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The life insurance industry generates billions of dollars in premiums every year. In 2016 alone, the total market size for premiums in the OECD region (40 reporting countries) was more than US$3.86 trillion dollars. Emerging Asia will be the fastest-growing market for life insurance with an estimated real compounded annual growth rate of 10.2%.

As an oligopoly, insurers have traditionally been able to benefit from the opacity and byzantine operating standards of the sector. One of the many examples of this is the inability of the insured to monetize their policies.

Most people do not realize that policies with cash value can be traded in the market for a higher cash value, that is, an individual could sell his policies to a third party instead of surrendering the policy. In 2014, policy lapses and surrenders were in excess of US$112 billion dollars in the US alone, of which it is estimated US$57 billion (250,000 policies) could have been resold in the market.

There are many advantages of buying an insurance policy on the open market. For example stable returns (superior to a similar asset class with the same risk ratings); fixed tenure; liquidity; and low correlation with other asset classes.

The minority of policyholders who know they can extract higher value from their policy face challenges in finding interested buyers as there is no recognizable marketplace. Buyers looking to add policies to their investment portfolio are confronted with similar, if not more, barriers to safely executing the purchase.

The disintermediation of the industry is also necessary on the after-service fulfilment of the insured. Many traditional companies have focused on creating value using technology to enhance periodic portfolio review, advisory or record keeping, but there is a bigger opportunity in ensuring the immutability and the peace-of-mind transition when the unfortunate circumstance of a claim arises. Whether the policyholder is an individual or a company, the fact remains that many individuals do not update their next of kin or beneficiaries when they change their portfolio or will.

http://www.iii.org/fact-statistic/industry-overview
http://www.oecd.org/finance/insurance/globalinsurancemarkettrends.htm
http://www.lisa.org/life-policy-owners/consumer-blog/blog/2015/02/25/lapsed-life-insurance-policies-an-astounding-number

fidentiaX is the world's first marketplace for tradable insurance policies. Our vision is to create a trading marketplace and repository of insurance policies for the masses by leveraging blockchain technology. This blockchain-powered marketplace will provide a trustless, immutable, auditable and transparent environment to disrupt the status quo. fidentiaX Open Source Foundation (FOSF) will be setup with the mission of proliferating the adaptation of blockchain technology in the Insurance Industry.
Insurance, as a means for transferring or distributing risk from the insured to the insurer, has been around as early as the 3rd Century BC. Chinese merchants 'transferred' or 'distributed' their cargo before embarking on a dangerous voyage so as to lower their risk. Babylonian traders took insurance further by hedging their risk with an additional payment to lenders to write-off their loan if the shipment was stolen or lost at sea.

The first life insurance policy was written in the early 18th Century and has since morphed from a single application into numerous iterations with many product innovations. There are insurance policies addressing every need of an individual through their life stages, for example, Endowment1, Whole Life2, Investment-Linked3, Term4, Universal Life5, Key-man6 with various riders such as critical illness7, terminal illness8, premium waiver9, etc.

The insurance industry is dominated by a monopoly of a few major players that have been innovating and coming up with new products and features to grow their business empire. The same cannot be said for the after-sales options available to policyholders.

The oligopolistic nature of the industry has resulted in policyholders being tethered to one insurance giant and having to play by their rules, although the holder of the policy is the very reason for the existence of the insurance company. One example would be the lack of options for policyholders facing a change in their financial circumstance or a change in their needs. Many policyholders are under the impression that they can only go back to the insurer to surrender the policy, or subject themselves to above-market interest rates to borrow against their own asset.

There is also an increasing trend of buyers looking to purchase tradable policies from the market due to the various benefits of this instrument. However, they face challenges such as accessibility to tradable policies and the manual transfer process. These challenges have curtailed the growth of this segment.

The potential market size for surrendered policies in Hong Kong, Japan, Korea, Malaysia and Singapore alone exceeded US$5 billion in 2015, and yet there is no recognizable marketplace (online or offline) for policyholders and buyers to transact.

fidentiaX will disrupt the status quo and break the tethers of the insurance companies by empowering policyholders to monetize their policies. This is also a fantastic opportunity for us to demonstrate the numerous advantages of building a portfolio of tradable policies with stable returns and developing a trustless platform for trading of these policies.

Xchange with confidence.
Existing Policy-Holders

Policyholders facing a challenging financial situation or a change in life stage wherein their existing insurance policy no longer meets their needs are faced with two options:

1. Surrender their policy at existing cash value which is determined by the insurer and lose their protection (sum assured). This brings about an added risk of being unable to invest in another policy due to their current medical condition or with disadvantageous terms due to age.

2. Secure a fully collateralized loan (90%-95% quantum) on their existing policy from their insurer at an interest rate of 5%-7%p.a.

There are types of policies (such as Investment-Linked) with only one option, that is, to surrender their policy, as insurers are unwilling to accept these policies as collateral even though the interest rate charged is five times that of the deposit’s interest.

In a few mature markets, there is the alternative of selling policies to a third party (individual or company) at cash value plus a negligible cash incentive. However, these companies are very selective in the policies they are willing to purchase, for example, endowment or whole-life policies which are near their maturity date are not favoured.

