A platform for mutual insurance

Reinvent insurance

Introduction

We, consumers love the shared economy because it gives us real value for the price of goods, provides us with bigger choice and makes our life more convenient. The modern technology has reduced transactional costs making sharing assets cheaper and easier than ever — and therefore possible to use on a larger scale. The big change is the availability of more data about people and things which allows physical assets to be disaggregated and consumed as services. But what about financial services like insurance? Why can't we share our risks with other people and buy a policy not from insurance company, but peer-to-peer from a particular person or group of people. The problem here is the risk assessment that by now only insurance companies and banks know how to do. Now the technology is here to make this knowledge available to everyone. There is a lot of data around us. Machine learning is starting to become a commodity and blockchain will allow us to keep funds outside of traditional financial institutions. That's why leveraging our 20 years experience in risk management and scoring we've created REGA Risk Sharing platform - the new standard for the mutual insurance with state-of-art technology that will be available for everyone as the new segment of the shared economy. The REGA Risk Sharing platform will also provide reinsurance facility for all mutual insurance products that comforts the REGA risk management standard. The reinsurance is a huge business in the traditional world and we will be the first to bring it to the blockchain.

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Executive Summary

Our peer-to-peer insurance platform should play significant role in unlocking the blockchain technology potential in insurance industry. It will allow people cover and manage the variety of risks without excessive and inefficient chain of intermediaries. Peers may finally get the opportunity to manage their own risks at their own price without intermediary risk carriers receiving all upside of risk premiums. The platform just takes a flat fee for providing the technological solution to the market, peers receive all the benefits and prolonged risk coverage.

Through our platform more cost-efficient and risk-manageable distributed financial products will be created. We start from delivering our own risk-sharing products to the market, creating value through filling the existing gaps in microinsurance sector, where the competition among traditional insurance companies is low. Our current solution helps members of risk-sharing community to receive medical protection and services for their beloved pets (Lexi Club). Next step, we will use our expertise and disruptive technology to deliver mass market mutual insurance products to the market. Finally, we will create user-friendly interface for community members to develop and manage their own peer-to-peer risk-sharing products, solving common chicken or the egg problem. Our platform is open-source, elaborated on Ethereum blockchain, that makes product design process and financial transactions traceable and transparent.

Peer-to-peer insurance products help to cover potential risks by creating mutual insurance pools with Ethereum smart contracts, which absorb risk realization. Incremental part of these pools are filling Super pool smart contract, which provides second line of financial protection coverage for all other pools on standardized conditions, hereinafter The second line protection This second line protection works on the similar principles as reinsurance in traditional insurance business. We use cutting-edge machine learning technology based on Microsoft Azure solution to assess risks and provide peers with easy access to the platform.

This new approach will finally lead to social role of insurance and provide solution for old conflict of interest between insurance profit gains and claims adjustments. Insurance will finally become the community development driver rather than the source of profit from unrealized risk for insurance companies. Getting rid of intermediaries will make insurance more cheap and affordable. Insured person will become part of the community, which should play significant role in his life and expose moral hazard phenomena to reduce risk on the platform. Peers get additional benefits

by sharing risk coverage with those who can not afford to get insurance products creating reputation based social networks.

We are the first platform that implements risk-sharing smart contracts on the Ethereum Platform and provides a standard for peer-to-peer insurance, delivering a viable solution to the market.

The REGA Risk Sharing platform will also provide The second line protection for all risk-sharing products that conform to the REGA risk management standard. The reinsurance is a huge business in the traditional world and we will be the first to bring it to the blockchain.

We are about to build a community of experts that will help us develop and adjust risk models for different insurance products. To create this community we are going to use crowdsale of the Risk Sharing Tokens (RST) which will be used as an REGA expert license to manage the parameters of the REGA risk models and process some difficult insurance cases. Such work will bring to the token holders additional income in proportion of purchased number of tokens, because part of insurance premiums collected on our platform will be allocated as expert's fee payments and due to limited number of the Risk Sharing Tokens the market price of the REGA expert licence will grow in the future. The Risk Sharing Tokens will be also acceptable by mutual insurance products running on the platform as an investment in mutual insurance pools.

The REGA Risk Sharing Tokens crowdsale will provide funding for platform development. The platform prototype is working now and already available to the community.

Key facts about REGA Risk Sharing platform and platform products:

REGA products

- **Direct:** No agents or brokers
- **Pay less:** 50% off price if compared to standard insurance products
- **Not pay is not gain:** No conflict between a client and insurance company - flat admin fee, 20% of the premium, there is no reason to pay a legitimate claim
- **Not insurance company:** This is not an insurance company, REGA provides infrastructure to create communities that insure own risks. Collected premiums minus 20% are the

REGA Platform

- **Standard:** new standard for mutual insurance
- **Reinsurance:** reinsurance facility for 3rd party products compatible with REGA risk model (REGA Superpool)
- **Scoring:** ready to use scoring models including facial scoring. Application scoring, behavioral scoring and fraud prevention.
- **Identification:** identification using client insured object photo using machine learning algorithms

community funds that can be used only for claim payments or for payback to community members

- **Payback up to 50%:** If a community members did not have claims during insurance period, he/she can get up to 50% of the premium
- **Transparency:** all transactions and payments are in public blockchain
- **Privacy:** no personal information in public blockchain
- **Security:** encryption and distributed database
- **Social:** community members help each other, communicate and share
- **Fast:** 90 sec to get a coverage, 90 min to get claim payment
- **Convenient:** buy and submit claim claims online, no paperwork
- **Open:** open source, building blocks for everyone to create own insurance products
- **Social:** use community of experts, REGA Risk Sharing token (RST) holders that helps to resolve cases and improve risk management models
- **Proof of stake (PoS)**: REGA experts buying RST tokens get license to make important decisions and get revenue from this
- **Underwriting:** REGA platform provides mechanisms for creating an underwriting process for any type of insurance product including client database, product database and product matching algorithms that will help to find the right product based on the clement needs and demographic data.
- **Crowdfunding**: use crowdsale of RST tokens to finance development of the platform and platform products
- **Crowd coding:** use community of software engineers to improve the platform
- **Not from scratch:** use existing scoring & underwriting system created by the team members as the platform prototype

Background

Blockchain technology might change the way we think about financial products and transform financial industry's modus operandi. To the greatest extent blockchain technology is expected to impact insurance and banking industries making it more transparent, manageable and better integrated into global environment. Distributed financial products may become the next standard for risk management on consumer markets.

Back in 2001 our team signed a contract to develop a scoring and underwriting system for the first Russian mortgage bank DeltaCredit. iNSTANTLOAN platform was born at that time and for more than 15 years it is the core business for Bellwood Systems,

parent company of REGA Risk Sharing project. During those years more than $10mln were invested in our system by corporate clients, including DeltaCredit, VTB, Svyaznoy and Sberbank, the largest retail bank in Russia (#56 Forbes), which is currently using iNSTANTLOAN for selling insurance products in more than 10,000 branches around the country. In 2014 we introduced an iNSTANTLOAN cloud service and now clients can use the system for consumer loans and insurance originations. Each month iNSTANTLOAN is processing more than $25mln transactions from several retail clients including MediaMarkt (Metro group).

We've been always dreaming to develop our own financial product and now it is possible thanks to Blockchain and smart contracts technology. Our REGA Risk Sharing platform is essentially the next step for the development of iNSTANTLOAN system that will be redesigned to incorporate Blockchain layer and will be available as open source software and service to the fintech community.

Current market description

Estimating global market of insurance approximately in $5trln., we can affirm low growth rate of collected premiums and persistently low Net Promoter Score (NPS) of global market players. As more than 50% of premiums collected around the world belong to USA, Japan, UK, China, France, Germany markets, it clearly shows great potential for growth of insurance on relatively new markets. Nowadays, in China more than 330mln. people are insured, but much bigger number are those investing in capital markets.

Insurance business processes that manage risk, premiums and claims require a lot of data exchange between many parties involved. Parties store their own copies of data, and process it individually. This makes it difficult to synchronise and collaborate through a shared process. It bring a lot of overhead and unnecessary hidden charges which ultimately are paid by customers.

The main trouble factors for insurance industry, according to many experts, are lack of technological innovations, lack of new business models and new products, barriers to entry for newcomers and excessive regulations. Customers do not trust insurance companies and fraudulent actions flourish. Low risk consumers often pay for high risk consumers.

There are a lot of successful start-ups like metromile.com, hioscar.com, lemonade.com, that change conventional approaches to insurance, testing more transparent, clear and technological models, drawing great attention from customers. New global trends spreading like shared economy, blockchain, robotics. AI, that influence our lives significantly, and set new standards on the markets.

With such enthusiasm in the society we count on big market opportunities for new insurance start-ups that concentrate on developing new products for new economy, capitalizing on Big Data, new approaches to risk management and capital financing, brand new channels of communication with consumers. Currently, financial markets operate through trusted parties infrastructure regulated with central authority. Decentralization principles integrated in existing organizational structures may lead to creation of new more efficient global economy.

