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# BLOCKCHAIN: BENEFITS FOR INSURANCE INDUSTRY





# OVERVIEW

#### Benefits of Blockchain in the Insurance Industry

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74

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Insurers are exploring the blockchain as they see vast potential in this new technology, most common research topics being: travel insurance and crop insurance. With crop insurance: If the bad weather causes any damage to the crops then a smart contract can confirm the loss using weather data and pay claims automatically. Similarly, in case of travel **EXECUTIVE** insurance, if the flights gets cancelled by the airline due to a covered reason, then a smart contract built using blockchain technology could automatically enact payment to those with insurance.

> These examples showcase a blockchain's ability to lower costs, thereby allowing consumers to realize savings.

- Willis Towers Watson found that blockchains can improve access to underserved segments, enable instant policy issuance, and increase transparency in peer-to-peer insurance.
- The WEF found that blockchains can automate claims processing using smart contracts, improve assessment using past claims data, and combat fraud.
- Capgemini research indicates that personal auto insurers could save \$21 billion a year through lower costs, which can be-realized through application of blockchain-enabled smart contracts.
- According to the aforementioned survey by Market Force, Pegasystems, and Cognizant, 12 percent of insurance executives expect the use of the IoT, blockchain technology, and smart contracts to be mainstream within two years, and 74 percent expect it to be mainstream by 2025.



# EXAMPLES

# Some important findings by notable institutions and researchers.

- Deloitte found that that "adopting a common blockchain across the sector could create a step-change in value in the insurance industry: claims handling could become more efficient and streamlined, resulting in an improved customer experience. Such an approach could also help to reduce further, if not entirely prevent, fraud if identity management was also enforced on the blockchain—meaning that criminals could no longer crash for cash."
- In another report, McKinsey & Company found sixty-four different use cases for blockchain technology. The report found that the insurance industry accounts for the most nonbitcoin blockchain uses (22 percent of the total), distantly followed by the payments industry (13 percent).
- PwC's recommendation is to "identify a group of firms willing to join a consortium to investigate the business case for atleast one of the potential use cases."32 McKinsey & Company agrees, recommending that the industry "work with consortia, technology experts and start-ups, regulators, and other market participants to identify the challenges around blockchain's open and decentralized nature. Among these challenges are technology limitations as well as market, legal/regulatory (Who is regulated in the absence of an intermediary or in cross-border solutions?), and operational requirements regarding, for example, data protection and standardization."

Because every market is two sided, opportunities for improvement exist both on the consumer (demand) side and the insurer (supply) side. Some specific, representative areas are inspected on the next two pages The blockchain technology speaks to all of these priorities, as it addresses automation, improved third-party integration, increased trust, more extensive market reach, and greater efficiency—thereby offering greater satisfaction among insureds and opportunities for growth by insurers.



# INSURED

#### From the Perspective of the Insured

Inflation is high, while the income rate is going down, technology is evolving and the access to information is easier....... and consumers demand ever more from suppliers—including insurers

These are a few major themes expressed by insureds:

#### Insured wished for an improved customer experience

- A recent survey by the digital consultant Engine confirmed that customer satisfaction in this area is low and hence, insurers can utilize this solid opportunity by creating efficiencies through means such as blockchain.
- Extreme dissatisfaction has been expressed by customer with the need to complete complex
  questionnaires and maintain physical receipts. With new technology the insureds expect a
  seamless solution with minimal delay

#### **Scrutiny regarding affordability**

- I. Consumer groups and organizations like the Federal Insurance Office have started to scrutinize auto insurers. This step comes after auto insurers kept premium increases in line with income growth.
- Consumers always want lower premiums, but if loss frequency and severity increase, lowering premiums while maintaining solvency becomes increasingly difficult

#### **Innovation of product**

Innovation and insurance were not well connected. However there has been introduction of new technologies in the industries, such as ridesharing services, the IoT, driverless cars, and drones

#### **Faster entry into emerging markets**

It has been very costly for insurers to enter into the emerging markets. although the potential of the market continues to grow. Insurers may take the first-mover advantage with the blockchain technology and deliver efficient service. Blockchain will be invaluable in this area.









# INSURER

#### From the Perspective of the Insurer

The environment is getting competitive with low ROI and low interest rates. The insurers have adjusted accordingly

#### **Decreasing costs**

In this industry, the record-keeping costs are high. The process of insurance involves the insurers to collect and identify data and documents such as identity, contract, registration of claims, and loss payouts. In fact, organizations involve 3rd parties such as service providers and other intermediaries to handle the processes.. Blockchain can help create efficiencies for all by lowering costs and turnaround times.

#### **Easing data retrieval**

93 percent of insurance CEOs consider data mining and analytics to be strategically important, as reported by PwC. This proportion is larger than the rest of the financial services industry. Implementing the same has several difficulties because the insurers may have to depend on the third-party providers. And the process manual, that implies that data cannot be offered real-time

#### **Simplifying processes**

According to Capgemini, personal auto insurers could save \$21 billion a year by using smart contracts. As to process claims, loss adjusters review claims, ensure completeness, request additional information when necessary, confirm coverage, determine liability, and calculate loss

#### **Protecting from fraud**

Insurance Research Council reports, fraud, including build-up, adds up to about \$7 billion in excess payments for auto injury claims—in the U.S. alone. Fraud makes insurance more expensive for insurers and insureds alike. So it stands to reason that by effectively combatting it, expenses for both groups could decrease.

