# InsureX

# An Insurance Marketplace based on Blockchain

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## 1. Executive Summary

#### 1.1 Introduction

InsureX is creating an alternative marketplace for insurance products. Our goal is to transform the way the market trades and manages insurance products. This paper gives an overview of our approach.

### 1.2 The Insurance Market Today

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

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]

London is the capital of the global insurance market in Europe with a long history as a marketplace for all kinds of insurance. Insurance is traded in traditional ways, often manually and with several layers of intermediaries. The inefficiencies have resulted in most of the major insurance institutions taking a keen interest in blockchain technology with the hope it will provide a modern, more streamlined alternative.

### 1.3 The Problem

Most insurance is traded via third parties such as brokers and other intermediaries. This adds costs, time and complexity to the process. It should be noted that brokers can fill important functions in the market [3], for example when insurance is restructured to match the needs of reinsurers.

The insurance industry as whole has not yet adopted or embraced new technology to meet the demand of new products and the increasing concerns about data privacy. Increased competition and changes in consumer behavior are moving them in this direction.

Insurance processes that manage risk, premiums and claims typically involve a significant exchange of data between multiple parties. Currently, the different parties would store their own copies of data, and process it individually. This makes it difficult to synchronise and collaborate through a shared process.

### 1.4 Opportunity

Located near the City of London, and working with some of the largest insurers and reinsurers in the world, we are well positioned to create a new, alternative insurance marketplace.

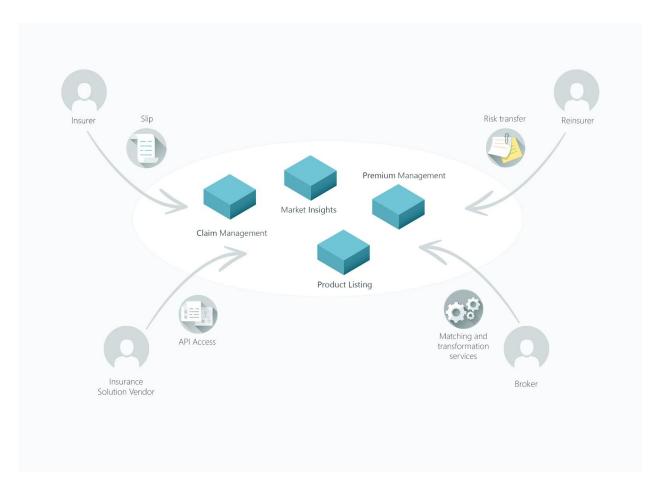
InsureX offers a disruptive environment which will be beneficial to the currently outdated insurance sector. Participants in this marketplace are able to transact business in a highly efficient, secure and consistent manner with easy access to historical data and valuable market insight. The InsureX platform uses blockchain technology to streamline the process between buyers and sellers of insurance products. Not only does it provide a place to find and trade insurance, but a platform to manage the downstream processes related to programs, policies, premiums and claims.

#### 1.5 Business Model

InsureX charges a commission on transactions being executed on the marketplace and an annual subscription for memberships. As the InsureX community grows the transaction volumes will increase and new products and services will be available.

### 2. The InsureX Platform

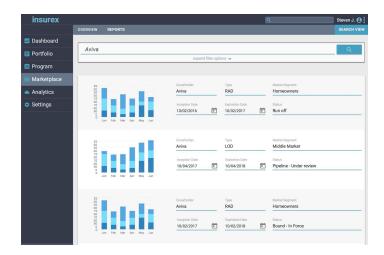
The InsureX marketplace is primarily for institutions such as insurers, reinsurers and brokers. Bringing these participants together directly results in an efficient, cost-effective and transparent marketplace.



### 2.1 Key Features

#### 2.1.1 List and market insurance products

Products can be listed to a public audience or limited to a selected group of buyers only. A product listing includes the key characteristics and potentially targets specific regions and markets. The flexibility we offer allows the maximum chance for successful matching.



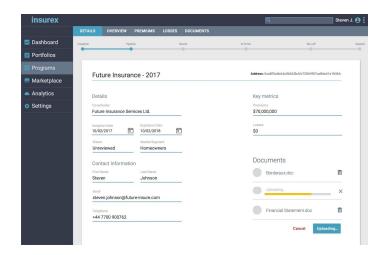
Marketplace view displaying a search result of several insurance products and their high level information.

During the subsequent negotiation and pricing our communication and document sharing functionality make the process simple and transparent.