Creating REGA Risk Sharing we take into consideration all those trends, feeling consumers are not satisfied with bad service and high prices that insurance companies are providing, leading to common unloyalty of insured. New insurance products created on our platform based on mutual insurance model, will give our members new positive experience of managing risks, making insurance affordable and more suitable to the needs of society. REGA Risk Sharing potential may attract more than 100mln users accumulating more than $5bln insurance premiums. Our platform using Blockchain technology will form new technological and financial infrastructure, which can be used globally. Developers and partners can adapt our products or create their own using their market expertise and unique knowledge about consumers. Our pilot products will demonstrate effectiveness of REGA Risk Sharing scorecards, risk management and marketing channels. It will allow product developers to be confident with our risk management solution.

Solution

Product Roadmap

As a main strategy for creation and testing of new products, REGA Risk Sharing follows the path of providing platform instruments as a base element for partners working on real markets. Project team develops these financial products, while actually remodeling classic business processes on decentralized platform.

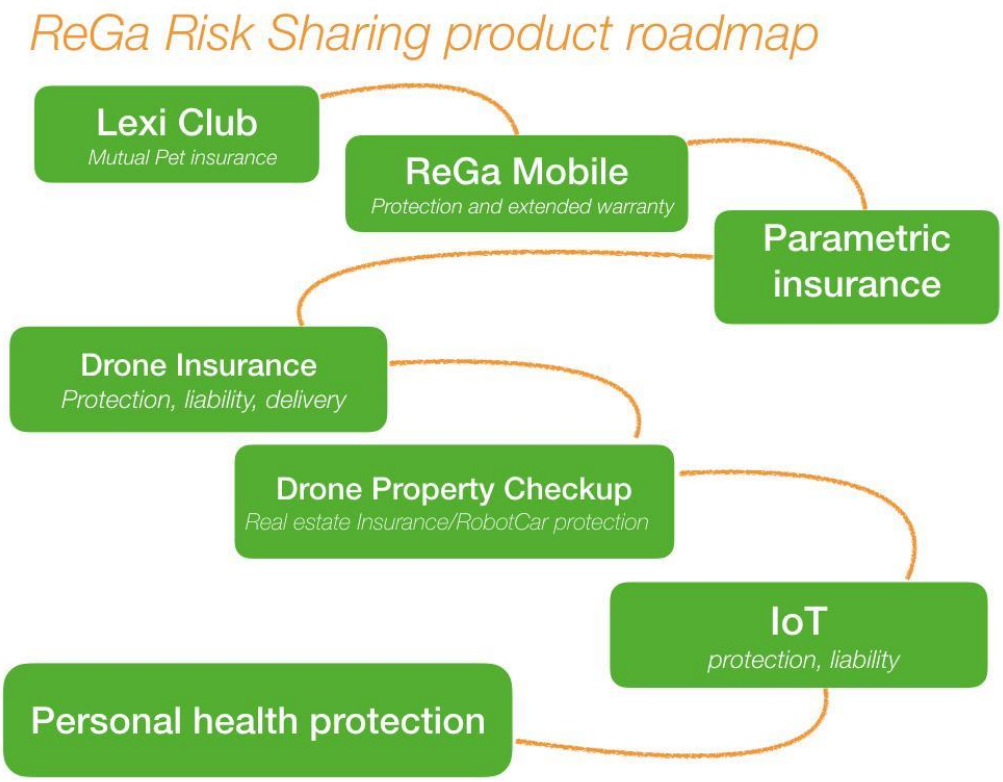
Understanding how difficult it is to promote new technologies on consumer markets, we do not underestimate competition from traditional market players and distrust from consumers. We are carefully approaching market segments, regions, potential customer base for piloting our products.

As a target audience we choose Millennial generation or Generation Y (1981-2000), who are now appear to be the main consumers of digital products and determine trends of development for many sectors of economy.

We highlight for ourselves the following perspective directions of development, where first products on REGA Risk Sharing platform could be developed:

- Newly born markets in transportation, logistics, robotics, AI, where REGA Risk Sharing is technologically similar, while risks associated with loss or damage of the property relatively low.
- New insurance products sold by conventional insurance companies with low penetration rate among potential customer base. Products, where traditional insurance exposes inefficiencies and standard channels of distribution do not work.

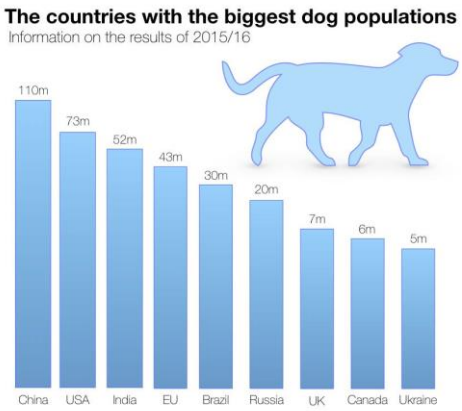
Some use cases of our Platform can be demonstrated through several products, that can significantly influence our lives, but actual possibilities are limitless.

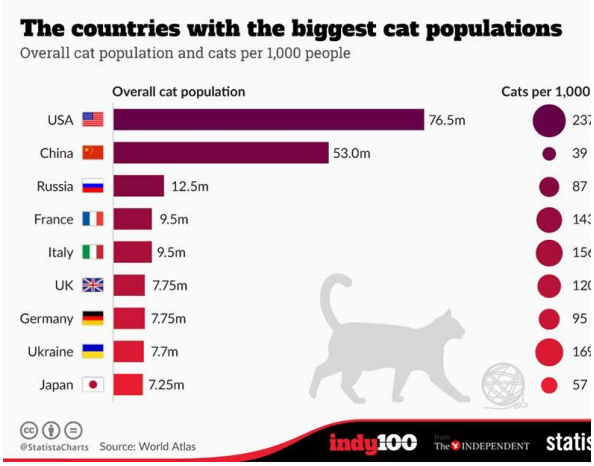


Lexi Club Pet Insurance

Lexi Club became our first trial product for testing market opportunities. Lexi is a club of mutual aid for home pets, protecting them in a similar way as animal insurance does.

Potential market size for Lexi Club worldwide:





Lexi Club is positioned as a community of mutual veterinary help for pets, actually acting as decentralized autonomous organization in terms of blockchain, where every member contributes a fee to mutual member pool, which is used to compensate payments for veterinary services. Fee payment amounts from $4 to $6 per month and depends on kind of pet insured, its age, weight and type of illness. We plan to integrate into the system scoring cards for pet owners to exterminate fraud and pick more precise rate. The variety of product plans available for club members differentiated depending on the service and coverage. Basic program lasts for 3 months and provides $500 coverage for veterinary services, unlimited online consultation and $100 payback if the pet is lost.

We set the goal of creating many programs to satisfy inquiries of club members. Besides we have a plan for providing special programs for partners - veterinary clinics, pet breeders, dog sitters.

Pet owner can enter Lexi club simply by using Lexi chatbot in Facebook Messenger (Facebook Lexi Club Bot) or Telegram (Telegram Lexi Club Bot). You just have to take a picture of a pet and send it over to Lexi chatbot, choose a suitable program and pay the fee. As the payment confirmed and a member receives fancy animated card with ID number, expiry date and pet name on it.

In case of something happening to the pet, Lexi club member can use chatbot to get online help or using our partner's catalogue pick the nearest veterinary clinic and send request for medical help. Afterwards medical clinic representative contacts pet owner and organizes medical treatment. Lexi club member can use the help of his personal veterinary, if he is authorized, as well.

To bring Lexi Club idea to life we had to develop sophisticated pets identification service by photo on neural network technology, create chatbots and online consultancy. We started to expand our network of service providers and experts delivering full cycle service.

According to the Lexi Club's roadmap our next step will be entering USA and European markets. The Economist experts estimate that animal insurance is equal to 1-2% of veterinary services market counted at $16bln level in 2016.

REGA gadget protection

The next product REGA Risk Sharing plans to deliver to the market is mobile device insurance, that will help consumers to recover their gadgets in case of breakage.

Mobile devices are too valuable and precious for consumers to repair without financial aid. Potential market size for insurance of mobile devices is valued over 100's millions of dollars. There are a lot of market players like asurion.com, gadgetinsurance.com, SquareTrade, however the market is just started growing.

It is common that all those programs work mostly for new devices and have rather high price. Our prototype of REGA App for Android can protect a mobile phone that is not older than 3 years, through a mobile application, at competitive price.

Estimating relatively uniform prices for new mobile devices around the world we want to demonstrate, that it is possible to form global insurance pools on Blockchain technology to deliver service anywhere in the world for REGA Mobile App membership owner.

Parametric insurance

Using our platform, new parametric insurance products could be developed. We can use data from various sensors and detectors to trigger insurance payment upon occurrence of certain event. That may reduce transaction costs of claims adjustment and create new type of coverage for undesirable events. Projects like http://www.rainvow.org/ - based on Ethereum, which help automatically compensate the rise of expense in transportation in rainy days, already working to combine Parametric data with blockchain technology. Projects like https://gnosis.pm/ can be used for prediction markets and hedging. We are aimed to develop reinsurance Super pool for such products, that will give them more liquidity, additional guarantees for users, access to riskier strategies, new user base.

Property Insurance products

Drones will become important part of the transportation system in the nearest future. Soon self-flying drones will be the main delivery option for the last mile goods delivery and bigger machines will be able to transfer people for example from one roof to another one in the big city. We are going to crate number of insurance products for drone related businesses: *drone* ***delivery mutual insurance***, *drone base* ***mutual property insurance*** and use drones in ***mutual car insurance***.

