



**An Insurance Marketplace based on Blockchain**

Nov, 2017

## Content

<b>1 Executive Summary</b>	<b>3</b>
<b>2 Introduction</b>	<b>3</b>
<b>3 The Insurance Market Today</b>	<b>3</b>
<b>3.1 Existing Challenges</b>	<b>4</b>
<b>3.1.1 Generation Shift</b>	<b>4</b>
<b>3.1.2 Growth Limitations</b>	<b>4</b>
<b>3.1.3 Overhead Costs</b>	<b>4</b>
<b>3.1.4 Legacy IT</b>	<b>5</b>
<b>3.2 Market Opportunity</b>	<b>5</b>
<b>3.2.1 Increased Regulation</b>	<b>5</b>
<b>3.2.2 Status Quo is not enough</b>	<b>5</b>
<b>3.2.3 Drive For Digitization</b>	<b>5</b>
<b>3.2.4 Global Reach</b>	<b>6</b>
<b>4 The iXledger Platform</b>	<b>6</b>
<b>4.1 Target Audience</b>	<b>6</b>
<b>4.2 Key Features</b>	<b>7</b>
<b>4.3 Key benefits</b>	<b>8</b>
<b>4.4 Technology</b>	<b>8</b>
<b>4.4.1 Architecture Overview</b>	<b>9</b>
<b>4.4.2 Blockchain</b>	<b>9</b>
<b>4.4.3 Oracles</b>	<b>10</b>
<b>4.4.4 Security and data privacy</b>	<b>11</b>
<b>4.4.5 Matching Engine</b>	<b>12</b>
<b>4.4.6 Digital Signing</b>	<b>13</b>
<b>4.5 IXT - The iXledger Token</b>	<b>13</b>
<b>4.6 Token Allocation</b>	<b>14</b>
<b>4.7 Reserve Pool</b>	<b>14</b>
<b>4.8 Team Pool</b>	<b>14</b>
<b>4.9 Token Burn</b>	<b>14</b>
<b>4.10 Token Purchase</b>	<b>15</b>
<b>4.11 Activities</b>	<b>15</b>
<b>4.12 Volatility Control</b>	<b>16</b>
<b>4.12.1 Price Range Calculation</b>	<b>17</b>
<b>4.12.2 Arbitrage Prevention</b>	<b>17</b>

4.12.3 Platform Launch Price	17
5 Roadmap	17
6 The Company	18
6.1 The Leadership Team	18
6.2 The Core Team	19
7 Competitive Landscape	20
7.1 Situational Analysis	20
7.1.1 Corporate	20
7.1.2 Industry	21
7.1.3 Platform Functionality Matrix	22
8 Partnerships	23
9 Disclaimer	24
10 References	25

## 1 Executive Summary

iXledger is building a platform that aims to disrupt and replace the traditional insurance working models. Our offering is a global and alternative marketplace that uses technology as one of the pivot differentiators. The working platform leverages blockchain and revamps many of the currently outdated insurance processes.

The insurance industry is undergoing change that is partially driven by technology. Insurance companies have been exploring emerging technologies in order to remain innovative and competitive in the industry. Blockchain is one of the key technologies that promises transformative alternatives to traditional insurance approaches.

This whitepaper outlines how iXledger will meet upcoming challenges and take advantage of opportunity gaps within the insurance market.

iXledger successfully completed a fund-raising ICO and we are focused on building a viable commercial operation. We are not including financial projections or budgets in general.

## 2 Introduction

iXledger is a UK registered company based in London, the global capital of insurance. Our mission is to transform the way the market trades and manages insurance products by offering an alternative insurance marketplace utilising blockchain technology.

iXledger is creating the required tools best suited for the operations of insurers and brokers. Our solutions will help these users maximise market connections and efficiency throughout all stages of their day-to-day working processes. This paper gives you a detailed overview of our approach.

## 3 The Insurance Market Today

The insurance market counts for \$3.92 trillion or 5.7 percent of the global economic output [1]. Estimates suggest that this is the volume of the gross written premiums generated by insurers across the globe in 2015.

London is the capital of the global insurance market in Europe, with a long history as a marketplace for all kinds of insurance. The Association of British Insurers estimated the value of

assets under management, held by insurance companies, at \$2.032 trillion. In the UK, 305,500 people are employed within the industry [2].

Insurance companies are seeking to increase their revenue by creating new insurance products and expanding into new markets. At the same time, brokers are merging to broaden their offering and services. Market consolidation has become the trend in order to grow [3].

Compared to the traditional cost cutting and market consolidation [4], blockchain can change the insurance industry the same way as the Internet revolutionised the world in the early 90's. Blockchain creates new growth opportunities in the global insurance industry as new products and operations are evolving from blockchain technology [5].

### 3.1 Existing Challenges

Insurers face a number of challenges, including: A fast-paced changing industry, outdated technology and a shift in demographics. Below is an outline of some of the major challenges.

#### 3.1.1 Generation Shift

The generation of Baby Boomers (aged 51-69) and Generation X (aged 35-50) are yet to embrace technology for insurance solutions. On the other hand, the millennial generation (aged 18-34) insurance professionals have expectations of a system that is simple, transparent and efficient. The increase in competition and changes is pushing this generation into a new digitalised environment.

#### 3.1.2 Growth Limitations

Brokers and underwriters face limitations to grow if their access to the marketplace is limited. Traditionally, relationships are the foundation to provide future business growth in insurance. The current manual paper-based processes are a big challenge to grow business operations.

#### 3.1.3 Overhead Costs

Insurance processes that manage risk, premiums and claims typically involve a significant exchange of data between multiple parties. Each party stores their own separate copies of data and process these individually. This makes it difficult to synchronise and collaborate through what is meant to be a shared process.

