



Hashcash
Consultants



BLOCKCHAIN ADDS INSURANCE IN ITS LIST OF BENEFACTORS

ABSTRACT

Companies in financial sectors are exploring and experimenting innovative ways to execute transactions quicker for an enhanced customer service, ensure cost efficiency in its operations, and assure transparency to customers and regulators. With large volumes of data getting generated regularly owing to digitization of records, it becomes important for every organizations to effectively manage the security threats and achieve significant cost efficiencies. This is where Blockchain, with its promises of decentralized ownership, immutability and cryptographic security of data, is catching the attention of the C-suite executives. Multiple use cases are also getting explored across industries as everyone has started realizing the disruptive potential of this technology. This article will discuss how insurance & reinsurance firms are seeking out opportunities to harness the benefits of blockchain as well as key challenges to adopting this technology. Further, the article will highlight near-term practical applications for blockchain and how to approach blockchain innovation.



INTRODUCTION TO BLOCKCHAIN

Blockchain can be described as a data structure that holds transactional records and while ensuring security, transparency, and decentralization. You can also think of it as a chain or records stored in the forms of blocks which are controlled by no single authority. A blockchain is a distributed ledger that is completely open to any and everyone on the network. Once an information is stored on a blockchain, it is extremely difficult to change or alter it.

Each transaction on a blockchain is secured with a digital signature that proves its authenticity. Due to the use of encryption and digital signatures, the data stored on the blockchain is tamper-proof and cannot be changed.

Blockchain technology allows all the network participants to reach an agreement, commonly known as consensus. All the data stored on a blockchain is recorded digitally and has a common history which is available for all the network participants. This way, the chances of any fraudulent activity or duplication of transactions is eliminated without the need of a third-party.



GLOBAL ACCEPTANCE OF BLOCKCHAIN – DIVERSE INDUSTRIES USING BLOCKCHAIN

The insurance industry is in the middle of an exciting transformation. Technology advancements coupled with changes in customer lifestyles and expectations are driving a hitherto unwitnessed level of innovation. Insurer's intent on realigning their business models with evolving customer needs have new allies in the form of blockchain and Internet of Things (IoT) that have the ability to change the course of the industry.

1. Government to record in a transparent way citizens' votes, or politicians' programs (for verifying if promises made have been kept) or to enable autonomous governance systems.
2. Intellectual property to certify the proof of existence and authorship of a document.
3. Internet to reduce censorships, by exploiting the immutability of data stored in the blockchain.
4. Finance to transfer money between parties without having to rely on banks.
5. Commerce to record goods' characteristics as well as their ownership, especially for luxury goods, thus reducing the market of counterfeit/stolen items.
6. Internet of Things (IoT) by exploiting smart contracts to automatically process data coming from sensors, in order to let intelligent machines interact with each other and autonomously take actions when specific situations occur.
7. Education to store information on qualifications acquired by learners.



GLOBAL MARKET OF INSURANCE INDUSTRY

The global insurance industry will grow more strongly than the global economy in 2018 and 2019. This year and next, we expect global premium to grow by more than €460bn in all. This is equivalent to average annual premium growth of 5.3% (in real terms, i.e. adjusted for inflation: 3.7%), whereas global GDP is expected to grow by only 4.9% (3.3% in real terms). Life insurance, in particular, looks set to return to strong annual premium growth of 5.6% (3.9% in real terms) after a weak 2017. Property-casualty insurance is benefiting from the currently favorable economic environment. In this segment, we are expecting annual growth rates of close to 5% (3.3% in real terms). Emerging countries are the primary growth drivers, but somewhat stronger growth rates in high-volume industrialized countries are also contributing to this positive development.

The long-term outlook for the insurance industry is even more pleasing. In 2030, we expect premium volume to be close to €8tn – almost double what it is today.

Property-casualty insurance should benefit from the positive economic trend. In 2018/2019, we expect global premium in this segment to grow at the same rate as the global economy – nominally by an average of 4.9% and in real terms by 3.3%.