For delivery insurance the Insurance premium amount will be calculated using a scoring model based on a maximum value of good for delivery, average delivery time, number of delivery trips and delivery risk zone. The premium amount will be invested in the Delivery Protection Pool and in case when the goods are damaged or destroyed the pool funds will be used to compensate the goods value to the goods sender. The cost of Insurance can be compensated by the goods sender by including a fraction of the Insurance premium amount in the good delivery price.

Drone can be used in Mutual Real Estate Insurance to check the property condition and also can provide evidence when an Insurance case is happened and the property is damaged. The property owner can be asked to place himself for photo/video during the drone checkup procedure to make an additional evidence then the property is belonging to the specific person. After the finish of the property checkup procedure all evidences will be processed and stored in blockchain and an individual tariff will be calculated for the owner.

The car owners might invest in Car Protection Pool and in case of an accident the pool funds will be using to cover cost of car repair. The drone service can be using to collect evidences for the accident. The car owner or driver can use mobile app or chat bot to submit an accident report and provide location for the drone. The smart contract with the drone will be signed and the drone will arrive to the given location to collect video and photo materials for the case valuation procedure. The photo can include licence plate of the vehicles involved. The collected photo also can be used to determine exact vehicles positions on the road. After the drone has finished the accident site checkup the vehicles involved in accident can change the location.

In 2021 global expenditures on IoT technologies will amount to $1,4 trln, according to IDC report. This is an obvious point of growth for global insurance market. There are plenty of new products to moderate insurance premiums for house owners, who installed those systems at home. According to NTT Data, more than 1000 consumers are ready to install smart home systems in their houses. At the same time those consumers are not satisfied with their insurance rates. We see the opportunity for REGA Risk Sharing platform to fully automate not only claims adjustment, but pool membership application itself. Smart things can apply for mutual insurance products automatically, triggered by certain undesirable event, while contacting a drone for visual inspection.

Health Insurance

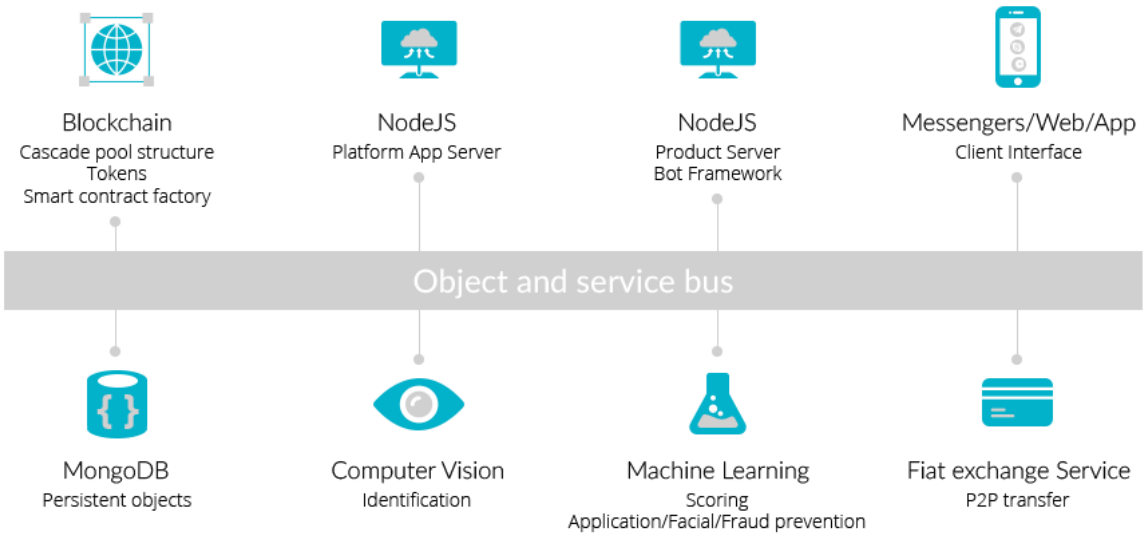
The final step for the platform development would be mutual health insurance. Parametric data from wearables, smartwatches, fitness trackers and other mHealth gadgets and applications, performing like an oracles, can be traced to identify insurance scoring systems and provide qualified risk mitigation. Beginning from lowering franchise of conventional medical insurance programs to creating our own medical insurance products in mutual health pools. Partnering with projects like https://patientory.com/ can give us user-permitted access to health information stored safely in Blockchain to pool customers with the same level of risk and lower their premiums collected for personalized medical help.

Platform

The REGA Risk Sharing Platform (Platform) is an open source software system that will be available as SaaS for developers and for insurance product creators. The Platform ecosystem will also include Super Pool as a reinsurance provider with capitalisation in Risk Risk Sharing Tokens (RST) and Ether. The Platform prototype is already up and running and we are using it for own created products including Lexi Club mutual Pet health insurance and REGA gadget protection. We are starting on Ethereum as the most developed virtual machine but already planning to implement the blockchain tire on other systems including Waves and RSK , becoming blockchain agnostic.

Architecture

REGA platform consists of two main parts: off-chain and blockchain. The off-chain part is the redesigned scoring and underwriting system that includes products and client databases, product matching engine and scoring/risk management module. In blockchain we have several smart contract types: three level cascade pool structure including super pool, tokens and smart contract factory. There is the high level



architecture of the platform.

Products

The platform is using three level product model: (1) product type, (2) product and (3) product instance. For example, the product type is mutual insurance, the product is pet mutual insurance and the product instance is smart contract at Blockchain address. The product is main container for several platform objects including *product calculator*, *product matching rules*, *risk management rules*, *scoring card* and *cascade pool structure*. Basing on platform members needs and scoring results the platform will calculate a product offer for the particular client using product calculator.

The main attribute of the offer is price, the amount that client should invest in a blockchain smart contract to get a policy. For example, if the client needs a 3 months policy for a 5 year old dog the price will be $20 and for other client with a 3 years old dog the 3 month insurance premium will be $15 based on higher scoring of the younger

pet. Product matching rules will help to find best fit product for a particular member from several products of product database. In our pet insurance case it contains as a rule a pet age range and if the client dog is 8 year old we are not able to offer this insurance product to this member. The platform needs to understand how to manage groups of members with the same risk level. Risk management rules will be responsible for these decisions. If number of claims in the particular group let's say it's a midsize 5 years dogs group more than 10% of total number of members in the group then the risk management module could make a decision to close this group and payback all collected premiums to members that did not have claims. The cascade pool structure provides a grouping mechanism based on the risk level (score).

As we've described in the previous example the one group can be midsize 5 years old dogs because they all have a score from 101 to 300 points. And another group will be small dogs with the same age because they have a score range from 301 to 500. Groups of members (sub-pools) will be aggregated to higher level groups (pools). For example, 5 years dogs with a score range from 101 to 500 became one pool and 2 years dogs that all have score from 701 to 900 will create another pool. All pools belong to super pool that establish the minimum score level for 101 points in our example.

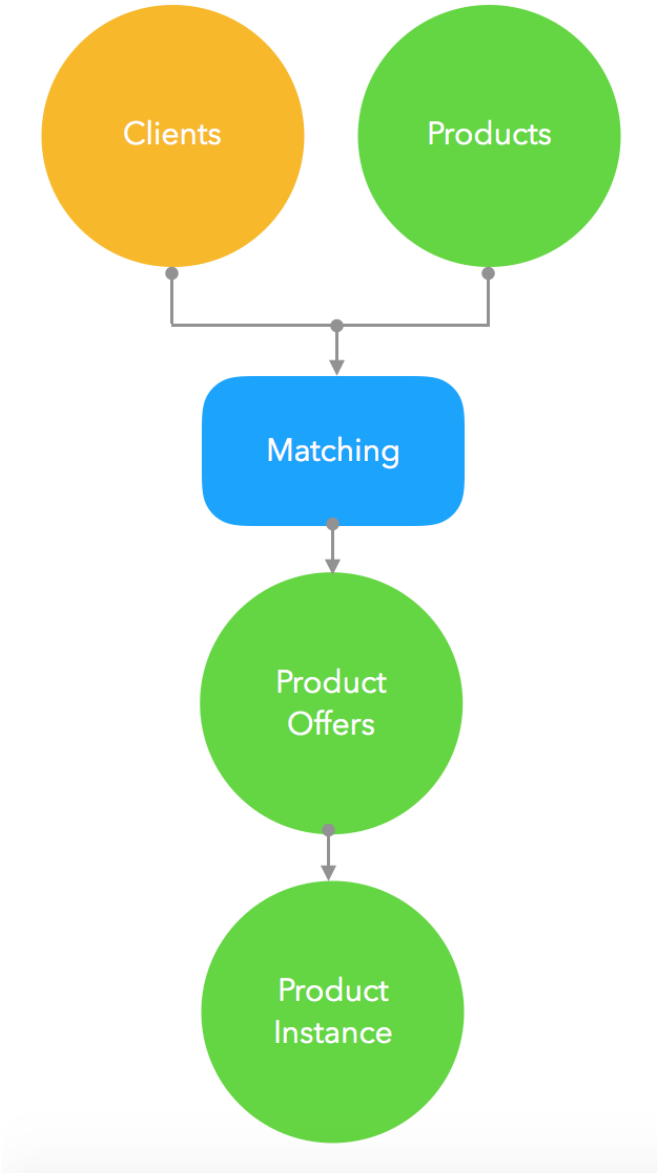
Clients

The second platform database is client information file. Each client will get an unique identification number - the client id that will link all electronic documents to the particular person. We will store all applications that clients has submitted with scoring results, product offers and smart contracts addresses. All information about submitted claims and payments will be linked to the client and we will use this information for scoring model adjustments. The client history will play important part during the risk assessment and give us a tool to calculate individual price for each person.

