





# A GLIMPSE OF THE REAL VALUE OF DLT AND BLOCKCHAIN

The insurance industry has, from blockchain's early years, grasped the advantages of a distributed ledger system that ensures consistency of data across a network. It has seen in distributed ledger technology (DLT) the potential to transform entire insurance markets and ecosystems, and to enable the creation of new insurance business models and products.

Yet unrealistic expectations about how quickly and easily the value of DLT and blockchain (which hereafter is mostly included in the definition of DLT) might be realized, along with the cultural challenges of reshaping core industry processes, meant that the technology did not deliver the anticipated benefits. Many firms that launched pilots and proofs of concept—even successful ones—remained uncertain about how to realize return on investment in a production setting.

But now, leading insurance organizations are seeing DLT's true value by looking beyond the technology in isolation. In much the same way as cloud computing did before it, DLT will mature into a transformational technology over the next few years. The insight that is changing the game is the growing realization that DLT is a catalyst for business ecosystem transformation. At its core, this is a team sport that requires companies to work together to win. The more teams that play, the more value gets realized for everyone.

Insurance organizations should partner with others to create DLT propositions and platforms that create value for all members of their ecosystem or value chain. They have a limited window to be one of the organizations that shape the DLT platforms and solutions of the future. Those that sit on the sidelines waiting for the tech and business models to mature risk losing the opportunity or potentially being excluded from the distributed, collaborative economy of the future.

# DLT IS MOVING BEYOND HYPE TO REALITY

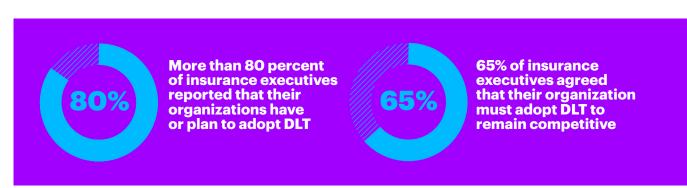
Now that most organizations have put in place the key technologies of the digital age—social, mobile, analytics and cloud (SMAC)—the next wave of digital technologies are beginning to emerge in the form of DLT, artificial intelligence, extended reality and quantum computing (DARQ).

Though at different stages of maturity, these four technologies will be the key drivers of what Accenture describes as a post-digital age—in which insurance organizations are looking to what's next in a world where every company has digitized its business.

Just as SMAC enabled new levels of collaboration and connectivity between insurance companies and individual people and organizations, DARQ— and DLT in particular—promises to transform entire ecosystems, markets and value chains. Distributed ledgers will expand business networks by securely connecting industry participants with ease and at unprecedented scale.

As a surge in industry activity reveals, insurance organizations are excited by the potential of DLT. The blockchain in insurance market is expected to grow from \$64.5 million in 2018 to \$1.4 billion by 2023 at a compound annual growth rate of 84.9 percent. The global blockchain market is forecast to grow at a CAGR of 80.2 percent in the same timeframe.

Accenture research also points to eager adoption among carriers. In the Accenture Technology Vision 2019 survey, more than 80 percent of insurance executives reported that their organizations have adopted DLT across one or more business units or are piloting or planning to pilot the technology.<sup>3</sup> Another Accenture study, conducted with the World Economic Forum, found that 65 percent of insurance executives agreed that their organization must adopt DLT to remain competitive.<sup>4</sup>



# BEYOND PROOFS OF CONCEPT

What's more, numerous insurance projects are moving beyond proof of value and entering or nearing production—The Institutes RiskStream Collaborative™ (formerly known as The Institutes RiskBlock Alliance), Blockchain Insurance Industry Initiative (B3i), and Insurwave are some examples. Over the next two years, these initiatives will refine their products while yet more DLT insurance projects can also be expected to go into production.

Several factors are converging to accelerate industry adoption of DLT. The first of these is the growing maturity of software platforms such as R3 Corda and Hyperledger Fabric, which are now ready to support production-grade DLT solutions. Secondly, carriers are looking to DLT as a means to unlock efficiencies against a backdrop of slow or flat industry growth forecasts.

