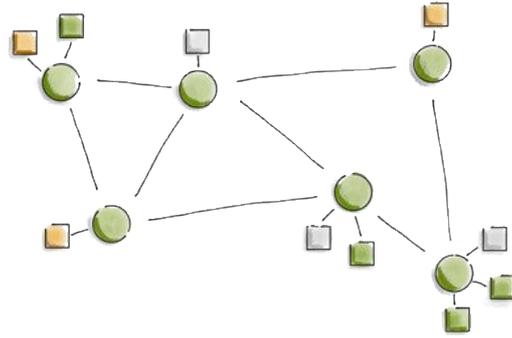
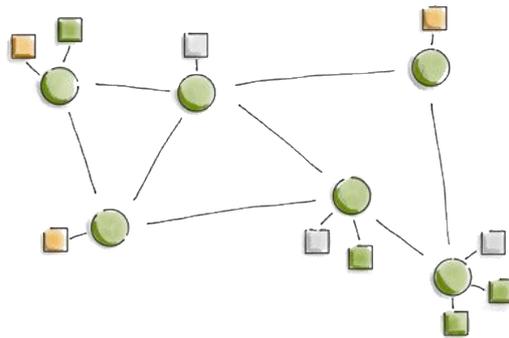


**B3i**



# Doing business in a Blockchain native world



# Doing business in a Blockchain native world

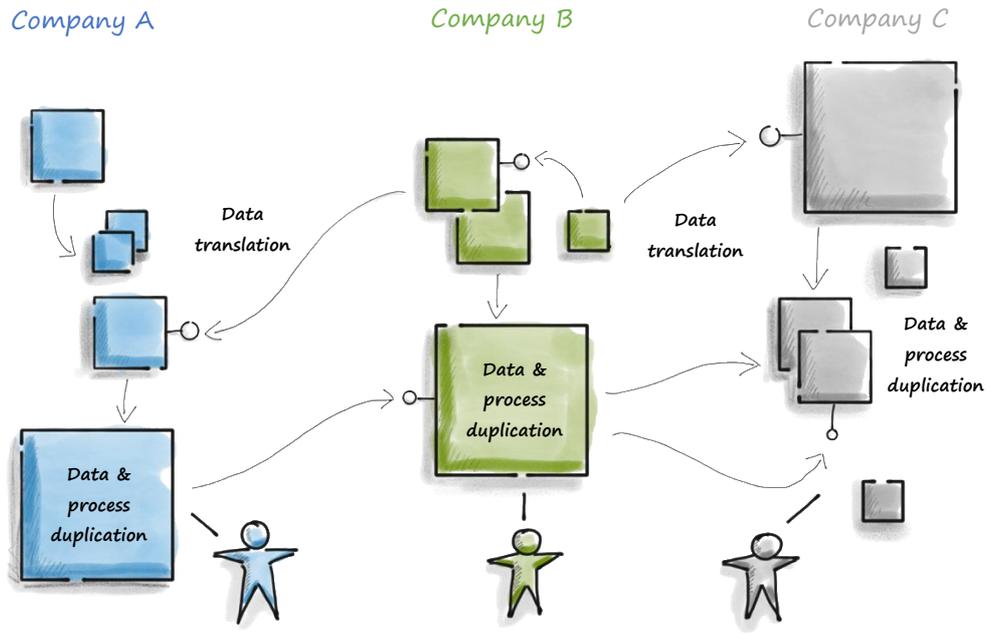
It's been a very exciting couple of years for B3i, on a journey that started in the spring of 2016 at a round table event hosted by Allianz in Munich. At that first meeting I remember having a sense that there may be some real potential in Blockchain but also feeling rather cynical about it. While I can't speak for the other people in attendance, I doubt anyone was absolutely certain about if and how this new technology would really impact our businesses. For sure we understood the mechanics of the technology, had observed the Bitcoin experiment and had listened to the rhetoric being pedalled by so many commentators, consultants and vendors, but no one was ready to bet the farm. My own rite of passage from sceptic to believer took some time but as I write this, I can say with absolute certainty that I'm now a Blockchain convert. While it's not quite time to go all in on Blockchain, I truly believe the impact of this technology can be very far reaching and I wanted to share my insights here. Before I do that, please forgive me for using the term Blockchain when in fact I'm mostly referring to Distributed Ledger Technologies and Networks, but you know how it is ... Blockchain sells!