### 3.1.4 Legacy IT

In many cases, insurance companies have outdated IT systems that are not ready for mobile use or general online access. A large proportion of the legacy IT systems are “closed” and have no easy way of integrating external partners’ systems.

## 3.2 Market Opportunity

The insurance industry is going through some significant changes that have an impact on profit levels and this therefore increases the need for cost-saving. The consumer markets are also changing with new approaches to insurance and gaining popularity. According to KPMG, ‘on demand insurance is an appealing proposition, as it provides convenience through an attractive customer interface and offering flexibility of cover. [6]’

Insurance companies need to reinvent themselves to remain competitive and also support the existing business processes against a backdrop of lower premiums and a need to cut costs. Below are a few characteristics of this changing environment.

### 3.2.1 Increased Regulation

Insurance companies and brokers are under increased regulatory scrutiny that causes an extra administrative burden. This adds additional requirements on IT systems to provide transparency and auditing protocols. Examples of some regulatory demands are GDPR (General Data Protection Regulation) compliance, Solvency II and IDD (Insurance Distribution Directive).

### 3.2.2 Status Quo is not enough

The process of how the market trades and manages insurance products is shifting to an electronic approach. This shift is being driven by demographic, economic and technology factors. Status Quo is no longer enough and insurers who fail to adapt will not be able to retain their customers, let alone grow their business to a broader market [7].

### 3.2.3 Drive For Digitization

Insurance companies are driving digitization efforts across the industry and are investing heavily in the search of efficiencies and increased market reach. Consumers and counterparties expect modern technology. Artificial Intelligence (AI), mobile apps and blockchain are some of the main focuses.

### 3.2.4 Global Reach

Insurance is no longer a local business and this sector needs to cover people and companies with a global footprint. The insurance marketplace is also increasingly global where it is no longer possible to meet in person. The need to communicate and collaborate remotely continues to increase significantly.

## 4 The iXledger Platform

The platform is a suite of tools that allows insurance professionals to maximise their market connections and profitability throughout all the stages of the business process. iXledger offers a powerful matching functionality and instant messaging features that enables market participants to broaden their business network in multiple types of insurance.

### 4.1 Target Audience

The iXledger marketplace is for participants of the insurance industry. Our target audience are:

- **Brokers.** Match buyers-sellers while providing tailor-made structures and other services.
- **Insurers.** Sell insurance products to reinsurers i.e. risk transfer.
- **Reinsurers.** Buy insurance programs or selling i.e. retrocession insurance.

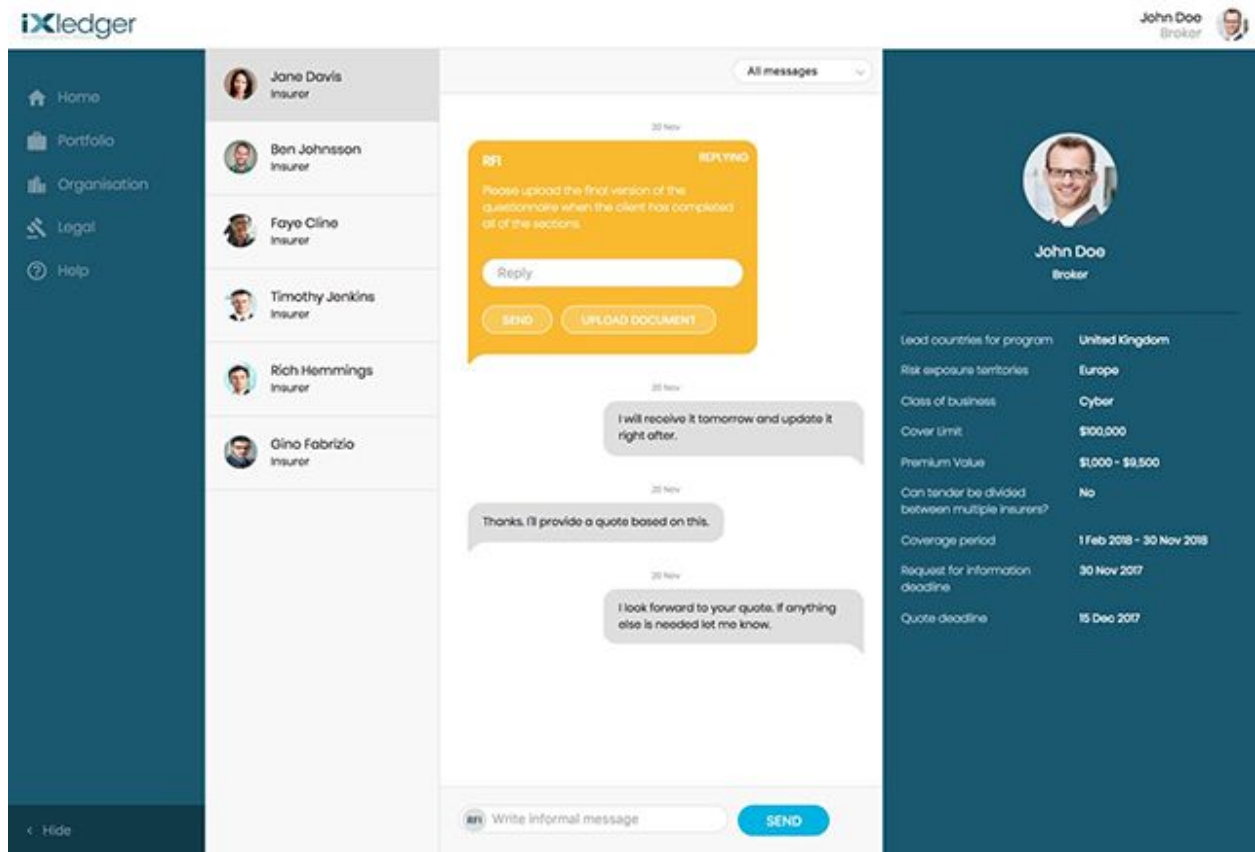
The millennial generation (aged 18-34) is one of our key target audiences. According to the General Director of Association of British Insurers, ‘by 2020, 70% of the workforce will be millennials and this generation has grown up surrounded by technology’. The insurance industry is focused in preparing insurance professionals within this generation to adapt to the shift in technology for insurance solutions [8].