Product matching

To select right product for the client we need a matching mechanism. It does not make sense if you have just one product to sell but we are creating a platform for many financial products and we must provide service that will help client to search product database. As we've described above each product contains matching rules that describe a condition to whom we can make a offer. In these rules we can use attributes from client demographic data, client location, collected needs and scoring results. If as the result of the matching the client can receive several offers we will use a next level matching on the product type layer where the developer can specify how to present

the matching result to the client. For example, should we show only one or several offers, how sort it or filter.



Risk management

The risk management module or service will be responsible for monitoring of the risk level inside risk groups. We will use scoring to calculate risk level for the particular client and we will group clients with equivalent risks in sub-pools and pools. The risk management uses behavioral scoring models to predict running cost for particular risk group and compare this running cost with the group liquidation cost to make a decision about next action. If the group liquidation cost is less than the predicted running cost then the given risk group can be a liquidated. In this case the group members who did not submit claims will receive back their premiums. As the result the risk model will be adjusted and the premium for this particular risk range will be raised to accommodate the adjusted risk level and if new calculated premium amount is more than the product maximum premium attribute then the new coming member will not be able to receive the product offer and join pools.

There is a list of possible actions that risk management engine can take :

Action	Description
Adjust	Adjust the pool/sub-pool limits
Liquidate	Liquidate sub-pool and reimburse all funds to the members
Create	Create new pool/sub-pool in the cascade pool tree
Reserve	Ask pool/sub-pool to increase reserves and issue the loan request if needed
Risk	Adjust the pool/sub-pool risk level
Close	Close pool/sub-pool (can't accept new members)
Open	Reopen pool/sub-pool (start accepting new members)
Merge	Merge pools/sub-pools

Split	Split pool/sub-pool and create two new pools/sub-pools with existing members
Rise	Rise event

To describe risk management rules we are using a ‘predicate - action’ language where each rule can be defined in the following form:

```
#define rule <rule_name> {
        condition : <rule_condition>
        case <predicate 1> :
                <action 1.1>, <action 1.2>,...
        case <predicate 2> :
                <action 2.1>, <action 2.2>,...
        ......
        default :
                <default action 1>, <default action 2>,...
}
```

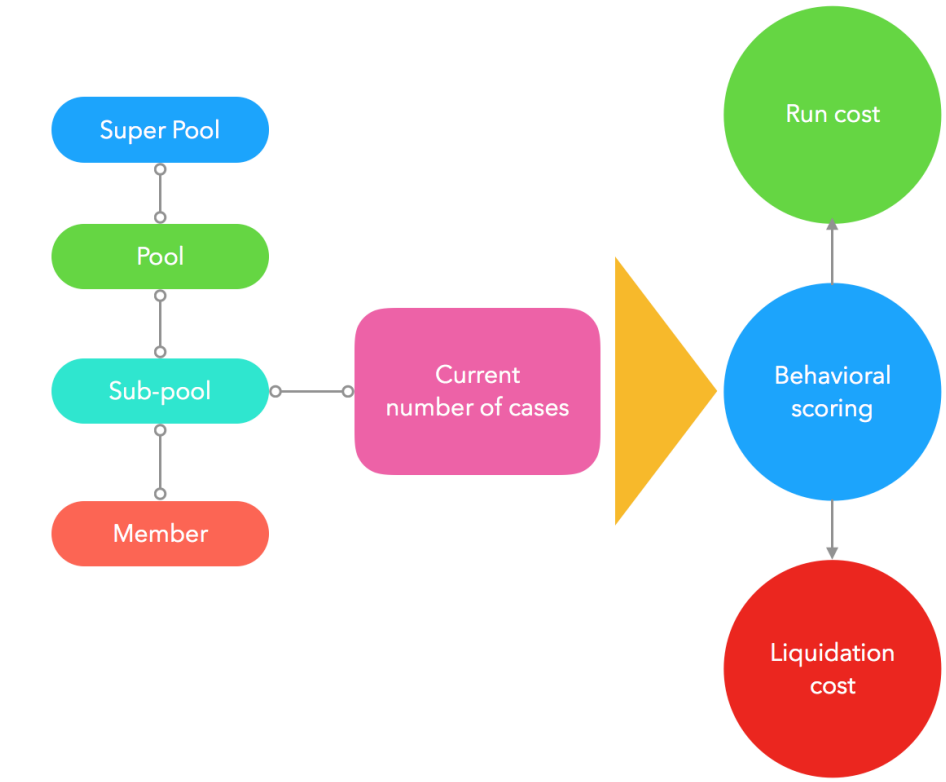
The condition is predicates on the cascade pool structure that specifies when the rule should be executed. Each case must contain at least one action and after the action from the selected case are executed the rule execution is finished. So, the only first case predicate that is true will be executed and if there’s no true case predicate then default actions will be fired. For example, the following rule check pool limit and ask the pool get a loan from super pool if the limit is violated:

```
#define rule check_pool_limit {
        condition : pool.balance < pool.limit
        case superpool.balance > pool.limit - pool.balance :
                reserve(pool, pool.limit - pool.balance);
        default :
                adjust(pool.limit, pool.balance);
                rise(superpool, 'short of funds');
}
```

There is example of the risk management engine work for gadget protection product.

REGA Risk Management Example

The behavioral scoring is described in details in the next part.



Scoring

Scoring is the set of decision models and their underlying techniques that aid the community to measure risk for particular member or/and member property. These technique decide who can get insurance, how much will be insurance premium, and what risk management strategies will reduce a mutual risk for the community members [1]. In our case community can make three types of decisions: first, whether to issue policy to a new applicant, second, how to deal with existing risks and whether to pay claim based on existing information about the case and insurance rules. The techniques that aid the first decision are called application scoring. Usually application scoring deals with client demographic data but we also study a new approach and try to calculate score using client photo. This type of application scoring we will call a facial scoring. The techniques that work with the second problem the risk management are called behavioral scoring. And the last, but not least is fraud prevention, the scoring models that helps to make right decision about a claim payment.

Application scoring

In application scoring we using applicant data to calculate a score. Not all the application data are used in calculation. Let us consider simple scorecard for mutual pet insurance :

Pet type		**Age**		**Weight (kg)**	
Dog	**50**	**1-3**	**50**	**1-2**	**40**
Cat	**60**	**4-5**	**30**	**2-5**	**30**
Other	**0**	**6-8**	**10**	**5-10**	**20**
		> 8	**0**	**> 10**	**10**

In this case 5 years old 5 kg dog will get the following score: 50 + 30 + 30 = 110 and 6 years 2 kg cat: 60 + 10 + 40 = 110 will receive the same score.

Facial scoring

To make application process more convenient for the client, we are going to introduce new type of application scoring - facial scoring, where score is calculated based on the member's face photo. The model prototype is already developed and tested and gives about 70% accuracy. To build the model we are using Machine Learning and Cognitive Service Provided by Microsoft. The Microsoft Face API (MS Cognitive) was used for

the member photo processing where around 15,000 pictures were digitized. For each face picture a flag attribute (good/bad) is calculated based on traditional application scoring model (base model). There are the following face landmarks/attributes that we are using for the facial scoring model: age, gender, head pose, smile, facial hair and glasses. Based on these attributes the Two-Class Boosted Decision Tree algorithm trained on 11, 000 records gives the following results:

True positive	**False negative**	**Accuracy**	**Recall**
2156	**826**	**0.709**	**0.723**
True negative	**False positive**	**Precision**	**F1 score**
1832	**812**	**0.726**	**0.725**

Fraud prevention

The fraud prevention use a scoring model to make a decision about claim payment based on existing information about the case and insurance rules. This technique will be used if claim payment amount is less then established limit and for other cases with bigger payment expert voting will be in use.

