

How the Blockchain Will Revolutionize Insurance: A Q&A With Patrick Schmid



Patrick Schmid, PhD, is assistant vice president of Enterprise Research for The Institutes, where he leads teams that develop market insights and analytical research. He has extensively written on and spoken about blockchain, serving as an expert on the topic for The Institutes. The following Q&A provides an overview of the broader insights and information he will share at The Institutes CPCU Society 2017 Annual Meeting, September 16 through 19 in Orlando, Florida.



What is blockchain, and why is it important to the insurance and risk management industry?

A blockchain combines a distributed database and decentralized ledger that maintains a continuously growing list of records, called blocks, in chronological order. In most blockchains, new blocks and the data within (transactions, smart contracts, and so forth) are confirmed and verified through a consensus process called mining. This verification process removes intermediary validation and establishes trust without the use of a central authority, such as a bank.

Blockchain could have widespread ramifications across the insurance value chain, with many looking at blockchain technology and associated smart contracts (computer protocols that facilitate, verify and enforce the performance of a contract and that can be self-executing and self-enforcing) as opportunities to:

- Streamline the flow and verification of data
- Lower operating costs
- Improve processes
- Remove the need for intermediation



What key insights do you think insurers and risk management professionals need to be aware of regarding blockchain?

The blockchain is significant in that it completely removes the need for verification by a central authority.

For example, through its underlying blockchain technology, bitcoin solved the double-spending problem, which stymied digital currencies before it. For those who never heard this term, the “double-spending problem” relates to the risk, particularly when digital currency is exchanged, that a person could concurrently send a single unit of currency to two different sources.

But bitcoin did even more. It reinvented the concept of monetary networks by providing a true peer-to-peer payment system and eliminating the need for intermediary banks, including central banks.

As important as that all is, blockchain applications are much larger in scope than bitcoin and its associated transaction protocol. More recent blockchains, like the blockchain associated with the Ethereum Virtual Machine (EVM), have further extended the blockchain disruption by establishing the use of smart contracts. These smart contracts could eventually automate large segments of the insurance experience, lowering insurer costs, which could be passed on to consumers.

In addition, insurers have traditionally been reluctant to share their data, even in efforts to tackle industry-wide problems, such as fraud or uninsured motorists. Blockchain provides a superior means to share information through its consensus process and security features. Original blockchains, like bitcoin's or Ethereum's, function as shared databases that are both public, in that transactions can be viewed by users, and anonymous, because the associated cryptography hides the identities of parties to the transactions. As business has grown more interested in testing this decentralized ledger technology, private and permissioned blockchains have developed. And the most recent advancements have led to development of permissioned chains on a public blockchain.

Regardless of whether the blockchain is private, permissioned or public, and whether it allows transactions or contracts, the very concept of the decentralized ledger has the potential to change financial services and insurance on the same scale as the internet did—maybe even more so. For insurance, blockchain could help increase market reach and customer personalization while also cutting costs.



Can you elaborate on how this new technology may affect the industry?

Definitely. From the insureds' perspective, the blockchain will improve the customer experience and affordability, provide a means for greater product innovation and allow for faster entry into emerging markets. From the insurers' perspective, the blockchain will lower costs, ease data retrieval, simplify and streamline processes, help combat fraud and lower regulatory burdens.



What are you most looking forward to at The Institutes CPCU Society 2017 Annual Meeting?

I'm looking forward to attending the educational sessions and meeting others in the industry. I hope to have casual conversations on topics like the blockchain with interested parties, but I also look forward to learning from my peers about other areas of opportunity for our industry.

To learn more about or register for The Institutes CPCU Society 2017 Annual Meeting, go to AnnualMeeting.CPCUSociety.org. This session is scheduled to take place on Sunday, September 17.

To learn more about the blockchain or to join the conversation, visit TheInstitutes.org/Blockchain or contact The Institutes at (610) 644-2100, ext. 7658.