In addition, according to a PwC survey, ‘by 2020, 50% of consumers would be prepared to provide their insurer with personal-data documents through an electronic platform to seek the best deal and efficient service’ [9].

The current market networking opportunities are limited to existing relationships between the brokers, insurers and reinsurers.

Our platform provides features such as an instant messaging based placement process and mobile access, which will sit well with this audience.

## 4.2 Key Features



### **Collaborative placement of insurance**

Meet, network and agree terms instantly with a secure live-messaging based submission process.

### **Utilise all the platform features on-the-go with our mobile application**

Keep track of all your business activities and keep up to date with an enabled live notification straight to your mobile device.

### **Securely share documents**

Upload and share your confidential documents processed through our blockchain-based platform.

### **Effective portfolio and individual risk data management**

Stay on top of your work in our customizable and powerful risk data and portfolio manager. Export the data straight into Excel or downstream processes.



**Template driven MRC (Market Reform Contract) creation with digital signing**

Be part of a collaborative platform, where all parties can edit contract wordings and clauses. Transactions are agreed and finalised with digital signatures from all business partners.

**Market insights and performance analytics**

Gain insights into the market by analytics and reports that will give you an edge. Analyse performance on an individual or team level and track your progress.

**Invite your business partners and colleagues to connect**

Our simple sign-up process encourages a network effect by rewarding the sign-up of the people you do business with.

**Promotion of expertise growth of your network**

Show your professional expertise and qualifications on your profile and search for partners for new business opportunities.

## 4.3 Key benefits

Blockchain technology is a new focus area within the insurance industry and it gives a significant advantage for market practitioners. Blockchain reduces the need for intermediaries and introduces trust, leading to growth opportunities and operational efficiencies.

The main benefits:

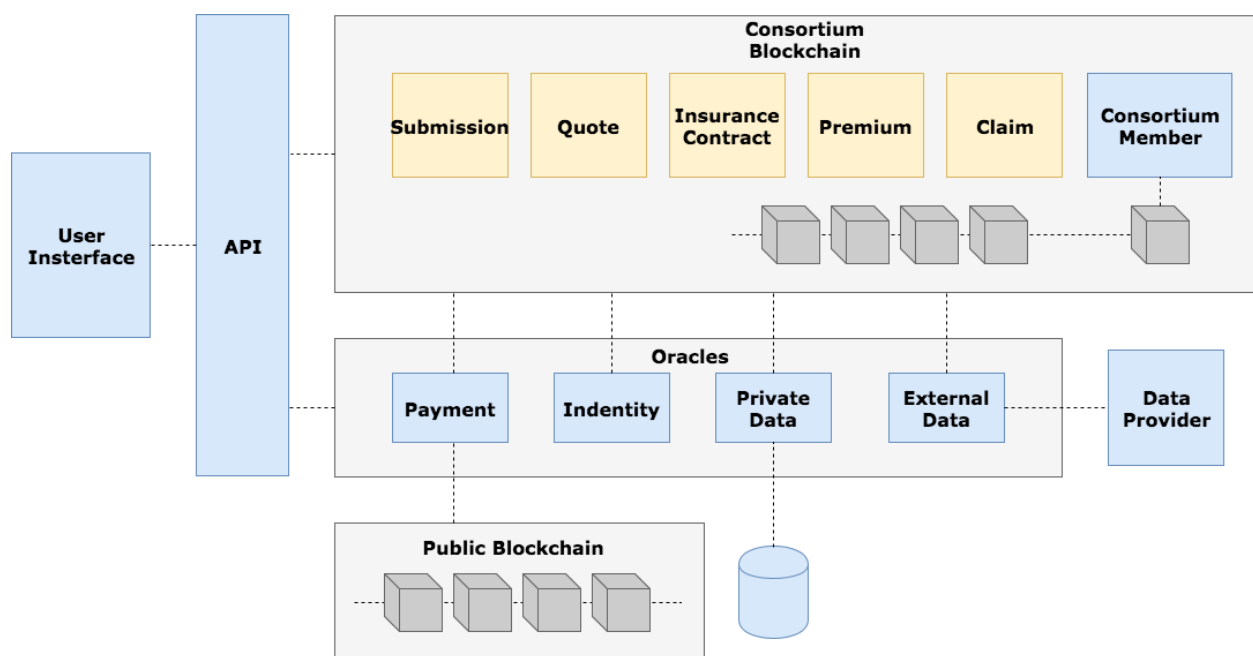
- Providing an alternative to existing marketplaces with modern technology and new approaches for lower overhead costs.
- As an independent provider we are able to create solutions without being tied to specific markets, insurance companies or consortia whilst staying in line with industry standards.
- Utilising blockchain technology as the software protocol provides an additional implementation for internal IT-solutions and external partners.

## 4.4 Technology

The iXledger architecture is a highly scalable and robust combination of the latest technology advances in blockchain, UX (User-experience) and server side approaches.

