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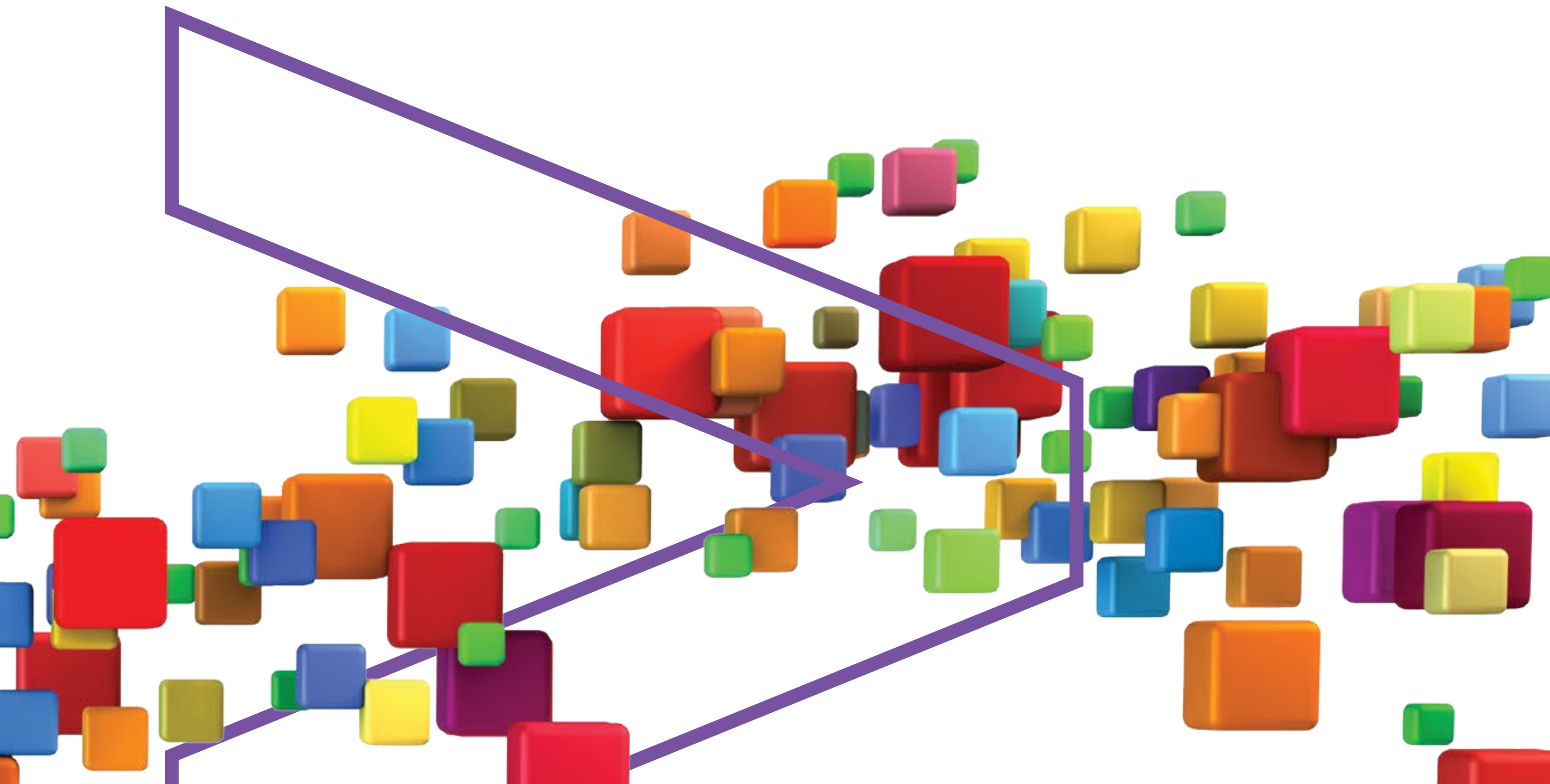


UNBLOCKING BLOCKCHAIN

UNLOCKING THE VALUE OF DISTRIBUTED LEDGER TECHNOLOGY FOR INSURERS

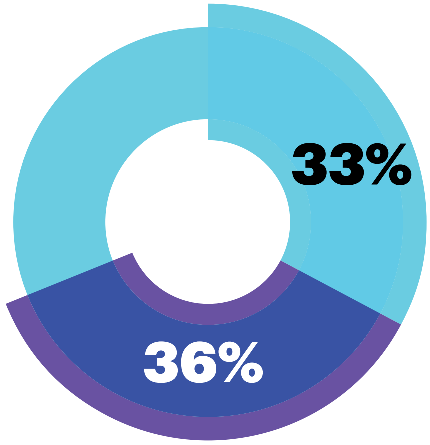
BLOCKCHAIN IS GENERATING A LOT OF HYPE
GENERATING VALUE IS MORE OF A CHALLENGE

Blockchain is a hot topic in financial services. Many predict the technology will radically change the insurance industry.

