levels of compensation are predetermined if a flight is delayed or canceled. Everyone has the same access to the coverage rules. They know what and who is covered. Better yet, compensation is distributed automatically without the need for the insured to file claims.

In 2016, the Blockchain Insurance Industry Initiative (B3i) was created to determine how blockchain could help the industry lower costs and improve client experiences. Now, with its 15 members and more than 20 other insurance and reinsurance entrants, the consortium is market-testing a new blockchain prototype.⁵

In June of 2017, a major multinational insurance company began using blockchain to reduce friction in the speed and verification of contracts by providing immediate access to policy and payment status. These improvements are increasing policy transparency and reducing administrative overhead.⁶

Getting started

Around the world, insurers are studying, experimenting with and deploying proofs-of-concept with blockchain. It's not too late to engage, and now is the time to get started. To simplify the journey, consider these recommended steps:

- Define your strategy and decide whether to lead or participate. Will you create the blockchain network for your ecosystem partners to gain an advantage and increase your market share? Or will you collaborate with your peers to define a new industry model and compete on the differentiated services that ride on top? Depending on the opportunities, threats or the evolution of your business transformation, you may choose to lead in some cases and participate in others.
- Study the ecosystems. B3i is an example of an industry ecosystem. Others are built around technology, such as Hyperledger, an open source effort hosted by The Linux Foundation to advance cross-industry blockchain technologies.⁷
- Consider new forms of cooperation. Networks may emerge that are run by companies you compete with in other areas. How will you handle competing situations? What legal structure and governance do you need to put in place to maintain the viability of the network? In the context of industry consortia, factors such as intellectual property rights, regulatory mandates and control of roadmaps and rules for admittance must be addressed through legal and governance frameworks.
- Develop the required capabilities to help gain a competitive advantage. How will you build or acquire the skills to blend new technologies, such as artificial intelligence (AI), digital and cloud, with blockchain in a cohesive architecture to drive your transformation? Do you have the right change management function in place to redesign products, processes and technology to help you gain competitive advantage?

Organizations are interested in blockchain because of the value that distributed ledger technology can bring to their ecosystems.

The time is now

Blockchain is rapidly gaining traction across a wide swath of industries. It's beginning to improve other industries and functions – logistics, agriculture, healthcare and more – where, like insurance and banking, trust and transparency are critical success factors (see Figure 1). Applying blockchain across industries

also can be valuable, such as a global trade network that tracks the insurance on shipping containers.

Organizations are interested in blockchain because of the value that distributed ledger technology can bring to their ecosystems. The time is now to become part of the insurance industry's blockchain future.

Figure 1
Blockchain for business

10 principles for success



Lead with the business use case, not with blockchain.



Decide on a starting point for your permissioned network.



Determine the path to production.



Differentiate blockchain against traditional technologies.



Understand how trust is achieved.



Tackle the governance, business and legal models.



Strike a balance between analysis-paralysis and make-reflect.



Drive architecture by openness, scalability, modularity and privacy.



Learn blockchain's foundational capabilities.



Select a blockchain platform that is enterprise-ready to develop, govern and manage solutions.

Notes and sources

- 1 Beattie, Andrew. "The History of Insurance." Investopedia. <https://www.investopedia.com/articles/08/history-of-insurance.asp>
- 2 Etz-Hokin, Katherine. "Finding aid to the Fireman's Fund Insurance Company Records." Online Archive of California. 2017. http://www.oac.cdlib.org/findaid/ark:/13030/c8th8sd2/entire_text/
- 3 DiUlio, Nick. "Making one auto insurance claim can drive up your rate by up to 76 percent." InsuranceQuotes.com. January 27, 2015. <https://www.insurancequotes.com/auto/one-auto-insurance-claim-rate-increase>
- 4 "By the numbers: fraud statistics." Coalition Against Insurance Fraud. <http://www.insurancefraud.org/statistics.htm>
- 5 Wass, Sanne. "Blockchain ready to disrupt insurance." Global Trade Review. September 13, 2017. <https://www.gtreview.com/news/fintech/blockchain-ready-to-disrupt-insurance/>
- 6 IBM Institute for Business Value analysis, based on publicly available information.
- 7 "Blockchain Technology." National Association of Insurance Commissioners. December 13, 2017. http://www.naic.org/cipr_topics/topic_blockchain.htm; "About Hyperledger." The Linux Foundation. <http://hyperledger.org/about>

About ExpertInsights@IBV reports

ExpertInsights@IBV represents the opinions of thought leaders on newsworthy business and related technology topics. They are based upon conversations with leading subject matter experts from around the globe. For more information, contact the IBM Institute for Business Value at iibv@us.ibm.com.

Experts on this topic

Annap Derebail

Executive Architect,
Financial Services Sector
IBM Global Markets
<https://www.linkedin.com/in/annapderebail/>
annap@us.ibm.com

Pramod Achanta

Partner, Financial Markets and Blockchain
IBM Global Business Services
<https://www.linkedin.com/in/pramod-achanta-467a42/>
pramod.achanta@us.ibm.com

Bertrand Portier

Distinguished Engineer, Blockchain
IBM Financial Services Sector
<https://www.linkedin.com/in/bportier/>
bertrand.portier@us.ibm.com

© Copyright IBM Corporation 2018

New Orchard Road
Armonk, NY 10504
Produced in the United States of America
February 2018

IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

This report is intended for general guidance only. It is not intended to be a substitute for detailed research or the exercise of professional judgment. IBM shall not be responsible for any loss whatsoever sustained by any organization or person who relies on this publication.

The data used in this report may be derived from third-party sources and IBM does not independently verify, validate or audit such data. The results from the use of such data are provided on an "as is" basis and IBM makes no representations or warranties, express or implied.

78013478USEN-00