Our layered and modular approach gives flexibility to replace technology and add new functionalities.

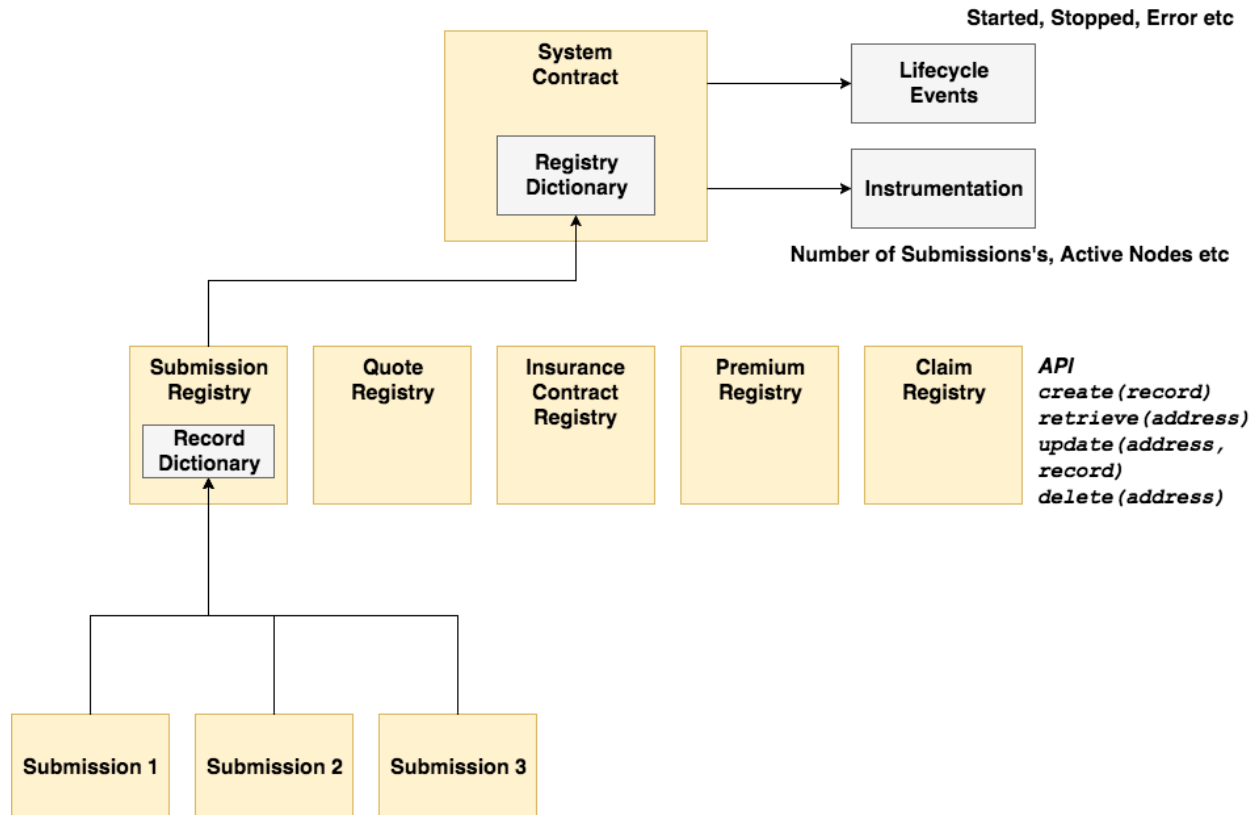
### 4.4.1 Architecture Overview



### 4.4.2 Blockchain

Our platform leverages blockchain technology and offers participants consistent, shared and secure processes. The nature of the decentralized blockchain allows a completely trustless interaction between parties and also removes third-party costs and commissions.

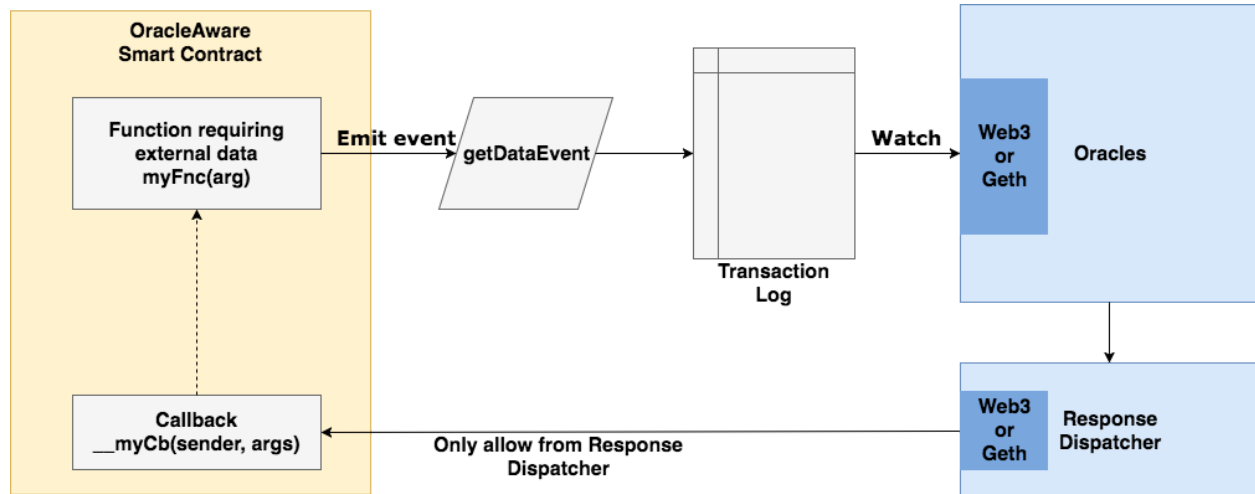
iXledger will eventually provide an open blockchain for insurance companies and others to join and mine. However it will initially start by creating a consortium blockchain in Ethereum with controlled participation. This allows the iXledger team to get around the current performance limitations suffered by the public blockchain. It is important to note that all iXledger software has been designed for deployment deployed on the public blockchain.