Identification

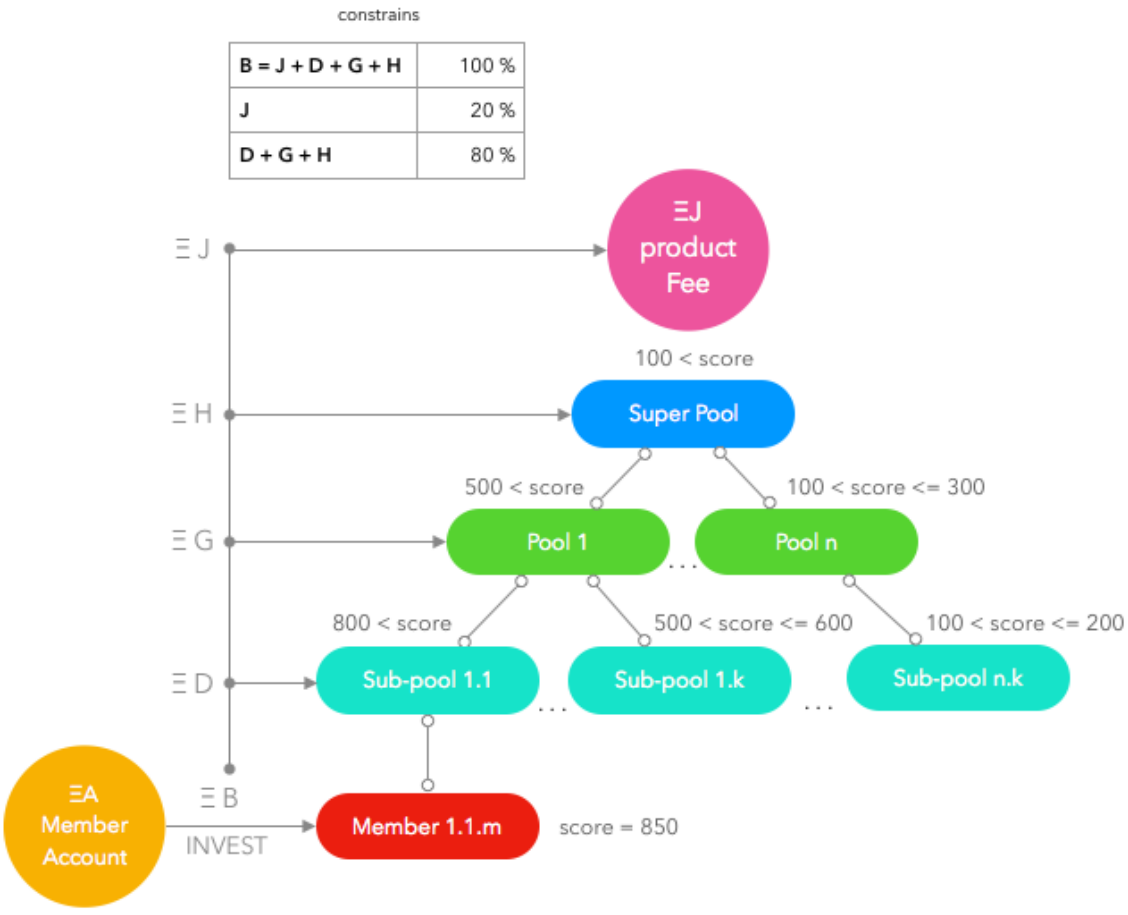
We are going to use Machine Learning for the identification process. For example, for the mutual pet insurance product we created a neural network algorithm that identifies the same pet on different pictures. When the insurance is issued the pet owner makes the pet photo and stores the algorithm processing result (photo signature) in the blockchain. If a case is declared the pet owner should prove to the community that the same pet was treated in the clinic. The pet picture from the clinic will be processed with the same algorithm and the result will be compared with the stored signature. Now algorithm provides with 90% accuracy and we are working to improve its efficiency.

Member smart contract

When the client has accepted the product offer and made the payment for calculated amount of the premium the member smart contract will be created in blockchain. The contract will contain client id, client score and payment limit, the total amount of claims that the community can provide to the particular member. The smart contract also provides a general ledger functionality including accounts and postings. The accounts are implemented as a smart contract persistent storage attributes. Clients accounts keep records about all transactions related to the member including claim payments and transfers between member smart contract and pools smart contracts.

Pools hierarchy

The cascade pool structure provides a grouping mechanism based on the risk level (score). There are three types of smart contract: sub-pool, pool and super pool. There is an example of simple pool structure:



To buy insurance a new member must invest funds in cryptocurrency to a member Smart contract created for the member by the platform. The amount of investment which is insurance premium will be split between several pools in accordance with the

product risk management rules. 20% of the investment will be product and platform flat fee and the rest 80% is an insurance coverage.

Sub-pool

The first level in the pool structure is sub-pool layer. Sub-pool is smart contract that has a member list as an own attribute. Each member contract must be a member of some sub-pool. The sub-pool for the member can be found using search method of the smart contract that will find a path in the cascade pool tree from the super pool to sub-pool for the member contract based on the member score.

Pool

The next level in the pool hierarchy is a pool level. Pool is smart contract that has member list that contains other pools. In this case the pool is a pool of pools.

Super pool

The super pool provides a reinsurance service to all pools in the structure. The super pool contains list of all linked pools and essentially it is also a pool of pools. There is simple claim payment scenario described on the picture. If the member has submitted the claim and sub-pool does not has funds to pay this claim amount it will call the next level of the structure for help. In this case the pool that includes calling sub-pool will be responsible for providing a loan but if the pool also does not have funds to support the claim it will call upper level, the super pool. The super pool will be the last level of support and it will provide funding from the super pool reserve or call a Super Pool Smart Token to sell reserve in Risk Sharing Smart Tokens to make the claim payment.

Smart contract fabric

To provide REGA smart contracts to 3rd party developers we are creating REGA smart contract fabric, smart contract that creates new smart contracts based on templates and parameters. Using this approach we will guaranty that 3rd party smart contracts through API can work with our off-chain modules and use Super pool reinsurance facility.

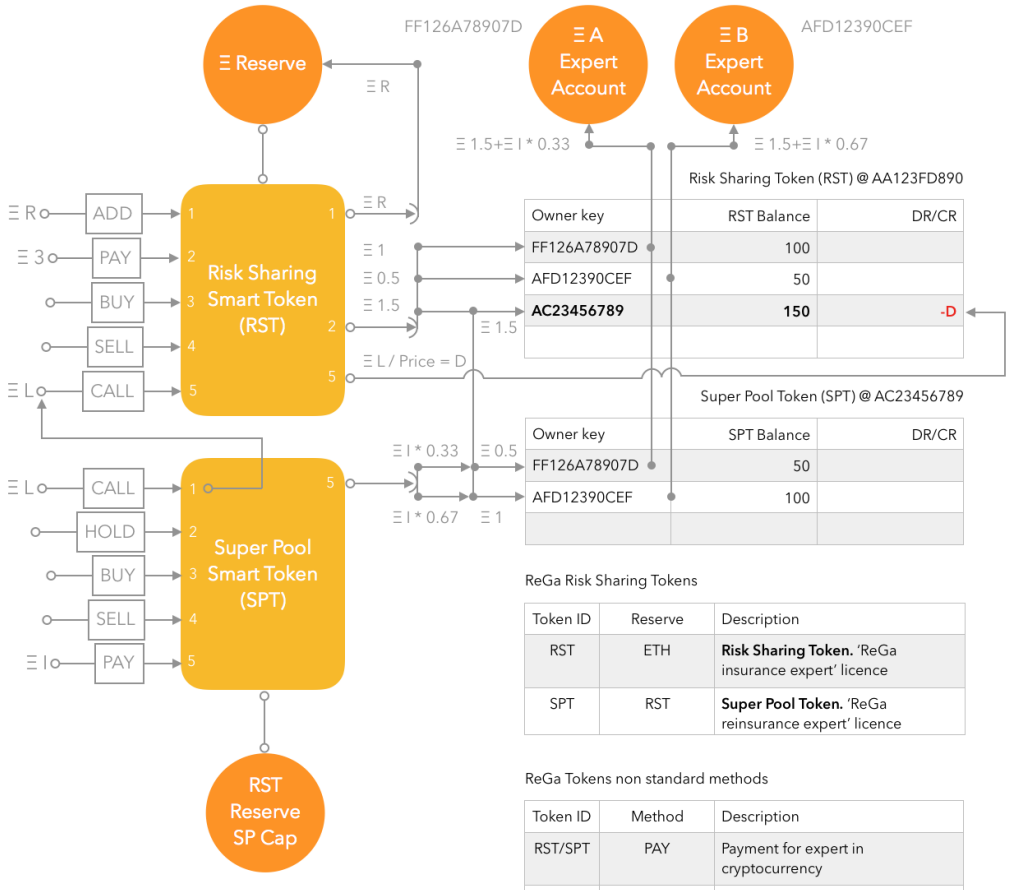
REGA tokens

REGA Risk Sharing platform will use smart tokens based on Bancor protocol to provide funding to the project and to build the REGA Expert community. REGA Tokens also will be acceptable by mutual insurance products running on the platform as an investment

in mutual insurance pools. There are two types of REGA Tokens: Risk Sharing token (RST) and Super Pool token.

Risk Sharing token (RST)

To build a community of experts that will help us to develop and adjust risk models for different mutual insurance products we are going to use the Risk Sharing Tokens (RST). That tokens will be an REGA expert license to manage the parameters of the REGA risk models and to process some difficult insurance cases. Such work will bring to the token holders additional income in proportion of purchased number of tokens. For this purpose a part of the platform and product flat fee will be allocated as expert's fee. The expert fee can be distributed between token holders as cryptocurrency payments to holders account or be utilised to increase Risk Sharing Token reserve or to issue new tokens using BUY method and then distribute new issued tokens between token holders (subject to token holders voting). Risk Sharing Tokens also will be acceptable by mutual insurance products running on the platform as an investment in mutual insurance pools.