#### 2.1.2 Transaction Execution

When the parties have agreed on the terms, a transaction is added to the distributed ledger. Our blockchain solution ensures that everyone can see the same transaction details and documents.

Because of the shared nature of blockchain, there is no need for a third party to verify and confirm the transaction. Participants in the transaction who have the right permissions will be able to see the same information in real-time.



A detailed view of an example insurance product. The record is saved on the blockchain with the associated address hash on the top-right side.

### 2.1.3 Portfolio Management

Our portfolio functionality allows you to get an overview of the transactions you have executed and a summary view of key metrics. The portfolios are hierarchical and can be nested to form complex structures to help with organisation and structuring.

High-level information such as risk, premium, claims and performance information is available and can be visualised and exported.

#### 2.1.4 Market Insights

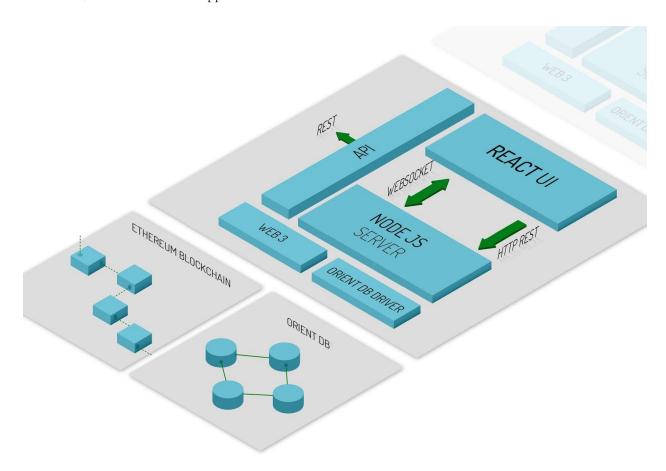
InsureX is able to provide a detailed overview of market activity across regions, market sectors, exposures etc. The ability to aggregate statistics gives an unparallelled view of the insurance market.



An overview of the InsureX dashboard displaying various market data and user notifications. This dashboard allows each user to customize and monitor data based on their requirements.

### 2.2 Technology

The InsureX architecture is a highly scalable and robust combination of the latest technology advances in blockchain, UX and server side approaches.



#### 2.2.1 Blockchain

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

Our platform leverages the Ethereum blockchain and its smart contracts which provide a comprehensive development environment and a large community [4].

### 2.2.2 Private, High-Performance Storage

In order to process certain transactions, private and confidential information is required to be stored and exchanged. Our storage is a secured NoSQL data fabric. It compliments the blockchain network by providing

fast access to data such as medical records or other confidential information. Multiple levels of security, external authentication and strong usage profiling are included.

#### 2.2.3 Application Stack

The UI is implemented using React which is fast and responsive. We use a Node.js backend which handles most of the business logic. The React and Node.js combination has proven to be a very fast, lightweight and robust approach.

The UI renders on tablets and phones and as part of our roadmap we're developing a mobile app, in order to take advantage of the native phone and tablet capabilities.

#### 2.3 Data and API Services

InsureX will generate large amounts of data which will be of huge value to our customers. The data will provide a market insight which does not exist today. External companies are able to utilise this data as part of their solutions, even if they are not directly using the InsureX marketplace.

Parts of our software will be open source, available to other insurance solution vendors to use. By doing this we aim to create a strong ecosystem and with an active community of adopters.

### 2.4 Target Audience

InsureX marketplace is for participants of the insurance industry and the core benefit to our users will be the ability to search and match the various needs as an insurer or reinsurer.

- **Reinsurer.** Buy insurance programs or selling i.e. retrocession insurance.
- **Insurers.** Sell insurance products to reinsurers i.e. risk transfer.
- Brokers. Provide tailormade structures and other services.
- General Companies. Companies who wish to insure their goods, property or people will be able to
  join the platform.

In order to do certain things like listing of insurance products, a Know-Your-Customer KYC process will be in place.

### 2.5 Evolving the Platform

There are many areas we aim to expand into once the initial platform is rolled out:

- Independent risk and valuation services.
- Direct consumer products.
- Automated brokering service.

## 3. IXT - The InsureX Token

The IXT Token is used to power the InsureX platform and works as a mean to reward or get rewarded for participation in the marketplace. Each activity on the platform has an associated cost specified in IXT. As activities are carried out on the platform, IXT is transferred from one participant to another. As a result of executing these activities, the platform will be rewarded a fee.