Our core business logic is implemented on smart contracts that are executed on the blockchain. iXledger blockchain contracts have been organised around business processes and each contract type is supported by a registry. This registry allows users to monitor contract data records and also provides control and event tracking. The aim of this contract implementation is to minimise the need to configure addresses externally and to provide a consistent approach.

#### 4.4.3 Oracles

One of the architectural challenges with smart contracts is that this architecture lacks information of anything outside of itself. Given that real time data is often needed for business practises (e.g. current exchange rates), this issue has been solved with oracles. When a smart contract is 'oracle aware', the contract can execute an event to the oracle, which in its turn feeds the required data back into the contract or performs certain alternative actions.



An example of oracle usage within the iXledger platform is when IXT payments are made. In the event of a chargeable transaction on our consortium blockchain, the smart contract connects with an oracle that then synchronises the payment on the public blockchain.

Oracles have their own challenges and one of these is security. For example both the oracle itself and the callback function in a smart contract need to be secured. Another aspect is the performance and gas costs.

#### 4.4.4 Security and data privacy

Some of our data is not public to everyone and must be protected with a high level of security. For example, the medical data documents that form part of a life insurance claim, or quote information provided for a submission. The different levels of protection and various use cases call for different approaches.

**Sharing of documents:** This feature might involve sharing highly sensitive medical data or other personal information between privileged users. Explicit exchange of encryption keys is required to gain access.

**Smart Contract privacy:** Certain data in the smart contracts needs to be encrypted. Since encrypting data within the blockchain is not viable, certain fields need to be encrypted before they are published. For example, participants who provide quotes for a submission should not be able to see quotes that have been sent by others.

**Personal Data Removal:** One of the challenges is the regulatory requirement to be able to remove personal information if requested. As our data is stored in the blockchain and therefore

immutable, we need a slightly different approach. We are basing it on encryption and consider data to have been deleted if the key is “lost”.

#### 4.4.5 Matching Engine

What makes a successful matching engine?

- High performance
- Scalability
- Flexibility

Many of the existing order matching engines mainly optimise on matching prices. This works well when the prices are the primary focus. However, for our participants, other fields (e.g. jurisdictions and business classes) are often no less important. For our products, flexibility is as critical as high performance in order to help smooth the customer’s business operations and avoid setting constraints.

There are naive approaches to achieve flexibility for a successful matching engine. Some implementations evade the issue by converting preference filters into database queries. Other approaches include field-by-field matching by brute force, which results in poor performance. Field specific optimisations can help to a certain degree, e.g. by cleverly re-organising data and comparison flows. Nonetheless it is important to note that such optimisations usually need very fine level manual adjustments, which results in scalability issues.

We are basing our matching engine on an innovative novel tree structure. The participant’s filters are parsed and then organised in a way that reduces repeated comparison (e.g. if a Submission satisfies one criteria of a filter, there is no need to re-compare the same criteria in other filters). The filter tree allows arbitrary numbers and types of criteria in a filter. It also self-organises dynamically, according to the created (and removed) filters — achieving scalability.

Here is one example:

**Interest in submissions:** Let’s imagine that there are 100 insurers who have registered interest in insurance Submissions. Half of them are interested in cover limits of over 2 000 000 and a quarter of them prefer the ones from France and under 500 000 cover limits. The remainder have no preferences over limits but are interested in the ones from the UK.

**Submissions available:** Suppose there is a Submission with 300 000 limit which comes from the UK. If we perform a model of an ideal matching process, this model will start by comparing the

cover limit: After the first comparison, the first 50 filters are skipped.

The second group (France and under 500 000) will pass the first comparison, but a second comparison against the country will drop all of them. Finally a third comparison will match the final group.

**Matching model:** The root of our matching tree has one branch towards limit comparison and another branch towards country comparison. The limit branch then forks by value, meaning that all of the first group will be registered under one sub-branch, while the entire second group under another branch of country comparison. Finally, the last group is directly under the root. With this approach only three comparisons are needed to match against 100 filters.

The real implementation is more complicated and there are intriguing challenges. Some of these challenges include rebalancing the tree as the filters are added and removed, and selecting the branching strategy based on hits and misses. There are multiple ways and strategies for these challenges. At the moment, simple models and strategies suffice for the Minimal Viable Product (MVP). In the long term, more sophisticated models will be developed as the product evolves.

#### 4.4.6 Digital Signing

We have integrated digital signing that leverages DocuSign, the market leader in e-signatures. The signing functionality is tightly integrated with our User Interface (UI) to provide a smooth experience. Removing the need for printing and scanning as well as a blockchain-backed proof of signatures makes the process auditable and quicker. This feature gets rid of administration tasks that often delay the signing process.

### 4.5 IXT - The iXledger Token

IXT is used to pay for transactions and other activities on the platform. From the perspective of an IXT holder, the token should be classified as a prepayment for services. The purpose of using an IXT token is to provide easier payments and reduce the administrative overheads when using the platform.

All transactions and activity are priced in IXT, which allows for easy comparison and unified charging.

IXT that have been transferred to the platform accounts or have been bought on the platform will not be transferrable to external accounts.

## 4.6 Token Allocation

We issued a total of 65,778,844 IXT tokens during our crowdsale period. From that total supply 24.08% (15,839,549 IXT) has been added to the iXledger pool which includes the team and company reserve.

