CLIENT ALERT

Five Ways Blockchain is Indirectly Helping Insurers

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While enthusiasm for blockchain use in the provision of insurance and reinsurance continues to grow, most insurance industry blockchain applications are still in proof-of-concept or other development stages. Right now, however, insurers are receiving real-world benefits from blockchain technology because they are benefiting from its use by the industries they insure.

Blockchain records transactions across many computers, such that the record maintained via the blockchain cannot be altered retroactively without altering all subsequent blocks and the consensus of the network. This protects data from tampering and makes records virtually immutable. Smart contracts utilizing blockchain technology allow for agreements to be automatically entered, signed, and enforced, thereby increasing efficiency and speed, and eliminating opportunities for human error. It's not surprising then that companies in global supply chains, real estate markets, health industries, and financial services have deployed blockchain technology to heighten security of transactions, increase efficiency, and decrease costs.

Insurers are gaining indirect, but real, benefits from blockchain use by other industries. Here are some important examples of blockchain use, together with thoughts about how insurers are benefiting from them:

Tracing Food Products

Walmart and nine other companies – Nestlé SA, Dole Foods Co., Driscoll's Inc., Golden State Foods, Kroger Co., McCormick and Co., McLane Co., Tyson Foods Inc., and Unilever NV – have collaborated with IBM to develop a blockchain application for food supply chains that will allow the companies to maintain secure digital records and improve the traceability of their food products.[1] The application, called Food Trust, will allow investigators to more easily determine the source of food suspected of contamination. Currently, federal regulations require each player in the food supply chain to keep records that go "one step up and one step back – i.e., where it got food and where it sent food. This makes it cumbersome to trace foods from field to table. However, the Food Trust blockchain should provide a complete record of the origin of foodstuffs. Thus, the platform will assist the industry in the event of recalls and in preventing, or at least hampering, intentional substitution, addition, tampering, or misrepresentation of food, food ingredients, or food packaging. This collaboration takes place on the heels of Walmart's' previous blockchain partnership with IBM, which tracked Mexican mangoes and showed the efficiency blockchain can provide. When tasked with tracing a single package of mangoes back to their source under traditional methods, it took Walmart six days, 18 hours, and 26 minutes. However, when the Food Trust blockchain was utilized to track mangoes from a farm in Mexico to stores in the United States over a 30-day period, it took a mere 2.2 seconds.[2]

This blockchain application tracing food products benefits the insurance industry in a number of ways. Product recalls are a major source, if not the leading source, of liability claims in the food industry and lead to substantial costs for insurers. The ability to track supply chains following food recalls will accelerate the ability to locate the source of contamination and contain the issue. Thus, the investigation will be streamlined and, because of accurate and reliable information, the scope of the recall

may be limited, saving both time and resources. The blockchain also may assist insurers with subrogation and liability issues by identifying responsible parties in the event of food contamination or the substitution or misrepresentation of food ingredients.

Tracing Supply Chains

Skuchain, a blockchain developer, and NTT Data, have partnered to develop a blockchain platform combined with internet of things (IoT) innovations like radio-frequency identification (RFID) to assist manufacturers in the global supply chain industry with inventory planning, logistics, and cash flow.[3] The platform comes with an application that allows for tracking and tracing of goods at every point in the supply chain. Moreover, with the addition of RFID, factory workers will not have to go through the time-consuming process of scanning each item to ensure it is there since RFID allows for goods to be scanned on a collective basis through mobile phones.[4] The partners have already completed a pilot in China with a Japanese manufacturing firm and its supply chain using Skuchain's track and trace system.

The platform developed by Skuchain can help insurers track assets and use real-time information to validate loss data.

Tracing Diamonds

Everledger offers a blockchain platform that operates as a global digital registry for diamonds.[5] It records 40 features, including color and clarity, from a digital diamond grading report that is issued by the Gemological Institute of America. The grading report is reported directly on the blockchain and the end consumer receives a permanent and immutable record about the diamond's characteristics that is accessible through an application.[6] The platform can track a diamond's provenance, thereby monitoring for conflict diamonds and preventing counterfeit diamonds from entering the marketplace. The company also offers similar platforms for other minerals, wine, and art.

Working with Everledger's blockchain, insurers can quickly and accurately confirm the legitimacy of a diamond, its quality characteristics and proof of ownership.

Tracing Property Title

Ubitquity, LLC, offers a patent-pending blockchain application for recording and tracking real estate transactions that streamlines the property title process.[7] The application is designed to parallel the current paper system. Essentially, when a transaction occurs, the information about the property purchase is automatically recorded, reducing future title search time and increasing buyer confidence in the title.

The Ubitquity platform can instantaneously confirm that title to property is clear, thereby saving time and reducing human error with title searches. The blockchain technology aims to make title information accurate and assessable, thereby decreasing the number of claims made under title insurance policies, and providing a substantial economic benefit to title insurers.

Tracing Patient Health Records

Medicalchain, an organization focused on building healthcare solutions, developed a blockchain powered application, MyClinic.com, that stores a patient's health records.[8] Instead of having a patient's records kept in various locations such as

doctors' offices, hospitals, and pharmacies, MyClinic.com allows all that information to be recorded on a distributed ledger and securely and instantaneously shared with healthcare professionals from anywhere in the world.

Further, Medicalchain's MyClinic.com increases interoperability in the health insurance industry with the ability to securely share files between healthcare providers. Thus, users have better access to online consultations and are not limited to a geographic location because of their ability to grant access to their records during consultations. Users are also given the option of licensing their data to pharmaceutical and research companies. Insurers should benefit through health care providers' better access to more accurate information about patients' treatment and prescription records, thereby furthering wellness and reducing malpractice claims.

Conclusion

These examples are by no means an exhaustive list of blockchain platforms currently in use. However, they demonstrate how the introduction of blockchain technology in the business world is benefiting insurers in concrete, measurable ways. In short, the insurance industry is already benefiting significantly from blockchain technology. As more and more companies incorporate blockchain applications in their business processes, the enhanced reliability of data, efficiency, and other advantages of those platforms will continue to benefit insurers.

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[1] Kim S. Nash, *Wall Street Journal, Walmart-Led Blockchain Effort Seeks Farm-to-Grocery-Aisle View of Food Supply Chain* (June 25, 2018).

[2] Jessica McKenzie, *The New Food Company, Why blockchain won't fix food safety – yet* (February 4, 2018).

[3] Sujha Sundararajan, *Coin Desk, Skuchain, NTT Data Partner on Blockchain Supply Chain Venture* (January 24, 2018).

[4] Finbarr Bermingham, *Global Trade Review, Skuchain uses blockchain and IoT for new supply chain platform* (January 24, 2018).

[5] Gian Volpicelli, *Wired, How the blockchain is helping stop the spread of conflict diamonds* (February 15, 2017).

[6] Leanne Kemp, *IBM THINK Blog, Everledger's Pioneering Blockchain Work for Diamonds* (May 23, 2018).

[7] *See https://www.ubitquity.io/web/index.html.*

[8] *See https://medicalchain.com/en/.*

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