The tokens serve several functions in our environment:

- Transaction execution reward
- Reward for providing data
- Platform access
- API licences

#### Example

- Participant A creates an insurance quote in the marketplace and provides the required IXT.
- 2. Participant B and participant C get notified and respond with their offers.
- 3. The selected participant gets rewarded with IXT.

#### 3.1 IXT Token Burn

Of all fees collected by the platform, a portion is burnt. This introduces a predictable and effective reward structure for using IXT. The remainder is reinvested in the operation and growth of the platform.

### 3.2 Getting IXT

IXT can be bought from the InsureX platform or from most token exchanges.

### 3.3 IXT Crowdsale

IXT will be issued during our crowdsale. Once completed, no further tokens will be generated. The sale will last three weeks from the 11th of July to the 31th of July.

A maximum of 130,000,000 IXT tokens will be generated, of those 30,000,000 tokens will be kept as reserve. A maximum of 100,000,000 IXT will be sold during the crowdsale, any remaining tokens will be burned.

Example: If 40,000,000 IXT are sold during the crowdsale then the remaining 60,000,000 will be burned. This would result in a total pool of 70,000,000 which equals to the number of sold tokens plus the InsureX reserve of 30,000,000.

Tokens will be issued in 5 tiers, each with an associated bonus model (see below).

Ownership of IXT carries no rights other than the right to exchange and claim over the platform. IXT does not represent or confer any ownership right or stake, share or security or equivalent rights, intellectual property rights or any other form of participation relating to the InsureX Platform.

### 3.4 IXT Pricing Model

Launching price formula:

$$Price = Base\ price * (1 + f(x))$$

**x** represents the current tier.

 $\mathbf{f}(\mathbf{x})$  represents the normal distribution with a mean of o and a standard deviation of 3.

### 3.5 IXT Bonus Model

The base price of IXT is 1,125 per ETH. The price for each tier is calculated on a bonus model and the distribution of the tiers is based on a first-come-first-serve basis. Early investment will benefit from the highest bonus, which will diminish down to 0% bonus at the last tier.

The bonus model will follow what has been sold during the pre-sale. Example: We sell 7,000 ETH during the presale, hence the 1st tier will start at 7001 and add 1,634 ETH on top of that. We continue through the tiers until the maximum goal of 83,778 ETH has been reached.

| Tier | Ether Amount | Number of Tokens | Bonus | IXT Per ETH       |
|------|--------------|------------------|-------|-------------------|
| I    | 1,634        | 2,500,000        | 36%   | 1 ETH - 1,530 IXT |
| 2    | 1,852        | 2,500,000        | 20%   | 1 ETH - 1,350 IXT |
| 3    | 15,456       | 20,000,000       | 15%   | 1 ETH - 1,294 IXT |
| 4    | 20,392       | 25,000,000       | 9%    | 1 ETH - 1,226 IXT |
| 5    | -            | Remaining IXT    | 0%    | 1 ETH - 1,125 IXT |

If by the end of the crowdsale the initial goal is not reached then all funds are returned to their respective owners.

InsureX reserves the right to change the number of tokens in the tiers before the crowdsale begins.

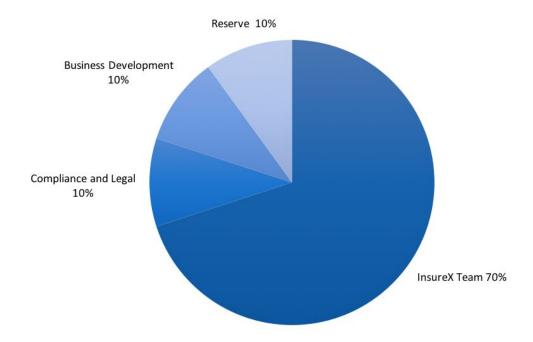
### 3.6 IXT Distribution

- Crowdsale Pool: maximum of 100,000,000 IXT.
- InsureX Reserve: 20,000,000 IXT. This portion will be allocated to reward early adopters and provide liquidity to the market if required.
- InsureX Team: 10,000,000 IXT. This will be allocated as rewards for advisors and team.

### 3.7 Budget Allocation

The funding raised through the crowdsale will be used to accelerate the building of the InsureX platform to move it from Beta into Production in partnership with a number of insurance and reinsurance partners during Q4-2017.

Pending on the success of the crowdsale, the distribution of funds will mainly go towards development, infrastructure and key hires such as senior actuaries, underwriters and brokers.



InsureX Team Expansion 70% - The majority of the funding budget will go towards an expansion of
the InsureX development team who will implement our proprietary functionality. Additional
industry specialists will be hired.

