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THE FUTURE IS IN BLOCKCHAIN

Distributed ledger platforms could help modernise the reinsurance industry but there are a few hurdles to overcome first

The current means of transacting reinsurance are far too expensive, involving high frictional costs that are underpinned in the main by poor quality data. Many brokers, insurers, reinsurers and managing general agents (MGAs) are using legacy IT systems resulting in data being duplicated multiple times across a number of different systems. Quite simply, the way the market does business now means there is no single version of the truth or process upon which all parties in a transaction can rely.

Due to the high levels of manual inputting, there is no way of knowing which systems are the most effective. Not surprisingly, this can lead to errors and omissions which can eventually trigger litigation. In the absence of an agreed set of data, all parties in a dispute are faced with having to trawl through emails and often base a claim on verbal assurances they say they were given by counterparties.

Another consequence of this is that there can be lengthy delays in the reconciliation process leading to cashflow strains. As soon as a transaction is executed, a business should have a reasonable expectation of being paid, but with so many parties inputting information, it can take 30-120 days for reconciliation and cash settlement.

Cost savings

B3i has estimated that a move to blockchain – a single, secure distributed ledger platform accessible to all parties in a financial transaction – would take up to 30% of the frictional costs out writing reinsurance businesses. Based on our discussions with market players, that number seems reasonable. Lloyd’s of London is struggling to remain profitable, and in 2017 it posted a combined ratio of 114% and an aggregated market pre-tax loss of £2 billion. We estimate that reinsurers using blockchain could save 30% in expenses and shave 10-12% off the combined ratio. In other words, at a time of extremely challenging global market conditions, the substantial efficiencies and cost reductions which blockchain could deliver really could mean the difference between reinsurance centres like London being profitable or making a loss. Earlier this year, R3, the global leader in blockchain for financial services, and ChainThat produced a study which estimated that blockchain could deliver operational cost savings to the global reinsurance industry of 10% to 25% - or $20 billion to $50 billion – each year.

Reinsurance companies underwrite extremely complex long-tail risks – meaning the policies often have great longevity and can take many years to be fully concluded. Combine this with the fact that data is held on legacy IT systems and you can see that reinsurers, insurers and brokers face a major data storage headache as they seek to modernise their systems. High levels of mergers and acquisitions which have brought together different IT systems under newly-combined businesses only add to the problems.

Migrating to blockchain

The reinsurance markets have a long history of failing to modernise common operating systems, so we can confidently predict there will be no big bang transition onto blockchain. Rather, I think we will see single lines of business or functions migrate onto blockchain on a piece by piece basis while the central legacy systems continue to operate at the same time. This could mean claims, accounts and settlements, or single business classes could move to blockchain while the existing legacy systems are supported to ensure business continuity.

Another aspect we need to consider is that re/insurance companies cannot move to blockchain in isolation: they need to co-ordinate with their business partners such as brokers and cedants to ensure they are trading in tandem on the blockchain platform using the agreed data standards such as ACORD.

Blockchain business hubs

One common misconception is that there will be a single blockchain network, a bit like we have one internet. This will not be the case. We will see a number of blockchain business hubs (business networks) emerge over the next two to three years. These could be based on a single business line such as aviation or marine or by location such as London or Bermuda. What has been reassuring is that the R3 Corda platform that we selected 14 months ago (based on it privacy and security features for insurance) is now the same technology being used by key re/insurance-focused consortiums

such as B3i, Riskblock and Insurewave. I expect this will enable a single compatibility zone between business networks to allow for much more efficient integration with each other - assuming they can agree to work together for compatibility.

Within the next two to three years, we are likely to see multiple blockchain hubs developing in reinsurance centres such as London, Bermuda and Singapore. The ACORD data standards already exist to run these platforms, but the market will need to iron out who will run them, as well as determining their regulatory frameworks. None of this will be straightforward. For example, standard reinsurance works in a completely different way to specialty reinsurance. However, once each hub has designed its own standard and is up and running, they will be able to link together using blockchain and we could see the North America wholesale market linking into the London market without any friction and updates being automatically propagated between these hubs. I expect the ACORD data standards will be used across these interconnected blockchain hubs and my money would be on the global reinsurance industry adopting R3's Corda platform.

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Early adopters

While I predict that these blockchain hubs will be set up within the next few years, the rate of adoption by companies will be another matter completely. Some will be early adopters looking to get first mover advantage, while others will be fast followers. Another tranche of companies which do not move onto the platform or join too late, are likely to become uncompetitive and may disappear altogether.

Once these hubs are operational and the frictional costs are stripped away, the global reinsurance industry will have an exciting opportunity to start to reimagine how it transacts business in the modern digital economy. The new market is likely to be very agnostic about matching risk to capital – whether it is from traditional reinsurers, third-party capital providers such as insurance-linked securities (ILS) funds, or others.

Capital providers will have a much clearer route into the reinsurance markets. They could, for example, publish how much capital they want to allocate and their risk profile, and carriers would link in with them to tap this capacity for their clients.

There is an obvious risk that some of the functions that brokers provide will be disintermediated, but they may continue to reinvent themselves - as they already doing – by offering actuarial and risk management services and taking these to insurers and reinsurers. On the reverse side, as the friction in linking risk to capital decreases we could see new forms of capital finding it easier to enter the market and requiring more from brokers and competing directly with traditional reinsurers.

Expense ratios have remained stubbornly high for many years but now blockchain technologies offer the opportunity to drastically reduce expenses while enabling more cost-effective and flexible products for customers. ■