## How Distributed Ledger Technology is changing the way that businesses interoperate

Distributed Ledger Technologies offer a new paradigm that enables companies to safely and transparently transact using shared applications and data in a way that was not possible before, removing error prone and wasteful data duplication, process duplication and the need for traditional integration. To understand this, let's first consider the currently predominant models on which business networks operate.

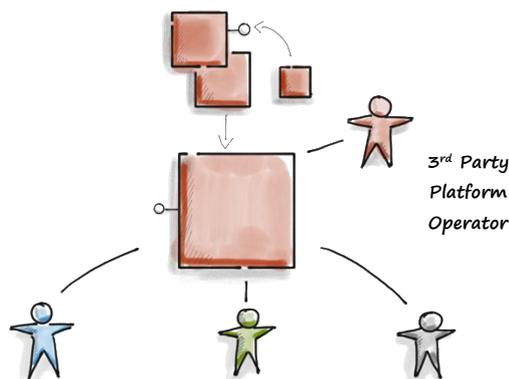
### Decentralised model

Consider the following example of three companies doing business together across some value chain. Although there are mutual processes and sharing of data, each company implements their own version of the process and stores their own version of the data, sometimes in a consistent way supported by data standards but more often in an inconsistent way, requiring expensive, error prone data translation and integration. Even in the best-case scenario where all parties adhere to a common data and API based integration standard, there is still huge redundancy, potential latency issues and lack of trust that must be compensated for using wasteful processes such as reconciliations.



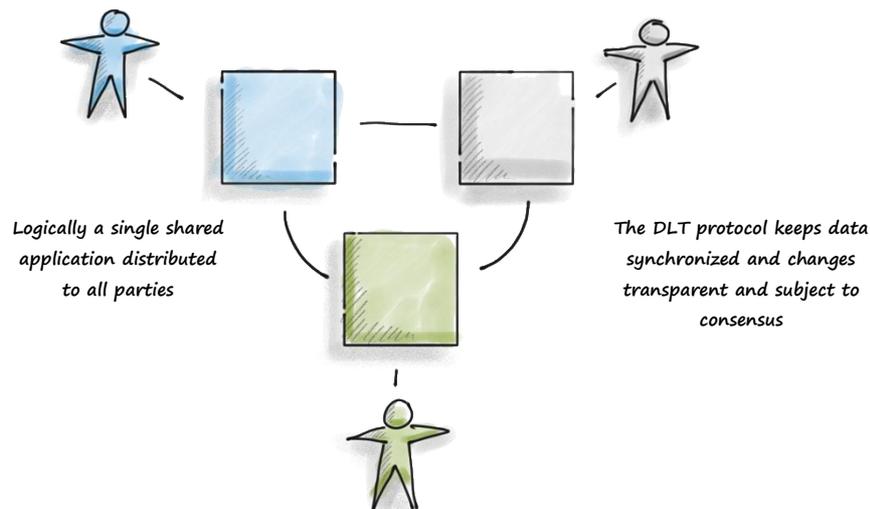
## Centralised Model

Delegating the responsibility of managing mutual processes and data to a 3<sup>rd</sup> party that provides a shared platform has been the traditional way of mitigating the inherent issues of the centralised model. However, while this approach does address many of the problems, 3<sup>rd</sup> parties will charge for such a service and may have a conflict of interests with the participants. Data regulation is also a challenge where the centralised service is being provided across many jurisdictions.



