Once Assurance

Life Insurance in crypto
Trade your life as a Token

Abstract.

Once Assurance is a Defi Dapp that creates NFT's that are backed up by a life insurance. In this sense a person can generate a token that represents its life and place it in a marketplace. Only the holder of the NFT is the one that receives the value of the crypto life insurance once the assured person dies.

This model allows users to set up a price tag for their lives,
It brings future value that materializes when death happens.

1. Introduction

The following system was firstly conceived to solve the retirement problem in the world.

The retirement system is mainly managed by the government.
It is a global trend that most of the developed nations had already inverted their population pyramids. This disparity makes almost impossible to keep a retirement system that is based on the new work force subsidizing the older generation pensions.
Around the world, most of these systems has failed and readjustments that only affect the old people have taken place. New regulations or even pushing further away the retirement age is an example of this.

An alternative to the government are the private institutions such as insurance companies. Usually, the government incentivizes people to save money for their retirements through tax benefits. Nevertheless, the problem are the Inefficiencies in the insurance sector.

Nowadays due to insurance regulation, a person cannot sell its life insurance. It is supposed to protect a relative or close person. It cannot be used to support your future self. In the FIAT world we can´t capitalize from our death and make from our life an active to be traded.

The most relevant pain points of the insurance industry are.

- Bureaucracy – Needed for every process within the company
- Operational costs – The final client pays the bills in the premium
- Legal framework constrains – Limited insurance ownability

Using Once, we had created a parameterized product with a fast underwriting and short KYC. Our algorithm ensures risk liquidity by having a dynamic pricing system that transforms the policy related outputs into a smart contract.
Finally, achieving the goal of giving ownership of the policies to the owners. Giving them the chance to trade their lives and have a voice in the organization through the DAO.

2. Functionality

   Once makes use of its token ANIMA to allow users interacting with its product. The main actions that a someone can perform in Once are:

   - Minting a life insurance
   - Providing risk liquidity

   In principle, this system allows the user to mint an Extra-Life token that represents its life, an Extra-life token is composed by several smart contracts that have the objective to keep the fundamental parameters of the life Insurance.

   For instance, an initial KYC process is needed to assure that a real person is minting its own token. Once this is accomplished, given that a life insurance has personal sensitive data a privacy-oriented network becomes fundamental. With this same process, the data that is related to the life insurance such as the assured sum is also kept public for the Marketplace listing purpose.

   This process of minting an Extra-life NFT can happen several times, a person can create as many tokens as he or she wants to represent its life. All of them will have a minting cost and a sum assured.

3. Token

   The structure of a typical token is the following.

   Private layer:

   - Name
   - Nationality
   - Gender

   Public layer:

   - Image for the NFT
   - Assured sum
   - Crypto currency for the payout
   - Age

The user keeps the ability to protect the information as desired.
Since trading of the token is one of the main features. Any user can disclose its personal information if needed.

4. Utility coin (ANIMA)

The coin needed to mint an Extra-life NFT and, in which the value of the assured sum is stated is called **ANIMA**.
Only by having a specialized coin it is possible to accurately control the relationship between the supply and the premiums to assure liquidity.
ANIMA is out utility coin that has the characteristic of having both, an inflationary and deflationary economic system.

The inflation of the coin is deeply correlated to the life insurance risk pool performance. Every time a new client mints an Extra-Life Token, the designated amount of assured sum is aggregated to the internal Risk Pool of the assured sum. This inflation is only for internal purposes to properly manage the dynamics of the Actuarial Algorithm.
Still 1% of the assured sum is released to the market via Validators.

ANIMA's Tokenomics

Dates	Phase	Supply	Price in USD	Vesting	Cap	% to total supply
01/07/22	Founders and Advisors	2,000,000	0.25	Founders	$500,000.00	5%
30/07/22	Private round 1	1,000,000	0.5	Whitelist investors	$500,000.00	5%
15/08/22	Public Sale 1	2,000,000	0.75	Retail investors	$1,500,000.00	15%
15/09/22	Community Incentives (Drops)	500,000	0.75	Discord & Telegram	$375,000.00	4%
30/08/22	Institutional 1	500,000	1	VC founding	$500,000.00	5%
01/10/22	Development Team	500,000	1.25	Coders and Marketing	$625,000.00	6%
01/11/22	Advocates	500,000	1.5	Insurance Agents	$750,000.00	8%
30/11/22	Private round 2	1,000,000	1.5	Retail investors	$1,500,000.00	15%
15/12/22	Staking 1 year	1,500,000	1.75	Late Liquidity Providers	$2,625,000.00	26%
01/01/23	Public Sale 2	500,000	2.25	IDO	$1,125,000.00	11%
15/01/23	Listing	10,000,000	Market	Market time		100%