Finally, industry players understand that collaboration and partnerships present the best opportunity to unlock the value of DLT, and are pushing their ecosystems to align behind the technology. DLT could potentially shift the cost curve if insurers team up to redefine how they engage with each other and their customers, partners and broader ecosystems.



# FROM EXPERIMENTATION TO REAL-WORLD VALUE

Insurance organizations have experimented with blockchain and DLT for several years, initially conducting proofs of concept and pilots on public, permissionless technologies such as Ethereum. Despite the industry hype, most of these early experiments did not deliver the value that organizations expected. Companies were also unsure how to take them into production.

But the time and money invested in this era of exploration has not been wasted. It has helped insurers to understand the more promising use cases for DLT and birthed a range of new enterprise-friendly DLT platforms. It has also yielded the key insight that one of the most powerful ways to realize the potential of DLT is as part of a business community.

Investment has consequently shifted from public, permissionless networks to private, permissioned DLT networks like Corda and Hyperledger Fabric. At this stage of evolution, these types of platforms are proving to be the best fit with evolving enterprise DLT requirements around data, security, and risk, especially as DLT networks move to live production.

Such technologies are also better suited to new, emerging models of collaboration, with insurance organizations seeing the real value of DLT in its ability to enable different parties to share a unified view of the core information that drives an ecosystem. Providing a single source of truth allows friction in business processes to be drastically reduced, using solutions such as smart contract to facilitate and automate DLT networks.

# MORE EFFICIENT PROCESSES: JUST THE START

Data reconciliation is made easier, accuracy is improved, and time spent uncovering information is eliminated, allowing for transparency, efficiency gains and cost reductions throughout a value chain. What's more, shared industry tasks and automation generate more seamless processes and lower total cycle time.

The aggregate improvements in speed and accuracy can also create a more positive customer experience. For example, shortening the claims cycle through improved efficiency could lead to higher customer satisfaction and retention, while faster and better access to data could enable smoother interaction between insurers and their customers. Reducing inefficiencies and costs throughout the value chain could, ultimately, even lead to lower premiums.

But these tangible improvements over today's process inefficiencies will only be the beginning.

As insurers become accustomed to a new way of working and product vendors deliver more robust production-grade solutions, we will see a second wave of growth that enables new products and service models. DLT will drive data quality to new levels of consistency and reliability, allowing more effective integration of solutions such as artificial intelligence, real-time analytics, and the Internet of Things into insurers' business models.

DLT on its own will deliver enormous benefit to forward-thinking insurers, but its true impact lies in its status as a foundational technology for the next wave of disruption. Seventy-one percent of insurers in the Accenture Technology Vision 2019 survey agreed that the combination of all four DARQ technologies will be transformational or will bring extensive change to their business.<sup>5</sup>

We are still early in the adoption cycle for this next wave of technologies, but some insurance organizations are already starting to lay the groundwork for innovation across their value chains and marketplaces. Consortiums, where groups of organizations commit resources towards a common cause, appear to be successful drivers in this early wave of DLT.

By coming together, companies in these consortiums are able to combine their experience and resources to overcome the hurdles to DLT adoption. In establishing business networks that capture efficiency gains, these first-movers are laying the foundation of future transformational and disruptive impact for the entire industry.

#### A TOOL TO IDENTIFY THE VALUE OF DLT

DIMENSIONS	VALUE DRIVERS
IMPROVING QUALITY AND PRODUCTIVITY THROUGH AUTOMATION, CONTROL, SECURITY AND TRACEABILITY.	<ul> <li>Auditability</li> <li>Compliance</li> <li>Data management</li> <li>Data security</li> <li>Process automation</li> <li>Reconciliation</li> <li>Standardization (data &amp; processes)</li> </ul>
INCREASING TRANSPARENCY AMONG PARTIES BY GIVING ALL A HOLISTIC VIEW OF DATA AND TRANSACTIONS.	<ul><li>Data sharing</li><li>Resilience</li><li>Transparency</li><li>Trust</li></ul>
REINVENTING PRODUCTS AND PROCESSES THROUGH DECENTRALIZATION, TOKENIZATION AND DIGITAL IDENTITY.	<ul> <li>Authentication</li> <li>Identity management</li> <li>Marketplace creation</li> <li>New products and services</li> <li>New or enhanced business partnerships</li> </ul>