## Distributed Model ... a DLT native world

DLT provides a way to build applications and platforms where ownership and operation is truly shared across the network of collaborating companies, removing the need for a 3<sup>rd</sup> party to operate the applications on your behalf. Mutual processes and data are shared as tamper-proof single sources of truth that entirely remove the need for traditional integration, data translation, duplication and redundancy. Data synchronisation and consensus is provided by the DLT platform. Applications are built once, in collaboration and used by many parties.

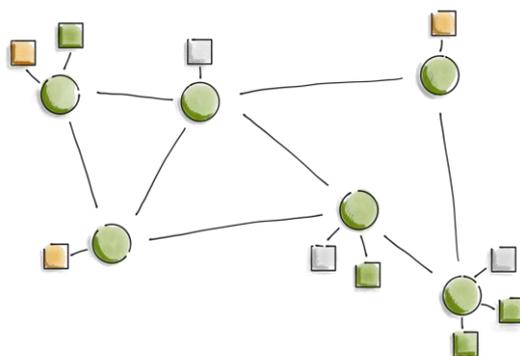


Data ownership can also be rigidly defined and enforced, for example a directory of industry-standard contract clauses that is populated and consumed by all industry participants may be considered to have shared ownership with any party modifying the data albeit requiring consensus with the joint owners. However, a person's identity is owned and managed by the individual and shared (copied and logically made visible but not duplicated in the traditional sense) with other parties as needed when she opens a bank account or buys an insurance policy for example. In such cases, only the data owner can modify the data, but those changes will be immediately visible to all parties.

Data protection, control and lifecycle management also become much easier. For example, requirements such as GDPR Right to Erasure are easily satisfied because there is a single logical record that can be deleted by the privileged data owner, an action that will also delete the physical copies on all counterparty nodes.

## B3i, Digital transformation & the Global Insurance Industry v2.0

21<sup>st</sup> century customer expectations and the ever-increasing pressure on operating costs has put digital transformation high on the strategic agenda of all re/insurers. Being digital isn't about pretty web-sites and mobile applications, it's about being digital from soup to nuts with the maximum possible automation and minimum waste at every level of the business. Digitalisation is not only a way to address existing operating costs but also an enabler for companies to take advantage of new low-margin, high-volume markets and business models with fully digital products.