## 4.7 Reserve Pool

**Initial Size: 10,000,000 IXT**

The reserve pool is used to ensure that our IXT token economy operates in a fair and controlled manner. Tokens from the reserve pool will be utilised to provide the required liquidity and smoothen short-term price increases. As the pool is depleted, it will be replenished by the tokens that the platform receives. This replenishment will happen on a weekly basis and a summary will be published with the steps taken.

The aim of this pool is to provide a stable price for our primary participants whilst maintaining a controlled increase in price (i.e. inflation) which reflects the growth and volume of the platform.

There is also the possibility of increasing the size of the pool as the platform grows. This will be achieved by reducing the tokens burned.

## 4.8 Team Pool

**Initial Size: 5,839,549 IXT**

Our team allocation is primarily there to incentivise team members to strive for an increase of the value of the token.

The tokens in the team pool will also be used to allocate an initial balance to early adopters of the platform. This allocation will provide users with either three months of free usage or the option to receive a reward by inviting their business contacts. We aim to achieve a significant network effect with this approach.

## 4.9 Token Burn

Tokens received by the platform will be burnt after certain costs have been covered. This exact amount will be determined on a monthly basis depending on the levels required for:

**Operational costs:** This includes the infrastructure costs required to operate the iXledger platform. The medium to long-term plan is to open up the blockchain to people who wish to mine. Miners would then be rewarded with IXT tokens.

**Growth:** There will be rewards for bringing on new participants, provisioning and marketing and advertising.

**Reserve Pool replenishment:** A constant level of tokens will be maintained in this pool with the potential to increase the size in proportion to platform growth.

Tokens will be burnt with a single transactions of those unwanted tokens to the Genesis block address. This procedure will effectively take these tokens out of circulation. Other existing token burn options being considered for implementation is a ‘graveyard contract’, which will explicitly destroy the token.

## 4.10 Token Purchase

An iXledger marketplace participant can purchase tokens directly from the platform with a credit card payment or bank transfer. Tokens that are purchased directly on the platform will be sourced from the exchanges on behalf of the customer. With this procedure, the token demand will be reflected in the market value whilst making it a frictionless experience for the user.

Tokens bought on the platform by registered users will be held in a secure wallet (acting as a custodian) associated with the user account and fully managed by the platform.

IXT token is already listed in a number of exchanges and the team is working to provide liquidity with more listings. Token liquidity will encourage participants to continue supporting the platform in various ways. For someone that is not an iXledger platform participant, you can only buy or sell tokens from exchanges.

## 4.11 Activities

Examples of activities which will require a fee or offer IXT rewards are defined below. More of these activities will be added as the platform evolves. The platform will also include an IXT transfer window that will publish the corresponding amount of IXT and the according addresses. Our payment oracle will settle the the transaction on the public Ethereum blockchain.



Activity	IXT Price
<b>Submission</b> You will pay IXT in order to place a submission in the market. Recipients of the submission will not be charged. The fee goes to the platform.	TBD
<b>Quote</b> You will be rewarded IXT when you provide a quote which is accepted.	TBD
<b>Firm Order</b> A firm order will result in an equal charge to both sides of the transaction. The fee goes to the platform.	TBD
<b>Invites</b> If you send invites to people outside your organisation you will be rewarded IXT as it helps the platform to grow.	TBD
<b>Organisation Setup</b> During the setup of an organisation you will be rewarded with an initial balance of IXT.	TBD
<b>Data</b> Data can be bought and sold on the platform. The exact functionality is scheduled during our second phase of development so all the specifics have not yet been worked out.	TBD
<b>Premium Features</b> Unlock premium features such as detailed statistics such as profile views, contacts and research material.	TBD

## 4.12 Volatility Control

One of the key priorities is to create a stable and predictable cost model for iXledger clients. This model will shield clients from the short-term volatility that is traditionally associated with blockchain tokens. Price volatility should only be a concern for someone who is about to buy IXT.

The way we prevent high IXT volatility is by offering a discounted mechanism if the price spikes above a predefined range. This is handled automatically as part of the IXT purchase process. If the market sourcing detects that the best price it can get is outside the range of the acceptable

price swing, the platform will add the difference. This difference in tokens will be obtained from the reserve pool.

#### 4.12.1 Price Range Calculation

The maximum daily price  $m$  is 5% of yesterday's price  $P$ . If the number of organisations participating  $k$  have increased, there will be an additional 5% increase per new organisation. The percentages are likely to be adjusted as  $k$  increases.

$$m = P * 1.05 + (k * P * 0.05)$$

The discount is then simply today's price minus  $m$ .

Selling tokens from the internal pool reserves will help to raise operational capital. This can be advantageous for the development of iXledger if the token benefits from healthy market prices.

#### 4.12.2 Arbitrage Prevention

iXledger platform participants will not be able to transfer purchased discounted IXT tokens in the secondary markets within 30 days of purchasing. This is to prevent arbitrage opportunities, where a participant buys a discounted IXT on the platform to sell it at a higher price in the secondary market.

#### 4.12.3 Platform Launch Price

There will be no attempt to prevent any potential steep price increase during the launch of the iXledger working platform. Volatility control will begin once the price has stabilised and IXT begins with institutional transactions. iXledger aims to protect primary participants from high volatility.

## 5 Roadmap

Below is a high-level roadmap which outlines the main phases and milestones. This is subject to change as we reserve the right to change our priorities and timelines as we find opportunities or get market feedback.