Proof of blockchain's popularity is evident:

- $1.9B had been invested in 891 blockchain startups as of early 2017
- Some of the largest players in the global insurance and reinsurance markets have joined alliances such as R3, the Post Trade Distributed Ledger Group, and the B3i consortium to explore the technology
- P&C insurers leading in blockchain are already offering products built on distributed ledger technology and are accepting cryptocurrency for premium payment.

Is the blockchain hype warranted? Businesses both inside and outside the insurance industry continue to experiment with use cases, and if the code is cracked, companies that are not prepared to pivot quickly to adopt the technology may risk missing out on big opportunities – or worse, may become irrelevant. Not every organization aspires to be on the cutting edge of blockchain research, but those that do not must be ready to react to those that do.



33% of insurers are planning to use blockchain in the next two years; another 36% have it on their agendas

GENERATING VALUE

Currently, the insurance industry is in the nascent stages of blockchain exploration and adoption. Various use cases have been proposed, but clear lines have not been established as to what is viable, valuable, and standard between carriers, partners and regulators. A clear leader – or group of leaders – in the space has not been identified.

There are three models for leveraging distributed ledger technology. Each offers its own merits, potential, and level of risk. Different models are appropriate for different organizations.

INTRA-CARRIER

The intra-carrier model refers to tightly-controlled blockchain deployment within an organization, typically to streamline back office processing. Although keeping the blockchain within a single enterprise affords the most control, it misses a main benefit of distributed ledger technology: the facilitation of transactions between trustless or semi-trusted counterparties without an intermediary. In rare circumstances, complex, geographically distributed organizations with regionally fragmented operations and systems may still find use for an internal blockchain – in essence, using the distributed ledger as a single communication medium between disparate entities. However, careful consideration should be given to alternative technologies that yield the same benefits, plus evaluating whether there are underlying issues that should be addressed, before embarking on a blockchain implementation journey.

INTER-CARRIER

Carrier-to-carrier transactions will benefit from the speed, traceability, and consensus mechanism that distributed ledgers provide. Reinsurance is one area ripe for disruption because it is a complex but standard process for which process improvements directly yield value. B3i, a group of large insurers dedicated to exploring possible uses and standards for blockchain technology, has recently been developing a prototype smart contract management system to facilitate reinsurance transactions[1].

But reinsurance isn't the only area of opportunity. Allianz is focusing on making catastrophe swaps simpler, faster, and more tradable by writing them on a blockchain platform[2]. Subrogation could benefit from a blockchain payment capability. Shared loss history among carriers could benefit the whole industry by providing visibility into the claim history of potential insureds and property. As investment banks are experimenting with more efficient payments in trade settlements, insurance companies could reap similar benefits in inter-carrier payments.

Tokio Marine recently tested a blockchain-based insurance policy for marine cargo insurance certificates, achieving an 85% reduction in the time it takes a shipper to receive an insurance certificate

ECOSYSTEM: CARRIERS + VENDORS

The ecosystem model is the unification of a wide range of parties – carriers, brokers, consumers, services providers, and more – on a blockchain to solve a common problem. Tokio Marine recently tested a blockchain-based insurance policy for marine cargo insurance certificates, cutting by 85% the time it takes a shipper to receive an insurance certificate[3]. Travel insurer InsurETH won a London hackathon with a service that uses publicly available flight data to automatically recognize and pay claims on travel insurance policies using smart contracts[4]. Accenture has developed a blockchain-based vineyard insurance proof of concept (POC) leveraging data from smart sensors. Smart-contract-based agent commissions are the next logical step in ensuring timely and accurate agent payments.

Outside of insurance, the Swedish government is testing a blockchain-based land registry[5]. Product authenticity services such as Everledger track a product throughout its lifecycle[6]. As industries beyond core insurance move to distributed ledgers, carriers will have an opportunity to engage partners and vendors in novel ways.

THINGS TO THINK ABOUT

ON YOUR DISTRIBUTED LEDGER JOURNEY

The potential for value is great. The options are varied. Analyze these points of consideration to inform targeted blockchain engagement.

GEOGRAPHY:
Blockchain solutions which cross jurisdictional, state, and national boundaries will have varying requirements for legal and regulatory compliance. As blockchain is scaled cross-border, solutions will become increasingly complex with considerations such as regulation, currency exchange, business practices, and macro-economic influences.