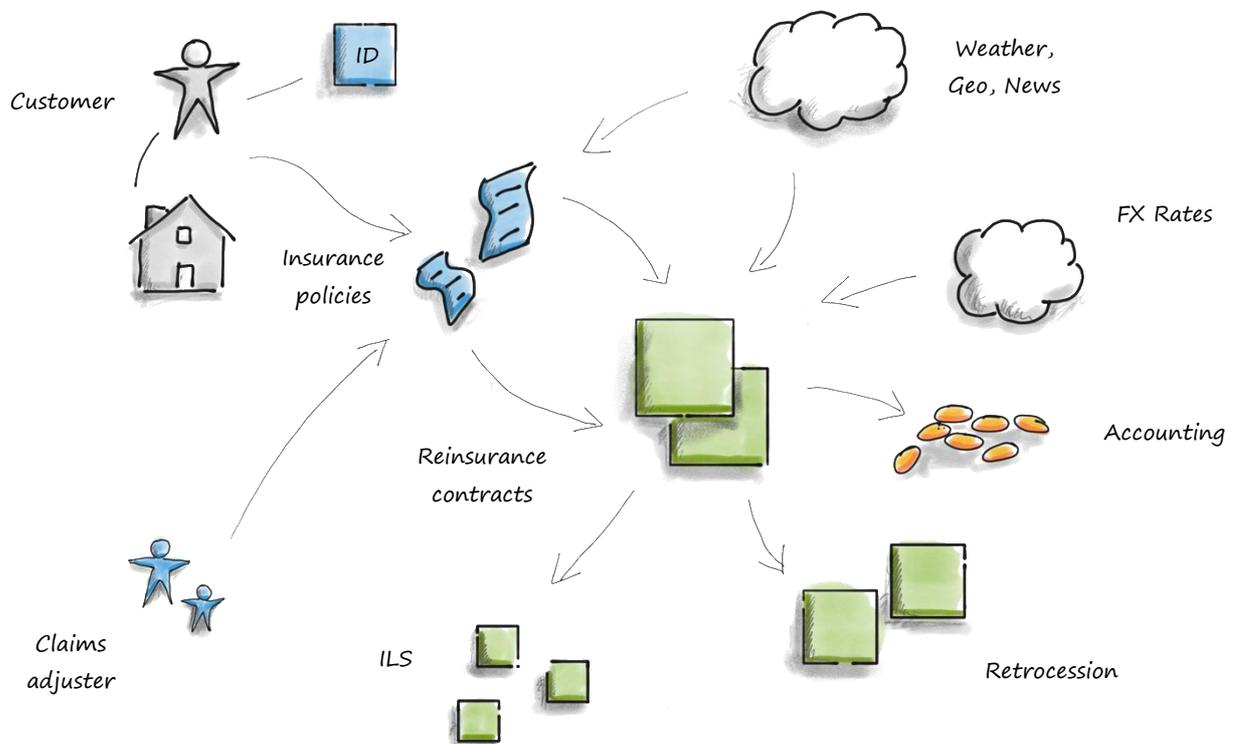
Recognising this, the primary goal of the B3i network is to become a shared, distributed operating ecosystem that enables the digital transformation of the global insurance industry. We believe that facing the digitalisation challenge in collaboration will have a better outcome for the industry and its participants. If we approach digital transformation separately, we will miss the opportunity to leverage the full benefit of DLT technologies.

The DLT paradigm is a fundamental shift that invalidates much of the rationale for transforming and integrating existing traditional legacy systems. Recognising this, our strategic goal should be to create a **DLT native insurance industry**, a version 2.0 of the global insurance industry.

With DLT we now have the ability to build true ecosystem applications that do not rely on a single player or a 3rd party platform for governance, control and technology. This enables us to jointly build new solutions to old and new problems that our industry faces. We can differentiate ourselves in the marketplace in the areas that make us unique, yet we will be united and cooperate on challenges that all of us face and are best answered with a solid industry-wide effort.

## Interoperability and the connectedness of everything

When you trace the way that data flows through the various insurance value streams from the customer, through reinsurance, retrocession, claims and to externally linked sources and partners, the interconnected nature of everything becomes very apparent. Consider also, the way that data is duplicated and transformed as it travels between participants. Customer identity is one such example, where customer records are littered across multiple stores and applications just within a single organisation, a situation which is further compounded as this data crosses organisational boundaries.



Taking a DLT approach solves this problem by creating single sources of truth such that a single logical record for each data entity is maintained across the network of connected applications and organisations. When a customer record changes, it changes in one logical place, made by the owner of that data, relying on the DLT protocol to synchronise the physical, distributed copies across the network. Such a change may impact risk coverage on one or more of the customer's policies which will in turn cascade to the reinsurance contracts and so on. DLT will cascade the changes across the connected applications and parties.

The interoperability between applications is ensured by the use of a B3i ACORD based common domain model, removing the need and overhead of traditional integration. This approach allows separate processes to be joined up and seamlessly integrated across the industry. For example, applications that cover retail general insurance products can be directly linked to reinsurance applications through native DLT integration, always maintaining single sources of truth.

### **Resist network fragmentation**

To realise the full potential of DLT, we must avoid the creation of multiple networks, especially within single domains (e.g. reinsurance trading). Increasing the number of separate networks will lead to a higher integration burden and decrease the level of application sharing and economy of scale. The goal of the global insurance industry should be to operate on a single DLT network that maximises reuse, sharing, interoperability and economies of scale.