**R&D.** Implement various use cases to understand what the technology can do.

**Prototype.** Build a basic functional application.

**Establish partnerships.** Create collaboration with insurance companies.

**Q2 - 2017**

**Q3 - 2017**

**Funding.** Raise enough funds to build and go to market with the platform.

**Team expansion.** Hire the right talent with business expertise and technology skills.

**Meeting the market.** Establish more relationships across the insurance market.

**MVP.** Build a minimal working platform with a single insurance product.

**US entity established.** Expand into the US.

**Q4 - 2017**

**Q1 - 2018**

**Go to market with single product.** Start trials and user testing with insurance companies.

**Establish service organisation.** Build out the support teams.

**Growth.** Prepare the platform for general availability and growth.

**Increase product coverage.** Implement more products.

**Business process support.** Create detailed processes to support claims, premiums and policies.

**Q2 - 2018**

**Q3 - 2018**

**Data platform.** Build out functionality to support a data marketplace for consumption and provisioning.

**Reinsurance marketplace.** Support for retrocession and treaty functionality.

**Ecosystem for third parties.** Enable third-party access and open up for insurtech partnerships.

**B2C.** Scale out and offer a consumer insurance or direct business solution.

**Q4 - 2018**

## 6 The Company

### 6.1 The Leadership Team

**Ingemar Svensson - Founder & CEO:** Before founding iXledger, Ingemar was the CTO of Risk and Valuation at SunGard Asset Management. His experience ranges from managing large

organisations to hands-on software development. Ingemar has spent 20 years building mission critical systems in various roles at Bank of America Merrill Lynch, Barclays Capital, Lehman Brothers and Mitsui Sumitomo Insurance.

**Cristina Dolan - Co-founder & President US:** Cristina is an MIT Media Lab alumna and Internet pioneer with over two decades of experience building software, content, and Internet based products and businesses. She was a co-founder of OneMain.com, which grew to be the 10th largest ISP after a successful IPO. Cristina is Chair of the MIT Enterprise Forum in New York. In 2017 she was honored with Harold E. Lobdell Distinguished Service Award from MIT for her work in promoting computer science.

**Mikael Olofsson - Co-founder & President EMEA:** Mikael has over 17 years experience from the financial markets and start-up sector. Previous to founding iXledger, he was Co-founder of TikkR.co an on-demand insurance platform with participation of the InsurTech Accelerator Program in 2017 at Startupbootcamp.org in London. Before this Mikael worked as Senior Equity Derivatives Broker and Commodities Broker in London, New York, Geneva and Paris for companies such as ICAP and SCB Group.

## 6.2 The Core Team

**Henrik Hoppendorff - Business Development:** Insurance specialist and former underwriter who worked at AIG and other insurance companies. He joins us with a wealth of detailed insurance expertise as well as the senior business development skills.

**Andrew Hodgett - Business Development:** Experienced marine (re)insurance broker. He joins us to provide insight in the broking sector and will take a leading role in our sales team.

**Charlotte Holmen - Head of Development:** Charlotte's last role was the first developer hired at the startup [Doctify.co.uk](http://Doctify.co.uk). As a senior full-stack developer she and her team took the product from scratch to the award winning product it is today.

**Gurcan Sanli - Social Media & Community Manager:** Gurcan joins us with experience in digital marketing essentials and social media management. He obtained a Bachelor's degree in marketing and advertising, as well as the key certificates in digital marketing accredited by CIM, Google and CPD.

**Linmao Song - Senior Blockchain Developer:** Prior to working as a Blockchain developer at Nchain, Linmao was at Barclays for 6 years as a C++ developer. Linmao leads the blockchain development on the platform.

**Theodor Port - Blockchain Developer.** Theodor joined us after completing his Masters in Computer Science at Imperial College London. He had significant experience of Ethereum development prior to joining from his own projects and as a community volunteer.

**Mohammed Yafii - Software Developer:** Software developer specialising in the creation of interactive and responsive user interfaces using modern JavaScript frameworks.

**Danny Currie - Senior Software Developer:** Danny joins us from Gavuin, a data analytics company where he was the product manager and senior full-stack software developer.

**Shanthi Varanasi - Middleware Developer:** Shanthi worked at State Street Bank leading the team of developers and was completely responsible for the Finance Risk project. Shanthi has an overall experience of 18 years in the Software Industry working on client-server web based and enterprise applications.

**Valdi Kamenarov - Middleware Developer:** Valdi worked at News Corp UK where he took part in the development of their Customer Management Platform. His role varied from analysing business requirements, system design and developing strategic business functionality.

## 7 Competitive Landscape

There are a number of players who are aiming to reform the insurance market with innovative solutions based on technology. A survey conducted by PwC, indicates that ‘74% of insurers expect the insurance industry to undergo a change in market operation due to the advance of technology’ [10]. There is a high demand for a system that is efficient for both brokers and insurers.

### 7.1 Situational Analysis

#### 7.1.1 Corporate

**Strength:**

- Strategic collaboration with Gen Re
- Blockchain-based platform
- Unique platform features
- Well funded
- Versatile leadership team with key experience

**Weaknesses:**

- Currently only one official partnership
- Low marketing presence to the target audience

**Opportunities:**

- Replacing outdated IT systems
- Demand for a global electronic platform to provide efficiency
- Blockchain adoption

**Threats:**

- Established projects that already offer various classes of insurance
- Regulatory hurdles

## 7.1.2 Industry

**Threat of new entrants: Medium**

- Insurance solutions' projects are emerging and establishing themselves in the industry with similar technologies and offerings

**Bargaining power of buyers: Low**

- Our target audience are keen to conduct their processes on a trusted and seamless electronic platform

**Power of suppliers: Low**

- iXledger are the insurance solutions provider who handles participant fees based on their activity scale

**Competitive Rivalry: Medium to high**

- Xuber are operational with regular funding from owners DXC Technology
- Xuber operates in multiple regions and offering several classes of insurance
- PPL obtain access over London markets and the necessary clients internally

**Threat of substitutes: Medium**

- Various blockchain-based projects are offering insurance solutions to meet both the insurer and broker requirements

### 7.1.3 Platform Functionality Matrix

Below is a Platform Functionality Matrix of the closest peers in the market.