Source: Building Value with Blockchain Technology: How to Evaluate Blockchain's Benefits, Accenture and WEF

# THE INSTITUTES RISKSTREAM COLLABORATIVE: SETTING THE PACE

**Work underway at The Institutes RiskStream Collaborative.** conducted with Accenture Strategy and Accenture Consulting, is an example of the consortium model in practice. Around 40 members of The Institutes—a non-profit knowledge partner for the risk and insurance industry—are working together to develop **DLT** use cases and solutions for the wider industry.6

The Institutes RiskStream Collaborative facilitates joint development of DLT use cases and creation of shared services between a community of insurance carriers, reinsurers, brokers, and agents. Structured to give each member a voice and prevent domination by a few large players, the consortium aims to ensure that DLT benefits the industry at the points where its value and impact will be greatest.

The Collaborative has selected two initial use cases for development: proof of insurance and first notice of loss. Working groups meet regularly to evaluate the friction and inefficiencies that exist in the current business processes. The consortium's analysis of the impact of these two use cases is encouraging: it identified between \$99 million and \$277 million in annual savings for personal automotive lines of insurance in the US alone by the third year of use.<sup>7</sup>

Other organizations are also leveraging the consortium's work. Aon and Guy Carpenter are teaming with The Institutes RiskStream Collaborative to use DLT in the reinsurance placement process.8 These organizations, along with partners like RenaissanceRe and Everest Re, have successfully tested a proof of concept to digitally and securely distribute submissions and receive quotes using distributed ledger technology.

The Institutes RiskStream Collaborative is developing an industry platform called Canopy, which has a built-in, ledger-agnostic governance and orchestration layer. This enables the consortium to adapt to a rapidly-changing technology market while reducing the cost of development. RiskStream, in partnership with Accenture, aims to go into live production with Canopy in 2019.

As the platform matures and use cases move into live operation, The Institutes RiskStream Collaborative and the market will gain a deeper understanding of the technology and be better placed to tap into the long-term value of DLT. Over time, the Canopy platform will provide the foundational building block for creating transformative value in the insurance industry across the value chain.

\$99m - \$277m

in annual savings for personal automotive lines of insurance in the US alone by the third year of use.<sup>7</sup>

# FIND PARTNERS THAT SHARE YOUR VISION

Since DLT is a team sport, the value will come not just from the technology. It will also come from the ability of companies across complex ecosystems to align behind shared economic incentives and robust governance structures. By working together to determine how their market may benefit from an industry-wide solution and how to share the costs of ideation and development, insurance organizations can uncover the true value of DLT.

That means companies that wish to succeed with DLT should seek other insurance organizations and ecosystems which share their vision for an important industry process, and work with them to find where there is room to create mutual benefit. Such initiatives will need to be driven by tech-savvy business leaders with the ability to bridge legacy organizations and new models of collaboration and engagement.

For insurance, DLT implementations often make sense as joint efforts between business partners in intermediated markets or in extended supply chains that are seeking to alleviate shared pain points. For instance, companies can automate large-scale, manual reconciliation operations that span enterprise borders—examples are claims resolution in personal lines, or premium management and settlement processing in commercial lines.

# CASE STUDY – ENABLING AN ECOSYSTEM WITH DLT

Generali Employee Benefits (GEB) is rolling out a blockchain solution that highlights how the technology could bring higher levels of process efficiency, data quality, standardization, security and transparency to an ecosystem. Working with Accenture, GEB has developed a solution that aims to take friction out of business processes for the GEB Network, local insurers, intermediaries and multinational clients.

The GEB deployment will enable these players to exchange different assets (such as data, information or employee benefits risks) in a secured and standardized way, reducing costs and increasing trust. Generali hopes that this will enhance efficiency in a market where insurers work in different ways and face a lack of standards and shared data governance structures.

The platform allows the participants (GEB, local insurers, intermediaries and multinational clients) in the reinsurance process for captive or pooling services to access the same data and to reduce processing errors through smart contracts and automated reconciliation.