ReGa Risk Sharing Tokens

Token ID	Reserve	Description
RST	ETH	**Risk Sharing Token.** 'ReGa insurance expert' licence
SPT	RST	**Super Pool Token.** 'ReGa reinsurance expert' licence

ReGa Tokens non standard methods

Token ID	Method	Description
RST/SPT	PAY	Payment for expert in cryptocurrency
RST	ADD	Increase reserve in cryptocurrency
SPT	HOLD	Disable buy/sell of the token for given number of months
RST/SPT	CALL	Sell tokens to get specified amount of cryptocurrency

Super Pool token (SPT)

The main purpose of the Super Pool token is create a super pool capitalization framework. Token holders can use Risk Sharing tokens to buy Super Pool smart tokens to provide capital for the super pool and to receive additional income working as Super pool expert. The following table shows the Super Pool smart token parameters:

Reserve currency	Risk Sharing smart tokens	Reserve ratio (CRR)	100 %
Initial price	1	RST	

To use Super Pool tokens as a capital for the super pool we must limit tokens liquidity. For this purpose we going to create new smart contract method HOLD that will block SELL/BUY methods for specific number of months. During this hold period Super Pool tokens are not liquid and their reserves can be used for providing additional funding to the super pool. When the hold period is finished token holders can exit from Super Pool tokens using smart token method SELL and get back their Risk Sharing tokens or they can buy Super Pool tokens. The open period for SELL/BUY transactions will be short usually 2 days. Just before a start of the open period the super pool overflow test will be committed and if the super pool reserves in cryptocurrency are more than specified limit then exceeded amount will be divided between additional reserves for Risk Sharing tokens and super pool expert fee (see pool picture). Buying Super Pool Tokens will be subject to additional KYC / AML procedure, so only qualified experts could manage Super Pool risk models.

Microsoft Azure

We are using the following Microsoft Azure services: Azure Bot Service, Azure Storage, Microsoft Cognitive Service, Azure Machine Learning, Azure Ethereum Blockchain Consortium (test and prototyping).

Bot framework

The Microsoft bot framework will allow us to create one application that can run on different messaging platforms including Telegram, Skype, Facebook messenger, Slack and web.

Development plan

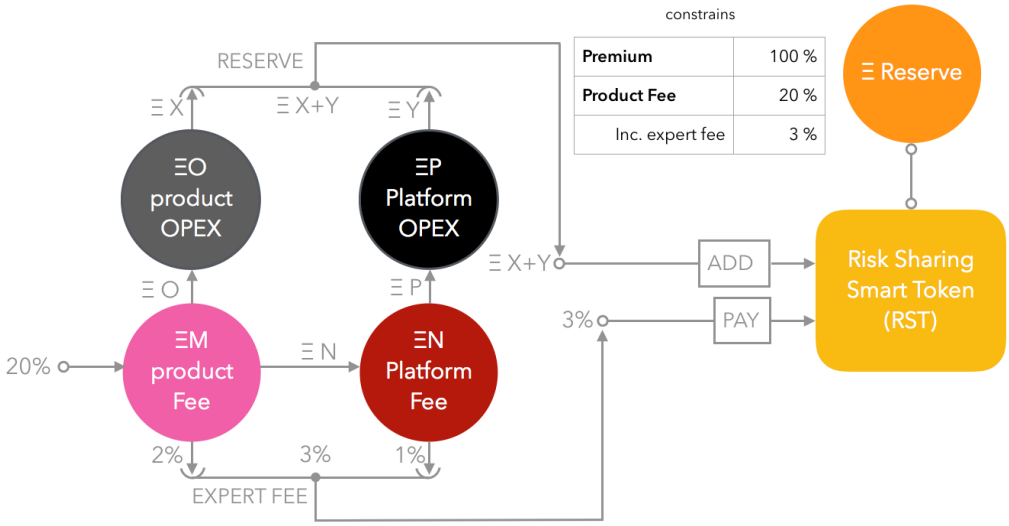
1	Risk management	Redesign claim processing to include a token holder voting in the scoring	4Q 2017
2	Blockchain	Create REGA smart contract fabric	4Q 2017
3	Scoring	Adjust scoring models based on claim processing statistics	1Q 2018
4	API	Develop platform API and start providing it to 3rd party developers	2Q 2018
5	Products	Adjust REGA gadget protection product to include Apple devices in the program	2Q 2018
6	Products	Create first parametric insurance product on the platform	3Q 2018
7	API	Adjust platform API to incorporate new type of products	3Q 2018
8	Scoring	Adjust scoring models for the new type of product using claim statistics	4Q 2018

Business Model

Insured all over the world receive insurance coverage by paying quite high premiums to the insurance companies, covering risks with their capital. Insurance companies are commercial enterprises who receive benefit by taking financial risks which are not realized at the end of the contract period. While the insurance policy is sold through a chain of intermediaries, policyholder bears all commision costs involved.

Our platform provides low cost risk sharing solution for pool members receiving risk coverage without intermediaries, and does not receive any benefits from unrealized risks. We just take a flat fee for providing the service to participants to cover platform and product development costs and making payments to token holders. We create value on the market by providing risk coverage at more affordable price, bringing convenience and simplicity to the market.

Business model structure



REGA Risk Sharing platform is targeting community members through social network approach. Platform members are beneficial sharing risks with people with the same level of risk, and may involve other participants through direct model of distribution, creating network effects on the platform. As the platform develops, more and more clients join and more insurance products created. As soon as we provide an easy and convenient risk modificator for product development peers may create insurance products suitable for their needs, while the platform helps with risk calculations. Starting from being a vendor, creating our own risk coverage products, we become a platform, taking a flat fee for risk management between peers.

Business process example

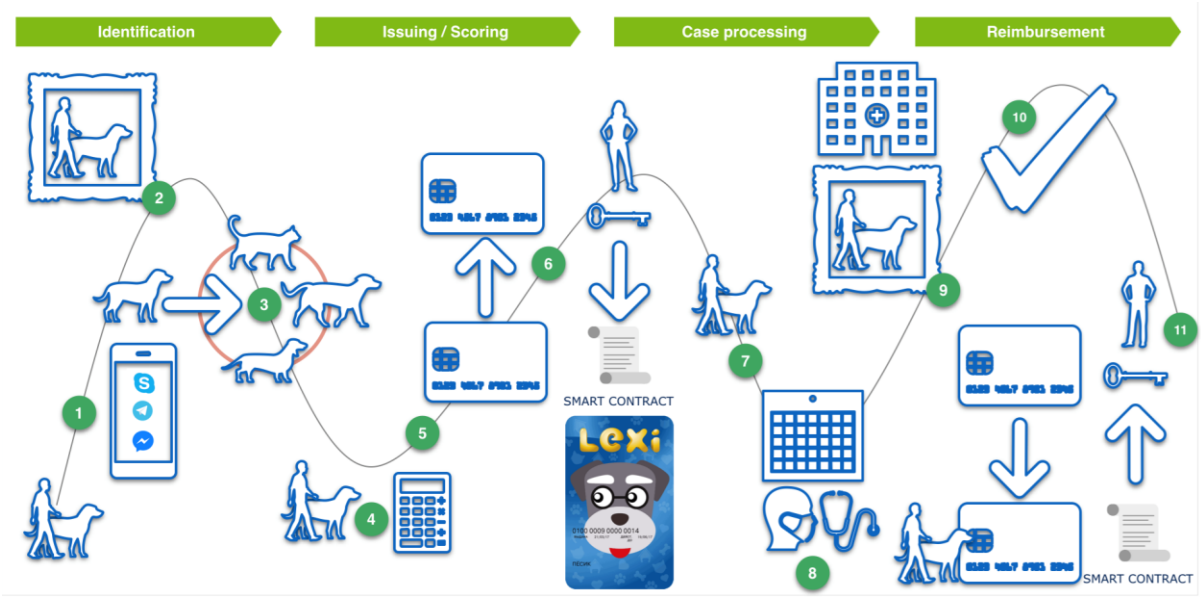
There is business process of the mutual pet insurance products that is running on the REGA platform prototype (see the picture):

1. KYC using the messenger identification process (Telegram, Skype, Facebook), start chat with Lexi Club Bot (Bot)
2. The Client sends to the Bot own photo and pet photo
3. The Bot is using MS Cognitive Service to identify pet type (cat or dog) and process pet photo using own pet recognition algorithm to check if the pet is already in database (existing pet/client)

4. Score pet / client, calculate individual premium amount
5. The client link his fiat e-wallet to the profile and issue a permission to withdraw calculated amount in the fiat currency
6. The Bot found another person who would like to exchange Ether to fiat currency and make P2P exchange transaction. Sends Ether to the member smart contract and issues Lexi Card
7. Client reports the case. The Bot checks if Lexi Card is active (active date = issuing date + 5 days)
8. If card is active the client can use Bot to make an appointment or get advice from vet on-line
9. The Client has visited clinic. Pays for the service and sends pet photo from clinic with geographic location. Also the Client sends bill to the Botl and proves payment.
10. The Bot checks provided documents and approves payment and if the reimbursement amount is less than 50$ approves the payback. If amount is more than 50$, calls expert voting procedures.

The Bot makes up to 80% of the vet bill reimbursement to the client from Pool. A person who would like to buy Ether (can be new client) is found and P2P exchange transaction is committed. The fiat reimbursement amount will go to the client linked e-wallet.