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Products, Pricing, and Distribution	Underwriting and Risk Management	Policyholder Acquisition and Servicing	Claims Management	Finance, Payments, and Accounts	Regulation and Compliance
Parametric insurance	Provenance	Policyholder acquisition	Fraud register	Netting and payments across countries	Real-time regulatory monitoring
Insurance included in transactional purchases	Data sharing and risk registries	Placement documentation	Claims automation	Subrogation	Education/ licensing catalog
Mobile insurance for developing countries	Peer-to-peer insurance	Know your customer/ anti-money laundering efforts	Multilayer claims settlement	New forms of raising capital (crowd- funding)	Proof of insurance

#### **Products, Pricing, and Distribution**

Parametric Insurance—Smart Contracts and Automation

The blockchain could help with parametric insurance by expanding parametric application in insurance and automating the entire process. Instead of indemnifying on pure loss, insurers would agree to pay a certain amount upon occurrence of triggers within present smart contracts. As mentioned earlier, blockchain-related research is already under way in flight insurance and crop insurance, but could easily be extended to niche coverages, catastrophe swaps, and other areas.



#### **Underwriting and Risk Management**

Data Sharing and Risk Registries

Processing of data could be optimized by blockchain and processes related to information flow across can also be optimized across the entire value chain, but particularly related to risk. Insurance-related parties may share data and register risk through a consortium chain

#### **Policyholder Acquisition and Servicing**

Policyholder Acquisition—Improving Record Keeping

Blockchain may improve record keeping by providing access to contract documentation only via keys. Only necessary parties like underwriters and broker may be allowed to get access to the keys, allowing appropriate access to the documentation and updates that are reflected across the board. In this way, a blockchain can help ensure consistency among various parties and dramatically cut administrative costs.

#### **Claims Management**

Fraud Register—Shared Data

Through blockchain technology, insurers could share certain fraud-related data through an insurer-only network while maintaining appropriate anonymity. Moreover, blockchain technology has the ability to generate a digital history of assets, which may help fight fraud and other crimes. A blockchain-enabled fraud register could quite possibly become part of a new blockchain-enabled claims process

Claims Automation—Creating a Seamless Experience

Blockchain-enabled smart contracts can be embedded throughout the claims experience. These smart contracts can establish rules to enforce policy terms and pay claims without requiring manual administration or having loss adjusters review every claim.



#### Finance, Payments, and Accounts

Netting—a Transactional Example

For example, if Company A owes \$100,000 to Company B, the Company B should have \$100,000 in accounts receivable in its books, and Company A should have \$100,000 in accounts payable. Generally these transactions are managed through invoices, and this process requires staffing and approval and this may require additional paper work, approval, costs etc. But with the help of blockchain, both the companies are able to access the same shared ledger rather than individual ledgers and conclude the transaction more efficiently. Blockchain technology can also help accelerate transactions because blocks are confirmed every ten minutes. Finally, groups of transactions could be netted.

Payments Across Countries—a Transactional Example

The amount of money exchanged in cross-border payments is staggering. money moves from one bank (in other words, a middleman) to the next. Each intermediary takes a slice of the funds before forwarding them along the chain, contributing to payment-processing delays, expensive customer fees, and risk related to weaker banking standards.

A blockchain, which does not face the same geographic hurdles and can bypass middlemen, could change this approach, leading to lower fees and faster transactions. For insurers, this could mean that less administrative support would be necessary, fees would go down because fewer intermediaries would be involved, and money would change hands quicker



#### **Regulation and Compliance**

Proof of Insurance—a Shared Ledger to Weed Out the Uninsured

As a proof, one can show that he or she has valid insurance is by putting their paper card(by the insurance company that lists policy information and effective dates) on the table. E-insurance cards has been termed as a valid proof of insurance in as many as thirty states.

Regardless of the type, proof of insurance is issued for every vehicle with liability coverage—but costs accompany this proof. For example, if a policyholder wants to update the information in this life cycle, then he/she has to go through additional costs, both direct and indirect. In addition, insurers, regulators, and policymakers seek to understand the uninsured, which make up a remarkable 13 percent of U.S. drivers.

The blockchain can help. It can allow for electronic safekeeping and updating of information across the board. And smart contracts could be used to alert insurers and other parties to suspicion of uninsured motorists.



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## Giacomo Arcaro

He has 15 years' experience in growth hacking, digital strategy, startup and business development. He has advised over 150 startups and has 50 managed employees into a XII Century Church in Italy for the European biggest growth hacking company. He holds the title of 'Amazon Best Seller Author' and is been known to be one of the 'Most Influencial Blockchain Evangelist' with +200 conferences all over the world.

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# Giovanni Casagrande

A known name in the world of cryptocurrency. He has been in the marketing industry for well over 20 years and have switched to the cryptocurrency industry in 2014. He's a writer, public speaker, investor and Marketing / Growth Hacking advisor in more than 100 successfully projects. His specialty was Economics in the University of Bologna and the knowledge, experience gathered from there has helped him to manage/help many businesses in the industry. 4 years ago he founded Black Marketing Guru, a successfully Growth Hacking startup in Italy.



'Number 1 ICO Advisor Worldwide



### Eloisa Marchesoni

Known as the youngest and most influential Blockchain expert in the field. She is an Italian-American who first started out as a startupper in the AI and IT business, while still finishing her Economics and Management studies in Bocconi. Eloisa is a renowned author, public speaker, and biz-dev, catering startups and companies wanting to innovate. Currently being the Chapter

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