Company	Blockchain	Instant Messaging	Placing business	Cross Product	GDPR Compliant	Claims Management	Policy Management	Premiums	Mobile Access
<b>iXledger</b>	✓	✓	✓	✓	✓	*	*	*	*
<b>PPL</b>			✓	✓	✓		✓		
<b>Xuber</b>		✓	✓	✓	✓	✓	✓	✓	
<b>fidenciaX</b>	✓		✓			✓	✓	✓	
<b>Etherisc</b>	✓					✓	✓	✓	
<b>Aigang</b>	✓		✓			✓	✓	✓	
<b>AkinovA</b>			✓				✓		
<b>Insurercore</b>		✓	✓	✓			✓		✓
<b>Blocksure</b>	✓		✓			✓			✓
<b>ChainThat</b>	✓	✓	✓			✓	✓	✓	
<b>SchemeServe</b>		✓	✓	✓	✓	✓	✓		✓

✓ = Offering

\* = Pending

Adopting similar functionalities as iXledger are **PPL**, **Xuber** and **fidenciaX**. These three projects have been categorised as iXledger's closest peers in providing insurance solutions.

## 8 Partnerships



We are in a strategic collaboration with one of the world's leading reinsurance companies, Gen Re (a Berkshire Hathaway company). The aim of our partnership is to deliver transformative insurance solutions amongst life and health clients of Gen Re in our insurance marketplace. This project will initially focus on the UK, with the aim to expand to Europe, Asia and the US.

The insurance market is broad, and we are researching multiple use cases for the iXledger platform. During Q2 and Q3 2017, our strategy has been to focus on internal operations rather than expanding externally. In Q4, we have actively sought to meet the market and spin diverse collaboration opportunities which we currently can not disclose till a confirmation is made. Going forward, external focus is our priority during Q4 2017 and Q1 2018 (See page 18)



## 9 Disclaimer

This content provided is for informational purposes only related to our approach of providing insurance solutions based on blockchain technology. The information above may not be exhaustive and does not imply any elements of a contractual relationship. This document in no way constitutes the provision of investment or professional advisory. iXledger does not guarantee, and accept legal liability whatsoever arising from or connected to, the accuracy, reliability, or completeness of any material contained in this document. Participants and potential IXT token holders should seek appropriate independent advice prior to relying on or entering into any commitment or transaction based on the information provided in the whitepaper, which is for reference only. This paper outlines iXledger's current vision for the platform and we intend to realize this vision, however, our vision is dependent on numerous factors and it is entirely possible that the platform will not be implemented as outlined in this paper. The platform and its tokens are not intended to constitute securities in any jurisdiction. This whitepaper does not constitute a prospectus or offer document in any form and is not intended to constitute an offer of securities or a solicitation for investment in securities in any jurisdiction. IXT tokens are functional utility smart contracts within the iXledger platform and memberships are not for speculative investment. There is no promise of future performance, or promise of inherent value, or promise of continuing payments and no guarantee that IXT token will hold any particular value.

## 10 References

**[1] Allianz - Global insurance markets**

URL:

[https://www.allianz.com/en/economic\\_research/publications/working\\_papers/insurance\\_markets/GVM\\_260416e/](https://www.allianz.com/en/economic_research/publications/working_papers/insurance_markets/GVM_260416e/)

**[2] Association of British Insurers, Keyfact 2016 : “UK Insurance and Long Term Savings, Key Facts”**

URL:

<https://www.abi.org.uk/globalassets/sitecore/files/documents/publications/public/2016/keyfacts/keyfacts2016.pdf>

**[3&4] Insurers search for growth, by Clyde & Co**

URL: [https://www.clydeco.com/uploads/Files/J368471\\_Search\\_Growth\\_Booklet\\_V3.pdf](https://www.clydeco.com/uploads/Files/J368471_Search_Growth_Booklet_V3.pdf)

**[5] New real-time, blockchain-enabled platform to secure and streamline the marine insurance process, by EY**

URL: <http://www.ey.com/gl/en/industries/financial-services/insurance/ey-blockchain-marine>

**[6] KPMG: Will on-demand insurance become mainstream?**

URL:

<https://home.kpmg.com/content/dam/kpmg/uk/pdf/2017/09/will-on-demand-insurance-become-mainstream.pdf>

**[7] Future Trends. A Seismic Shift Underway: How people, technology and market boundary trends are shifting the insurance industry**

URL:

[http://www.project-consult.de/files/Majesco\\_Future\\_Trends\\_A\\_Seismic\\_Shift\\_Underway\\_2016.pdf](http://www.project-consult.de/files/Majesco_Future_Trends_A_Seismic_Shift_Underway_2016.pdf)

**[8] Insurance Post: Insurance Census 2017: Face of insurance.**

URL:

[https://www.postonline.co.uk/insurer/2481654/insurance-census-2017-face-of-insurance#discussion\\_thread](https://www.postonline.co.uk/insurer/2481654/insurance-census-2017-face-of-insurance#discussion_thread)

**[9&10] PwC Global: Insurance 2020. The digital prise - taking customer connection to a new level.**

URL:

<https://www.pwc.com/gx/en/industries/financial-services/insurance/publications/digital-non-life.html>