Prospects are also good for the long-term outlook. In 2030, premium volume will most likely amount to around €7.9tn – almost double the volume of €4.2tn in 2017. Of the additional premium of €3.7tn by 2030, some €1.2tn is expected to come from China alone. Almost two-thirds of this is likely to derive from life and health insurance business, with the rest coming from property-casualty insurance.

Despite these high growth rates, in 2030 the USA will still be the world's biggest insurance market, with a market share of almost 24%. China will move into second place, overtaking Japan.



IMPACT OF INSURTECHS ON MARKET DEVELOPMENT

In saturated markets, i.e. the industrialized countries, InsurTech companies have grown significantly in importance over the past three to four years, but the high level of saturation there means that additional premium growth is not very likely. We also think it unlikely that start-ups will squeeze out traditional insurance companies to any major extent, as capital requirements and regulations in the industrialized countries make it difficult for new players to acquire an insurance licence. Most InsurTechs currently operate as digital brokers or in partnerships with traditional insurance and reinsurance companies. Although InsurTechs, in their role as digital brokers, constitute competition for traditional sales channels – which could lead to a shift in market shares – the overall impact on premium volume across the market is most likely to be quite small in the industrialized countries.

In developing countries and emerging markets, however, InsurTechs play a different role. FinTechs in general are expected to see major growth in the emerging markets. According to studies¹, in these markets alone, FinTechs could generate additional GDP of US\$ 3.7tn by 2025, as mobile phones facilitate access to financial accounts. By 2025, low per-capita-income countries like Ethiopia, India or Nigeria could augment their GDP by 10–12% through FinTechs, while middle-income countries like Brazil, China or Mexico could still add 4–5%.

These possible developments also hold additional potential for the insurance industry. This is because rising per-capita income also leads to increased insurance penetration; this is currently still low in emerging markets, especially in developing countries, and offers tremendous catch-up potential.



BLOCKCHAIN IN INSURANCE

Traditionally, the insurance sector has been slow to adopt new technology and is often the last financial sector to incorporate any technological evolution, and Blockchain is no exception. However, it is important to note that the concept of Blockchain is being looked at as one of those rare innovations, which has the potential to disrupt the insurance industry much ahead of the trend. The insurance industry is all about managing financial risks and includes a high volume of financial transactions on a day-to-day basis. This makes the industry vulnerable to a potentially large number of intrusions, attacks, and fraudulent transactions. The insurance space is also highly complex with composite contracts between multiple stakeholders that require a large processing potential. In this thought paper, we will review some of the current challenges in the insurance space, and analyze if Blockchain can provide the much-needed solutions.

MAJOR PAIN AREAS & APPROACH

1. **Fraud Detection and Risk Prevention** - By moving insurance claims onto an immutable ledger, blockchain can help eliminate common sources of fraud in the insurance industry.
2. **Claims Prevention & Management** - Within claims prevention, new data streams can enhance the risk selection process by combining location, external risk and analytics. A distributed ledger can enable the insurer and various third parties to easily and instantly access and update relevant information (e.g., claim forms, evidence, police reports and third-party review reports).
3. **Distribution & Payment Models** - Global insurers can use blockchain to cut asset management costs by reducing the hedging fees they pay to protect themselves from currency fluctuations in international transactions.
4. **Reinsurance** - By securing reinsurance contracts on the blockchain through smart contracts, the blockchain can simplify the flow of information and payments between insurers and reinsurers.



BENEFITS

With HC NET Blockchain, insurance companies can convert multiple policies into “smart contracts” giving a single, consolidated view of policy data and documentation in real time. The solution allows visibility into coverage and premium payments, delivering automated notifications to network participants following payment events.