Some of the roles we plan to hire (either as permanent or consultants):

5 UX Developers

- 5 Ethereum Developers
- o 3 JavaScript Server Developers
- o 5 Testers with focus on automation
- Underwriter/Actuary
- Sales and Marketing
- Compliance and Legal 10% A share of the funds will be set aside legal and compliance in order to establish the business.
- **Business Development 10% -** The business development budget will allow to raise awareness of our platform within the insurance sector.
- Reserve 10% A portion of the funds will be set aside for any future unforeseen costs.

# 4. Roadmap

#### Q2 - 2017:

- **R&D**. Research into blockchain technology and insurance markets.
- **Prototype**. The development team starts to work on a first prototype of the product.
- **Establish partnerships**. Establish relationships with people from the insurance and blockchain industry.

#### Q3 - 2017:

- Funding. Launching of the crowdsale campaign.
- **Team expansion**. Insurex will expand the development team and hire experts in the insurance and development sectors.
- MVP. Fully functional version of the platform with minimal functionality..

#### Q4 - 2017:

- **Sign up 10 clients**. Having 10 clients using the platform in daily operation.
- Extend downstream processes.
- Service organisation. Set up a support team to help clients.
- **General availability**. Initial version available for all the client.

#### Q1 - 2018:

- Go to market. Establish a sales and support organisation.
- Scale the platform. Ensure the platform can scale up.

# 5. The Company

InsureX was founded in London in 2017. The concept came from Ingemar Svensson, whose company Finserve.io was working with various insurance clients who frequently brought up blockchain and the idea of an alternative marketplace.

Shortly after, InsureX engaged a reinsurance company in London who agreed to further explore how this platform could improve security, administration and cost.

Cristina Dolan also joined as co-founder and her experience from the startup sector, technology expertise and her commitment to the blockchain community is the ideal fit for the growth and acceleration of InsureX.

### 5.1 The Leadership Team

#### Ingemar Svensson, Founder & CEO/CTO

Before founding InsureX, 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 & COO

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 (Acquired by Earthlink). She is a member of Forbes Technology Council and in 2016 was judge at the IBM Blockchain Hackathon. Cristina is Chair of the MIT Enterprise Forum in New York were several events have been hosted with industry leaders covering blockchain technology and opportunities. 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 & Entrepreneur in Residence

Mikael has over 17 years experience from the financial markets and start-up sector. Previous to founding InsureX 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. Previous employees includes ICAP and SCB Group.

#### Valdi Kamenarov, Architect

Valdi worked at News Corp UK where he took part in the development of their Customer Management Platform. His role varied from analyzing business requirements, system design and developing strategic business functionality to supporting their live systems.

#### Nicolas Cherence, Lead Ethereum Developer

Nicolas worked in the SocGen CIB Front Office on the Delta One trading desk. After that he joined a financial software company and worked on a Front to Back Office application. He holds a master's degree in statistical and financial engineering from Paris IX Dauphine University.

#### Charlotte Holmen, Lead UX Developer

Charlotte's last role was the first developer hired at the startup Doctify.co.uk. As a full stack developer she and her team took the product from scratch to the award winning product it is today. She also has a previous career as a journalist and editor. Among many gigs he featured her own page in one of Swedens largest travel magazines.

#### **Advisory Board**

#### Ross Campbell, Chief Underwriter General Re, London

Ross is a veteran of insurance industry with more than 30 years of experience. As Chief Underwriter, Life/Health Research & Development of General Re in Europe he will give InsureX unprecedented insight and understanding of how the industry tackles today's challenges.

#### Nick Pester, Partner, Head Of Insurance & InsurTech at Capital Law LLP, London

Nick leads the Insurance & InsurTech practice at Capital Law, where they provide the insurance sector with

more niche / specialist offering grounded in a highly commercial approach. As part of this they advise InsurTech companies across the full range of legal and commercial issues encountered within the space, looking to connect Insurers and InsurTech operators to their mutual benefit wherever possible.

#### Timo Schlaefer, Co-founder / CEO Crypto Facilities Ltd, London, UK

Timo is CEO/co-founder of Crypto Facilities Ltd in London which is a digital asset trading platform who is embracing the demand of new cryptocurrencies. Timo was before that VP Quantitative Modelling with Goldman Sachs in London.

#### Ransu Salovaara, Senior Adviser & CEO TokenMarket

Ransu is a financial industry executive specialised in cryptocurrencies, digital assets and blockchain technology. Serving as the current CEO of TokenMarket InsureX has secured the very best knowledge and experience in this evolving field.

# 6. References

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