REGULATORY:
Regulation of blockchain solutions is and will likely remain an ever-evolving issue. Compliance with the numerous state Departments of Insurance, state and federal agencies, and regulations will remain a challenge as blockchain scales up and expands use-areas. A robust regulatory and compliance program will be key to the successful implementation and scaling of blockchain solutions.

COMPLEXITY:
Complex use cases and intricate ecosystems demand advanced solutions. Additional participants, increased transaction load, security, and integrations lead to more complexity, cost, and risk. The benefit associated with more advanced blockchain solutions must be weighed against the effort of creating them.

INVESTMENT:
As the scale and complexity of blockchain solutions grow, investment and ROI will be subject to increased scrutiny. There are several options for investing in blockchain solutions due to their current development by both carriers and third parties. A carrier looking to grow a blockchain capability must select the best investment option, be it self-driven research or an acquisition, a joint-venture, or even a subscription.

RISK:
With all new and developing technologies, the risks associated with utilization shift as the technology matures. Blockchain is no different, and risks to individual and/or corporate privacy, cybersecurity, and even financial loss to consumers and investors must be weighed. With appropriate consideration given to the potential risks, blockchain offers new solutions within acceptable risk levels.

SPEED TO MARKET:
Low levels of adoption will, in the near term, remain an impediment to the realization of the benefits of blockchain. As it moves into the mainstream, however, speed to market will take its place as the key to attaining these benefits. With the broad applicability of potential solutions, the ability for these to be identified, developed, and rolled-out quickly will drive the benefits.