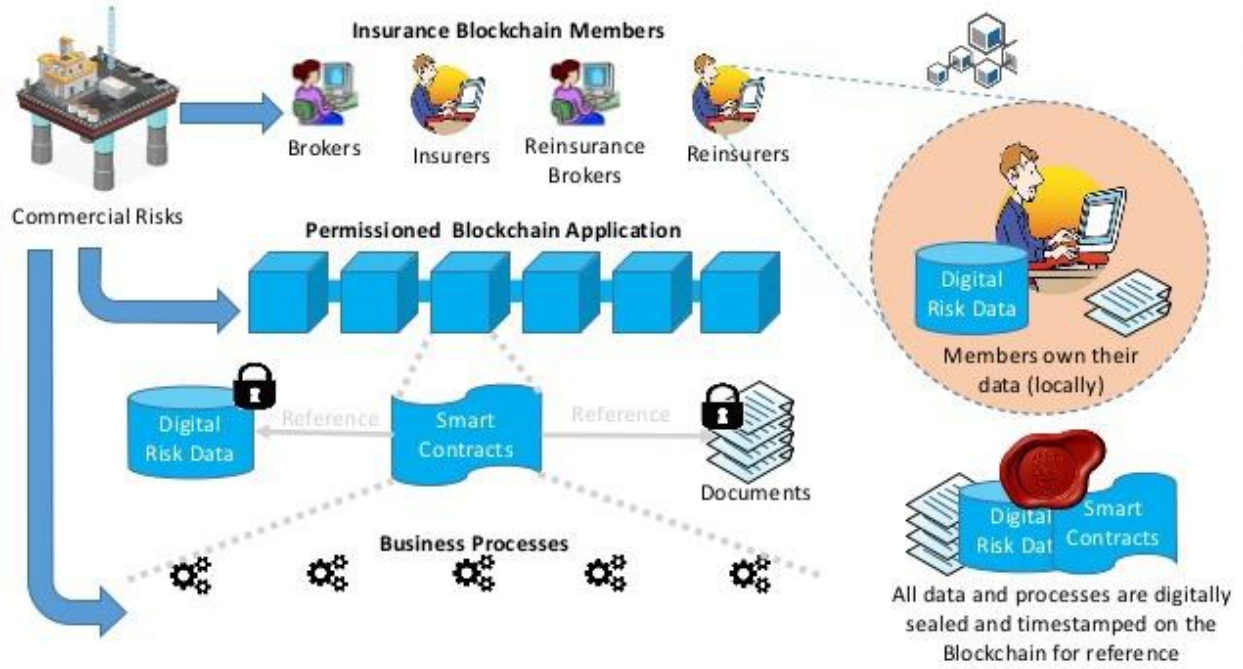
A transparent blockchain solution allowing multiple companies to collaboratively assemble relevant records can streamline claims recovery. Its shared ledger capabilities can help insurers agree on claims, build trust that evidence is being shared and improve the overall customer experience.

HC NET Blockchain can be the vital link across a vast ecosystem of third-party administrators and service provider networks. Its shared ledger transparency can help employers reduce errors resulting in improved claims processing, better provider management and lower operational expense.

HC NET Blockchain helps ensure contract certainty and improve risk-handling capabilities — from managing contracts among reinsurers to maintaining shared accounts and managing claims payments. With transparency across the reinsurance value chain, blockchain can eliminate the need for participating companies to regularly reconcile their reinsurance accounts.



PROPOSED ARCHITECTURE



ABOUT HASHCASH CONSULTANTS

At HashCash Consultants, we use the best of Blockchain technology to empower enterprises and institutions to move assets and settle payments in real time. FinTech Companies, Domestic Payment Networks, Currency Exchanges, Banks and corporates use HC NET for Retail Remittances, Corporate Payments, Trade Finance, and Payment Processing. An array of technologically sound products that we offer includes HC Remit, HC Corporate Payments, HC Commerce and HC Market Maker.



HC NET

Join the largest blockchain network trusted by

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-  Fintechs
-  Payment Network
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