S



REGA Expert Community

REGA Risk Sharing platform will be used by REGA Expert Community to develop and adjust REGA risk management models to process insurance claims. To become a member of the REGA Expert Community someone should buy a Risk Sharing Token(s) during the crowdsale. Such token will give the token holder additional cryptocurrency income for the expert work that will include decision making and voting for several subjects. For example, Risk Sharing holders can use their tokens to vote for giving additional reserve to the REGA Super pool to provide community members with more reliable reinsurance product or became a member of the expert group that evaluate insurance case (claim) that can't be processed automatically due to big payment amount. The claim expert group will be created by the platform using random selection mechanism from the token holders community and will include from 3 to 5 members on each claim. Due to limited number of tokens issued during the crowdsale we predict that REGA Token market value will grow in the future. Each token holder will be able to give up the licence to the REGA Risk Sharing Token smart contract and receive the cryptocurrency based on the REGA Risk Sharing Token exchange rate calculated using the following formula:

$$\square\square\square\square\square\ \square\square\square\square\square\square\square\square\ \square\square\square\square\ = \frac{\square\square\square\square\square\square\square\ \square\square\square\square\square\square\square}{\square\square\square\square\square\square * \square\square\square}(1)$$

where Reserve balance - amount of Ether reserves, Supply - number of issued tokens and CRR - token reserve ratio equal to 20% for REGA Risk Sharing tokens.

We are going to implement number of insurance products in our platform and we understand that more product we going to have bigger expert community we need to create. As a result of crowdsale we will be able to achieve our goals based on provided road map (see Milestones) and number of issued tokens that we hope will be in the range from 70,000 to 10,000,000.

Expert Token Vote

Experts will vote for several token related subjects with accordance with the following rules:

Token	***Method***	***Subject***	***Period***	***Votes***
RST				
	Pay expert fee	*Stop expert fee payment for period/amount*	*1-3 days*	*50% + 1*
		Route all expert fee payments for period/amount to token reserve	*1-3 days*	*67 %*

	Add reserve	*Route all payments for period to token expert fee*	*1-3 days*	*67 %*
	Emission	*Make emission with particular parameters (start date, period, number of tokens and delta reserve)*	*1-3 days*	*50% + 1*
SPT				
	Pay expert fee			
		Stop expert fee payment for period/amount	*1-3 days*	*67 %*
		Route all payments for period/amount to token reserve	*1-3 days*	*67 %*
	Add reserve			
		Stop payment for period/amount	*1-3 days*	*67 %*
		Route all payments for period/amount to token expert fee	*1-3 days*	*67 %*

Expert Case Voting

Experts are also going to vote to resolve case related subjects. For this purpose experts will be selected randomly to create an expert jury that will consist of 5 members and will be called in action if:

A. The claim amount is more than an automatic payment limit for the product;
B. The claim amount is more than remaining limit amount for all automatic payments for the product (each automatic payment decreases the limit);
C. The member originated the claim has a low score (30% less then average score for all community members);
D. The claim was processed by automatic claim payment scoring model and was rejected by it. All rejected payments must be considered by the expert jury.

The motivation for expert to vote and consider the claim will be the Risk Sharing tokens capitalization. There are several voting strategies for expert:

1. To vote always against to the claim payment. In this strategy all good and bad cases are rejected and all collected premiums are returned to rejected members.
2. To vote always to make the claim payment. In this case some bad cases can be paid and that will bring the loss for the community.
3. To vote randomly on each claim payment and not consider the claim specifics. This case is combination of 1 and 2.
4. To consider the case specific and vote with accordance with product claim processing rules. This approach will bring the maximum value for the token holders.

Assume that the profit from a claim is a random variable R, where:

- $R=0$ if the claim is rejected;

- $R=L$ if the claim is accepted and the claim was good. Accepting good claims is good for the insurance model that based on probability of claims. A claim is a good claim if it's created as a result of random event. If the insurance model is working (number of claims are in accordance with model parameters) then token holders will receive the expert commission for the claim processing and also the reserve of tokens will be increased due the super pool overflow (see super pool section for more details);

- $R=-D$ if the claim is accepted and the claim is bad. The bad claim is the claim created by member artificially just for purpose to get support funds from the community. If we are accepting bad claims then the insurance model will become unstable due increased number of claims payments (good and bad) and as result reinsurance level will be engaged to pay claims or to payback rejected claim's premiums. In this case the valuation of tokens can decrease because the part of token reserve can be utilized for claim/payback payments.

Suppose that the claim has number of characteristics including voting result if it was committed. We will use x as a notation for the characteristics vector $x=(x_1,\ldots,x_n)$. The claim characteristics x will give as a score $s(x)$ (to simplify the notation we will use just s and drop the x dependency of the score). We are defining p_G and p_B as the proportions of good and bad claims in the all claims population. $q(G\mid s)$ and $q(B\mid s)$ are conditional probabilities that the claim with score s will be good (G) or bad (B) and $q(G\mid s)+q(B\mid s)=1$. Let $p(s)$ be the proportion of the claims population that has score s.

The expected profit from accepted claim $E\{R\mid s\}=Lq(G\mid S)-D(1-q(G\mid s))=(L+D)q(G\mid s)-D$ with score s is:

Thus to maximize the profit, we should accept the claim with score s if $q(G \mid s) \geq \frac{D}{D+L}$.

Let A be a set of all scores where the inequality holds, then the expected profit per member from the whole population is:

We assume that the profit and losses are independent of the score and that $q(G \mid s)$ is

$$E^*\{R\} = \sum((L+D)q(G \mid s) - D)p(s) =$$
$$E^*\{R\} = \sum_{s \in A}((L+D)q(G \mid s) - D)p(s)$$
$$\sum_{s \in c}(Lp_G p(s \mid G) - Dp_B p(s \mid B)) =$$

$$Lp_G(1 - F(c \mid G)) - Dp_B(1 - F(c \mid B)) =$$

monotonically increasing $Lp_G - Dp_B + (Dp_B F(c \mid B) - Lp_G F(c \mid G))$ is s.

In this case, define $F(s \mid G)$ and $F(s \mid B)$ to be probabilities a good or a bad has a score

$$\frac{F(c \mid B)p_B}{F(c \mid G)p_G} > \frac{L}{D}$$

less then s. The first term in the resulting formula $Lp_G - Dp_B$ is the profit if we accept all claims (and it can be negative number), and the second part $(Dp_B F(c \mid B) - Lp_G F(c \mid G))$ is the profit that scoring and voting brings. So, we need to have $Dp_B F(c \mid B) > Lp_G F(c \mid G)$ or

$$Actualbadrate = \frac{(1-F(s|B))p_B}{1-F(s)}$$

Let $F(s)$ be the proportion of scores below s and $F(s) = F(s|G)p_G + F(s|B)p_B$. We define a bad acceptance rate as $(1-F(s|B))p_B$ and an acceptance rate as $1-F(s)$. The actual bad rate, which is the percentage of those accepted who are bad, is the following ration then:

Suppose that $L = 3\%$ and $D = 150\%$ from the premium, then $\frac{L}{D} = 0.02$ and out acceptance rate is 72%, $p_G = 0.912$ and $p_B = 0.088$. There is an example of the scorecard for which we calculated $Q = \frac{F(c|B)p_B}{F(c|G)p_G}$

c	650	600	550	500	450	400	350	300	250	200
$F(c\|B)$	0,767	0,782	0,787	0,807	0,819	0,834	0,856	0,874	0,903	0,931
$F(c\|G)$	0,152	0,159	0,167	0,173	0,182	0,197	0,224	0,254	0,307	0,369
Q	0,487	0,475	0,455	0,450	0,434	0,408	0,369	0,332	0,284	0,243

From this example we can see that for all c the value of Q is grate then $\frac{L}{D} = 0.02$, so the scoring and voting bring additional profit to token holders.

Reinsurance

The REGA Risk Sharing platform will provide reinsurance facility for all mutual insurance products that comforts the REGA risk management standard. The reinsurance is a huge business in the traditional world and we will be the first to bring it to the blockchain. The REGA Risk Sharing platform products could use reinsurance service by transferring part of the premium to the REGA Super Pool. Usually it will be about 10% of the premium, but for some risky products the percentage can be much higher. The REGA experts will be responsible for REGA Super pool management and will use voting mechanism implemented in REGA Super Pool smart tokens. Each REGA Risk Sharing Token holder can become the REGA Super Pool expert by exchanging

REGA Risk Sharing Token to REGA Super Pool tokens. The formula (1) calculates the exchange rate where CRR = 100% and initial rate after the crowdsale will be equal to 1. The expert work in REGA Super Pool business will bring additional income, if risk model is balanced and Super Pool inflow is bigger than REGA Super Pool outflow caused by claim payments.

Transparency

To provide maximum openness and transparency to the society REGA Risk Sharing is operating as an open source project, where all financial transactions can be traced in public Ethereum Blockchain. Smart contracts involved in the project are published on Github resource and might be reviewed by general public. Blockchain technology provides verifiable public record, that creates environment with no need for trust to third parties. Interaction time stamps created within Blockchain will become an inevitable record that can not be altered or deleted. The amount of insurance pools in each category is open to everybody, as well as number of participants on the platform.