5. Inner operations

Life insurance risk management principles

Traditionally a life insurance institution takes a good cut from the premiums the clients pay. The cost to run is usually high, given their fixed costs to cover. Management, employees and agents are examples of these.
The most common risk selection factors that demonstrate sufficient credibility to form the basis of an actuarial risk assessment study includes nationality, gender, age at policy issue, smoker status and amount assured.

Furthermore, the data stream related to the life expectancy and death experience, needed to execute the actuarial calculations to determine the premium recalculation can be automatically calculated in real time. This is possible due to the closing death contracts in the Blockchain and the total Risk Pool cap.

To simplify the tokenization process and give consistency to its ANiMAs coin. Only unique payments premiums are allowed. This means that every token that is generated, represents a smart contract that uses the demographic characteristic of the person as an input and calculates the price of the premium. This premium grant a lifetime assured sum expressed in **ANIMA** coin.

The amount of **ANIMA** granted as an assured sum will be determined by the total **ANIMA** assured sum pool and its capitalization in function to the backup pool.
ANIMA is a coin that its main functionality is to keep value one on one to the assured sum. Its value is supported by the backup pool and the performance of the assets being managed.

6. DAO (Decentralized Autonomous Organization)
   To give decision power to the holder of each individual token a DAO is mandatory. This DAO uses the principles for corporate governance.
   With it, managerial decisions from a variety of topics related to the internal and external repercussions.

   The participation of this DAO is equivalent to the amount of assured sum expressed in ANIMA granted to each individual token.

7. Asset Management

   The assets that are located in the backup pool are invested in a low-risk portfolio. The objective of this pool is to serve as the payout wallet for all the assured sums to be pay and to stablish the relationship for the actuarial algorithm.
   Furthermore, a main functionality of ONCE is to grant the ability of Extra-Life tokens to choose where to invest.

8. Market:
   Keeping in mind that each token represents a person's life and a life insurance. Each token holds 2 different values.

   - Assured sum
     It's the value of the contract once the assured person dies

   - Token market value
     As any other NFT it can be traded to transfer the property of the token

   In this sense, a person can sell its assured sum to someone that is willing to pay the price of the token to gain the property of the token and the right to receive the assured sum.

9. Use case example:

   A person decides to acquire an Extra-Life token to represent its life.
   The first thing to do is to acquire ANIMA, this can be done in a DEX or directly in ONCE.
   This person invests a certain amount of money equivalent to 100 ANIMA coins. After the conversion, this person can mint its token with the 100 ANIMA.
   When minting the token, the related costs (gas fee, mgmt fee) are deducted from the total amount. Leaving 90 ANIMA coins to put into the token.
   Given the characteristics of the person, the remaining 90 ANIMA coins can grant an assured sum of 200 ANIMA.
   Once this person has its token, can decide whether to place this token into the marketplace or keep it privately for a parent to have as a traditional Life Insurance.

10. Death claiming:

    In order to determine if a person has died there are two main mechanisms.

    Oracle:
    The first mechanism is by a decentralized oracle that fetches the death records. Fueled by government death data, it is possible to know if a person has recently died. In this matter when the specifications of the smart contract are met. The funds are released to the holder of the Token.

    Death Consensus.
    The second mechanism satisfies all those nations where the availability of data is not streamed as an API to be consumed.
    This mechanism makes uses of validators that have taken the role of resolving whether a death took place.
    This validators stake ANIMA to have this role.
    When a claim is triggered by the beneficiary, random validators are assigned to resolve the death. The validators must decide, given that

their decisions do affect their validating rating and compromises its stake.
Once a majority consensus is reached, the payment is released in the stated coin when the Extra-life Token was minted.

11. Burning process:
When a contract is completed, the ANIMA coins are changed to the desired crypto currency defined by the contract. With this same process the total supply of ANIMA shrinks as the capital outflows from the risk fund.

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