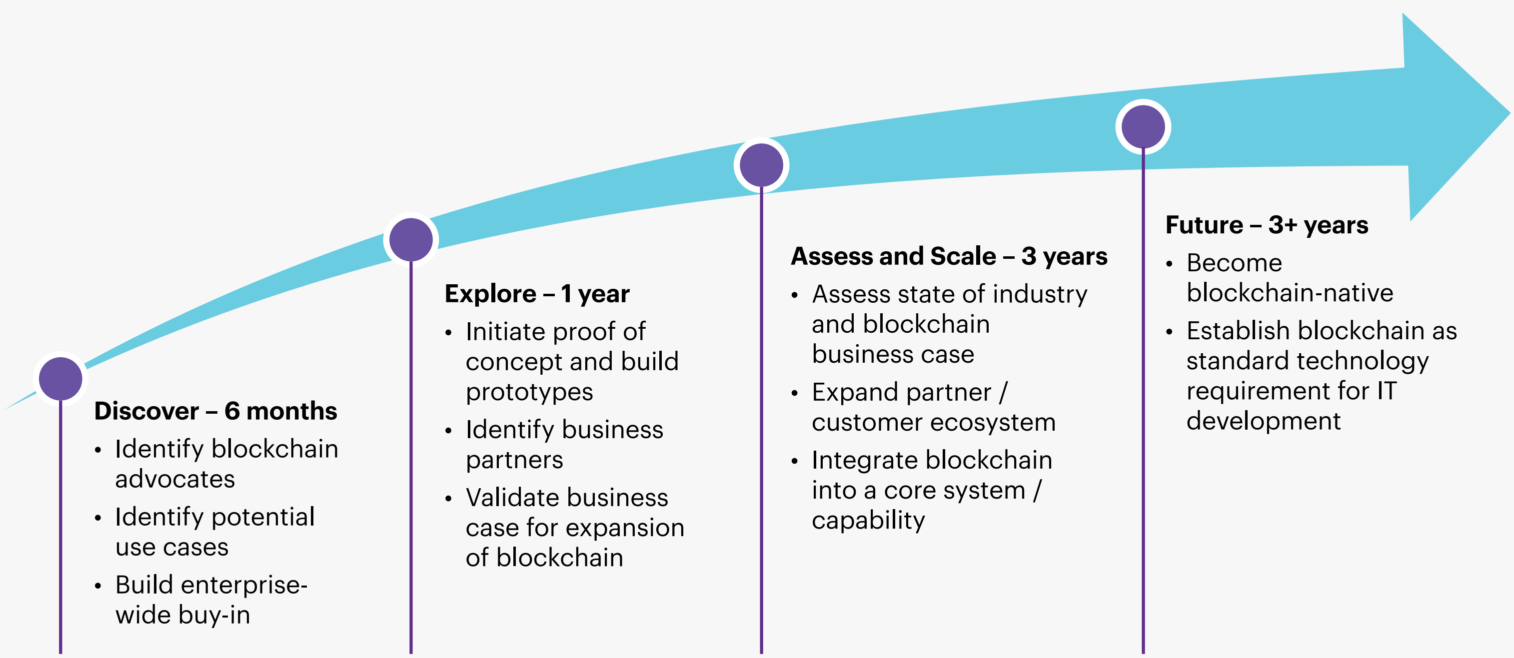
HOW CARRIERS CAN

PREPARE FOR RAPID BLOCKCHAIN ADOPTION

DISCOVER: 0 – 6 MONTHS

Form a blockchain advocacy group consisting of senior leaders within the organization's technology and business divisions. Since blockchain technology is emerging and many people have little to no understanding of it, the advocacy group will be dedicated to education and connecting relevant parties from technology and business. They will have a mandate to create awareness about blockchain technology, showcase the latest blockchain innovations, and highlight its potential benefits. Ultimately, advocacy will help gain buy-in within individual enterprises and across organizations in partnership.

Additionally, with a clear idea of the organization's strategic goals, the advocacy group will be charged with proposing blockchain-based use cases to meet strategic objectives as appropriate. The group will consult with a wide range of stakeholders and subject matter experts from both inside and outside the organization to thoroughly understand objectives and evaluate whether blockchain-based solutions make sense.

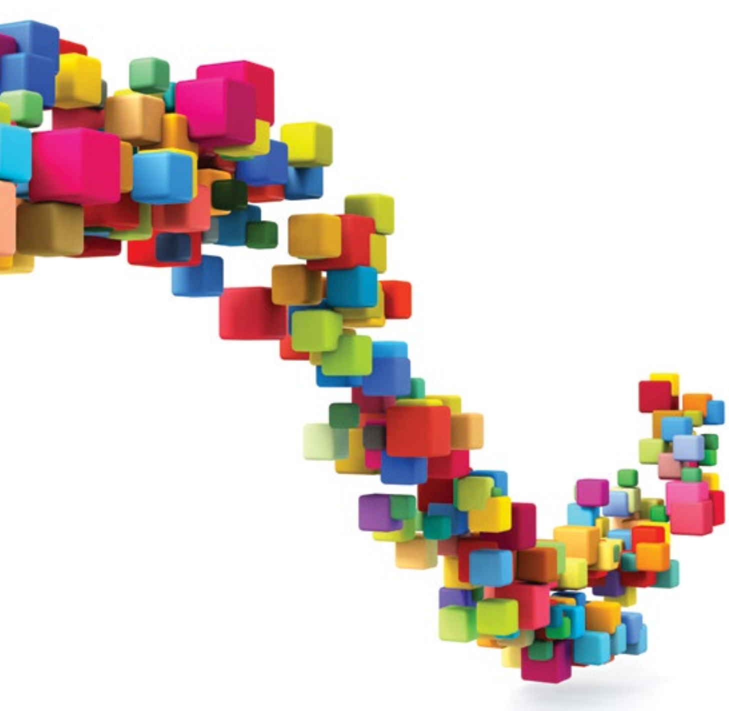


EXPLORE: 1 YEAR

The next step for carriers is to explore the feasibility of opportunities within their organizations and with other business partners depending on the model they choose to adopt. This will be done by streamlining the list of use cases from the discovery phase above and picking a few to test.

In this phase, carriers and their business partners will collaborate to create POCs and prototypes addressing their use cases in dedicated labs or controlled environments. They will deploy these POCs within a closed user group environment, with specific user profiles and user privileges, while maintaining strict governance over data accessed by users.

Upon the completion of these POCs, the carriers will assess the viability of blockchain technology within their organizations with respect to the selected use cases. The results of the POCs will aid in identifying the potential benefits, risks and challenges, which will be articulated formally in the form of a business case for proceeding with the expansion of blockchain.



ASSESS AND SCALE: 3 YEARS AND BEYOND

With the results of the POCs, carriers will have the opportunity to assess the impact of blockchain on the industry's core business and review how the technology may affect doing business with existing partners across the value chain. If the impact is likely to be significant, their investment in building prototypes will have prepared them to take advantage of the technology.

To scale the technology beyond the POC stage and to integrate blockchain into their core systems, carriers will need to identify partners and/or ecosystems with symbiotic benefits to achieve the network effect necessary for the solution to be impactful.

As with any new initiative, there will be a need to develop a comprehensive roadmap and strict timelines based on the results of the prototypes. Other issues to be considered here will include legal and regulatory matters, target operating model, infrastructure, data and process standardization.

The goal will be to become "blockchain-native", a situation in which blockchain is a mainstream technology and the standard for IT development in the insurance industry.

THE EARLY MOVERS WILL LEAD THE WAY

Carriers can take advantage of blockchain in a variety of ways. Each has a different set of considerations and implementation implications. But whichever they choose, preparedness to act will prove advantageous. Insurers that move now to become blockchain ready will be among the first to benefit when the technology becomes mainstream.

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