Generali demonstrated a blockchain prototype last year—involving two global clients and local insurers in Spain, Switzerland and Serbia—that showed the platform could lower costs, save time and improve data quality for all stakeholders.

DLT can enable such functionality without requiring the consortium partners to implement complex new technology by integrating with the existing systems of each through application programming interfaces. A consortium model for DLT development enables insurance organizations to share costs and pool their expertise and other resources to find where the technology intersects with market requirements and high-value use cases.

### TWO MAJOR MODELS ARE EMERGING:



## **MARKET LEADER**

This model sees an actor that is a predominant driver of network activity leading the development and deployment of the DLT solution. Such an organization is in a powerful position to maintain and drive efficiencies across the network, which may include its business partners and customers.

One example is a blockchain-based solution developed by Accenture and Zurich Benelux to help the insurer's customers in Benelux manage surety bonds. The solution includes an easy-to-use dashboard that enables customers to quickly check the status of their bonds, get detailed bond history records, complete new bond requests and view bond forecasts.

The vision is to enable additional stakeholders—such as notaries, brokers, reinsurers and co-surety partners in the insurance market—to interact with each other, creating a more-connected ecosystem while ensuring confidence in the security and accuracy of the data.



# **PEER NETWORKS**

Formed by competitors in a similar industry, this model sees organizations come together to realize efficiency and value gains at a market-wide level. The Institutes RiskStream Collaborative and B3i are examples of insurance consortiums bringing together players to realize value from DLT.

These two consortiums show that the model can be flexible enough to accommodate the needs of large and small players alike. The initial emphasis is on creating a step change in efficiency for the entire value chain or market, rather than driving competitive advantage for one participant. As more parties come on board, the benefits to all will multiply.

If an insurance organization chooses to be a fast follower rather than a leader in the adoption of DLT, its leadership should be sure that they understand what the risks and benefits are of waiting to see how the market evolves. Choosing to stand back from joining or leading a DLT ecosystem must be a conscious choice—every organization must have a stance on the technology.

Whether seeking to lead a new consortium or to build a network with their peers, insurance organizations must establish a structure and incentives that ensure fair and positive outcomes for all stakeholders. Their governance structures and technology stacks should be designed for the long haul. Companies should leverage or build technology that can scale well and efficiently bring together small and large businesses behind a common set of interests.

# DLT'S TIME IS AT HAND

As with the World Wide Web and cloud computing before it, DLT promises to bring radical change to how entire industries operate. Now is the time for insurance organizations to take a stance on how they expect DLT to impact their business and the wider industry. By understanding the technology and its applications, they can assess the challenges and benefits that loom on the horizon.

Beyond calculating return on investment for specific projects, they must think strategically about wider industry impacts. Insurance leaders should decide how they will participate in the emerging ecosystems. For some, there may be a compelling competitive advantage in building DLT networks and using the technology first. Others may be better placed to join consortiums as they move into production.

Whichever route makes sense for your organization, the value of DLT technology is clear. Joint development and cooperation with other organizations will deliver near-term efficiency gains and service improvements for your entire ecosystem. In the longer term, you and your partners are laying a foundation for the distributed, and collaborative, economy of the future.

As the advances made by The Institutes RiskStream Collaborative and B3i show, leading consortiums are beginning to deliver value as they move into production. The level of cross-organization collaboration already taking place around DLT positions insurance as one of the industries leading the adoption of new business models powered by this technology. Now is the time to think about how you can respond to the opportunity and ensure your company is on the winning team.

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### **CONTACT THE AUTHORS:**

#### **Jamie Solomon**

Managing Director Accenture Technology Strategy jamie.solomon@accenture.com

#### **Anudeep Chauhan**

Managing Director
Accenture Insurance Strategy
anudeep.s.chauhan@accenture.com

#### **Matt Lehman**

Managing Director
Accenture Insurance
matthew.a.lehman@accenture.com

#### **Christian Richter**

Managing Director Accenture Insurance Strategy christian.richter@accenture.com

#### Nicola Palazzo

Managing Director Accenture Insurance nicola.palazzo@accenture.com

#### **Brett Hornung**

Insurance DLT SME
Accenture Strategy
brett.hornung@accenture.com

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