- To Members

Our platform solution helps participants in a user friendly interface overlook all attributes of risk coverage product. Risk Constructor will enable Customers to choose suitable parameters for risk coverage in a fun manner, while immediately calculating the premium, making the process easy and transparent. Helpful Dashboard enables to see premiums collected, amount of risk covered, dates of inception and expiration of the policy, types of risks within the policy. Social Network Bot will also remind policyholder about approaching expiring date of policy. To insure the risks are covered the reinsures Member Pools in Super pool structure to guarantee stability of the whole structure, according to standardized risk typology.

- To Partners

REGA Risk Sharing will provide Partners with Open API to connect to the platform and get access to Customers. Personal blockchain accounts and transactional records will be created to monitor overall activity. Reinsurance Super pool structure, created to cover substantial risks involved within the products, will give additional confidence of credibility of the platform to third parties. Compliance of business processes with legal environment in different jurisdiction is univocal for REGA Risk Sharing platform.

- To Investors

We disclose all necessary information to investors and auditors to ensure clarity and accuracy of operation, including risk assessment. Investors participating in crowdsale of REGA Risk Sharing tokens will receive benefits from growth of the platform, as the price of tokens rises on the market with greater inflow of insurance premiums, besides

additional payments according to smart contract provisions. To ensure liquidity of REGA Risk Sharing token we create Smart contract in Ethereum, that will guarantee Investors a buyout of their token at a certain price, determined by market demand.

- To Regulators

We ensure regulators to comply with all necessary procedures including identification of platform participants, working according to current jurisdiction legislation. Internal policies are designated to prevent and mitigate possible risks of the platform being involved in any kind of illegal activity. REGA Risk Sharing adopts risk-based approach to combat money laundering and terrorist financing. The principle is that resources should be directed in accordance with priorities so that the greatest risks receive the highest attention. Upon request of regulating authorities we disclose all information concerning the case, if that information can not be found in public blockchain.

Legal

Blockchain technology raises a lot of significant legal questions, the answers to which cannot be determined with the certainty in the abstract. Theoretically, DAO's are autonomous entities subsisting independently from any legal, moral or physical entity. However, coupling DAO with a real world legal entity would benefit from the efficiencies related to blockchain to blockchain and cryptographic technologies. As Blockchain becomes more widely adopted, legislators, regulators and courts will have to turn their minds to fit associated technologies within existing regulatory framework. Some key legal issues, that should be solved include:

- Applicable law issues – as servers are decentralized and can be spread around the world, determining where a breach, failure or fraud occurred may be complex
- Decentralized autonomous organizations legal status as entities, when they will be facilitating commerce
- Liability side of decentralized autonomous organizations and their founders
- Legal validity of smart contracts

We will try to find the optimal solution to adopt the appropriate structure to legalize operations in Ethereum Blockchain within current legal framework. Possible solutions may include wrapping-up contractual agreement in contractual terms, for example Master Supply Agreement, incorporated as prevailing terms for the linked DAO, or a split-contract could be used which incorporates elements of both of codified program

and more traditional contracts. In respect to the status of the platform one of the possible options would be for contracting entities to simply adopt a free-to-use platform with an agreed code. Another option to enter into more determined, traditional framework could be creation of free-standing Protected Cell Company type structure, which is responsible for the maintenance of the platform and for fulfilling the relevant legal obligations. However, at this stage the flexibility remains and we will definitely consult with professional legal advisors in jurisdictions, where common law in a more creative manner adapts to technological changes of modern time.

REGA Tokens

REGA Risk Sharing platform will use smart tokens based on Bancor protocol (Bancor) to provide funding to the project and to build the REGA Expert community. There are two types of REGA Tokens:

TID	Name	Reserve	Description
RST	Risk Sharing Token	ETH	Platform and product expert licence
SPT	Super Pool Token	RST	Super pool expert licence. Only qualified experts

The Risk Sharing Tokens will be also acceptable by mutual insurance products running on the platform as an investment in mutual insurance pools. Buying Super Pool Tokens will be subject to additional KYC / AML procedure, so only qualified experts could manage Super Pool risk models.

There are several adjustments to the Bancor smart token protocol that we have implemented for the REGA Tokens:

TID	Feature	Description
RST SPT	PAY	Expert fee payment to token holders in cryptocurrency
RST	ADD	Increase token reserve in cryptocurrency
SPT	HOLD	Disable buy/sell of the token for given number of months
SPT	CALL	Sell fraction of the token reserve to receive specified amount in cryptocurrency

PAY

The pay method is used to pay expert fee to the token holders. Each token holder when buying tokens must provide a private account address that will be stored in the smart token contract with amount of tokens belonging to the given investor. The pay function accepts as a parameter an amount in cryptocurrency that must be transferred to all token holders in proportion with token balances. So, if amount is fee amount, tokens - number of tokens in the account and supply - is total amount of tokens then the amount of expert fee for given token holders will be - amount * tokens / supply. If the token holder is Smart Token contract then calculated amount will be paid to that token holders using the same formula.

ADD

This method is adding specified amount to the token reserve.

HOLD

The hold method will disable buy and sell methods for the specific period starting from the current date.

CALL

The call method decreases the token reserve for the specific amount of tokens.

Crowdsale

We are going to use crowdsale mechanism for Risk Sharing Token (REGA Expert licence) and then use part of issued RST tokens to provide reserve to Super Pool Token.

RST Crowdsale Objectives

1	A portion of the funds raised will be used as the Ether reserve for RST (details on the CRR will be outlined in the crowdsale launch announcement), enabling continuous liquidity to Ether for any RST holder, as well as any holder of a smart token using RST as a reserve.
2	A portion of the funds will be used to develop, promote and support the open-sourced, blockchain based REGA Risk Sharing mutual insurance platform including the development of new scoring models using Machine Learning and Cognitive services
3	A portion of the funds will be used to develop, promote and support the mutual insurance products on the REGA Risk Sharing Platform

4	A portion of the funds will be used to provide the initial capital for the REGA Super Pool in terms of reserve for Super Pool Tokens.

Token values

There are several ways how REGA Token will increase their value besides the token price increase due to the high demand on the token market :

- The mutual insurance product on REGA Risk Sharing platform will pay the expert fee to the RST token holders by transferring 3% (subject to change by voting) from each premium amount using the PAY method

- The mutual insurance product on REGA Risk Sharing platform will increase the RST reserve by transferring an amount that left after the deduction of the operation expenses from the product support fee using ADD method

- The REGA Super Pool will increase the RST reserve by transferring part of smart contract account balance in cryptocurrency by the end of each year using ADD method

- The REGA Super Pool will pay the expert fee to the SPT token holders by transferring part of smart contract account balance in cryptocurrency by the end of each year using the PAY method

The Risk Sharing token holders can use their tokens to invest in REGA Super Pool tokens from SPT smart token contract during open period (usually 2 days). When the open period is finished the buy / sell operations of the SPT tokens will be disabled for specified number of months (usually 12). The Super Pool tokes reserve can be decreased by REGA Super Pool smart contract if the Super Pool account balance is less than specified limit and underlying pools have claims to be paid out.

The REGA Risk Sharing token as the smart token can be exchanged at any time to the reserve cryptocurrency, which is Ether using exchange rate, described above. (1)

Milestones

Milestone	Min investment needed	Description
1	7,000 ETH	Lexi Club Mutual Pet insurance implemented on US and EU markets. The REGA platform prototype is redesigned and improved.

2	25,000 ETH	REGA Risk Sharing Platform developed and available to 3rd party developers and insurance product creators. REGA Super Pool is capitalized and can provide reinsurance to the 3rd party products.
3	40,000 ETH	Mutual products range is extended to include car and property insurance. Drone insurance products implemented. REGA Super Pool recapitalized to withhold new product risks.
4	100,000 ETH	Personal health insurance is added to the product range. Service part for the health insurance is added to the Platform. Additional capital provided to the super pool.

Team

Sergei Sevriugin, REGA Risk Sharing CEO, Co-founder. More than 15 years experience in FinTech, currently CEO of Bellwood Systems. Former Executive Vice President of DialogBank, President and CEO of Delta Bank, COO of DeltaCredit. Degree in applied math and cryptology.

Victor Chernyshev, REGA Risk Sharing CTO, Co-founder. CTO of Bellwood Services company. 15+ years experience in financial IT projects.

Roman Ischenko, REGA Risk Sharing Chief Architect, Co-founder. 15+ years of experience in financial IT projects, software architecture and development. Degree in math and applied math.

Sergey Kiselev, REGA Risk Sharing Business development and CMO, Co-founder. 10+ years of entrepreneurship in a different business areas including brokerage, insurance, entertainment. Management degree.

Maxim Urazaev, Lexi Pet CEO, Co-founder. 10+ years of experience in veterinary products and service market, Professional Affairs at Hill's Pet

Nutrition Russia (Pet Food), Area Partner Business Development at Vetoquinol s.r.a. (Veterinary Pharmacy). Degree in Veterinary medicine.

Leonid Morozovskii, Co-founder. 15+ years of experience in commercial banking and insurance, Head of Sales, Vice-President, CEO, Deputy CEO. Law degree, PhD in Economics, Chicago Booth Executive MBA.

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