Limited options and the lack of awareness and accessibility have created an inequitable situation for policyholders leading to a status quo which has not changed for centuries. Insurance companies prefer that policyholders surrender their policies (thus releasing them from their sum-assured obligation) rather than encourage trading of these policies.

Some regulators are trying are correcting this bias by imposing advisory requirements on insurers to inform policyholders, before deciding to surrender their policy, of the availability of a market for traded policies.
BUYERS

Increasingly, individuals and corporates are viewing insurance as an asset class within their investment portfolio. However, barriers to entry, such as high mortality charges which increase with age, difficulties in sourcing policies and the manual transfer process make it prohibitive to invest in an insurance policy.

Policies purchased from the open market have various advantages due to the nature of how insurance products are structured:

**Inherent Capital Preservation Feature**

Cash value of a policy consist of guaranteed and declared returns by the insurers, i.e., cash value is effectively preserved and backed by the insurer.

Furthermore, insurance companies are highly regulated by central banks/governmental bodies which have stringent guidelines on the reserve requirements for the insurance companies.

**Eliminating “Setup” Cost Of Insurance**

Original policy holder takes the brunt of the setup cost in the first couple of years due to how insurance policies are structured. The cost of distribution (commission payable to agents, underwriting cost, etc.) is deducted in the first couple of years of the policy.

**Fixed Investment Tenure**

Maturity date (for endowment plans) is defined and allows cash flow management and portfolio planning.

**Mortality Upside**

Policies purchased on the secondary market typically focused on the cash value of the policy and does not price in the element of Sum Assured in the event of mortality of the life assured. The Sum Assured amount could potentially be significantly higher than the cash value.

**Liquidity**

 Tradable policies can be resold in the open market or surrendered at the insurer for immediate liquidity.

**Smoothing Of Returns**

Insurance companies do not typically declare all revenue earned in a good year and keep the undistributed returns as a reserve. These reserves are distributed during a bad year to smooth out the performance of the underlying funds.

The advantages of purchasing a tradable policy from the open market are apparent, however, getting access to tradable policies from a trustless and reliable platform is not as straightforward. There is no notable marketplace that provides easy access to potential buyers seeking to include tradable policies in their portfolio.

Furthermore, there is no standardized fulfillment process for the transaction of such policies, which often requires the buyer to place trust on the third-party provider.
fidentiaX the world’s first marketplace for tradable insurance policies, will be a membership-based ecosystem focusing on the key stakeholders:

**Policyholders**

Providing a liquidity alternative to existing policyholders through a transparent, fair and efficient platform which allows tokenization of their existing policies.

**Buyers**

Developing a trustless marketplace for buyers exploring tradable policies as part of their investment portfolio by leveraging on blockchain technology and its benefits to provide a secured transactional ecosystem.

Our platform features will be designed and developed with these member stakeholders’ needs as a guiding principle.

fidentiaX members’ platform will provide the following features depending on the membership category.
POLICY LEDGER

Individuals and companies are overly dependent on the trusted intermediaries (agents) who sold them the policy to provide after-sales fulfilment. However, due to the high turnover of intermediaries in the insurance industry, the after-sales fulfilment is often found wanting.

When an unfortunate event of claim occurs, it often falls upon the next of kin or the beneficiaries to scour through the belongings of the insured to locate the necessary policy documents in order to make the claim.

fidentiaX’s Policy Ledger breaks from the traditional reliance on intermediaries by creating a digital ledger for policyholders:

1. Consolidate and manage your insurance policies on a distributed ledger.
2. Creating an immutable record of your policies on the blockchain.
3. Premium payment alert
4. Coverage summary
5. Multi-signatory access for beneficiaries and/or trustees on mortality event

LISTING OF POLICIES FOR TOKENIZATION

1. Database on acceptable insurance policies which will include Endowment, Whole Life, Universal Life, Key-man, Investment-Linked, Annuity, etc.
2. Real-time pricing engine with an automated submission of relevant documents for more efficient quotation.
3. Re-purchase option for policyholders who want the option to buy back their policy within a stipulated timeframe.
4. Policies would be tokenized onto the blockchain.

MEMBERS AUCTION (BID YOURSELF A POLICY)

fidentiaX strongly believes that tradable policies should form part of any investment portfolio and will conduct periodic (minimum once a year) private sale for members only.

Policies from the model portfolio will be auctioned for a minimum number of fidentiaX (fdX) tokens and the auction will be open for members to bid on the policy (a real-world asset). The successful bidder will take ownership of the policy and could either cash out the policy or add that policy to their investment portfolio.

We believe this will add stability to fdX token prices in the secondary market.

MARKETPLACE FOR PURCHASE OF TRADABLE POLICIES

1. Marketplace to browse available tradable policies for purchase.
2. Filter based on key criteria (tenure, yield at maturity, amount, etc)

CUSTODIAN SERVICES

1. Buyers could engage to provide custodian services and hold the policy in a trust structure.
2. Facilitate payment of annual premium
3. Realizing the cash value of the policy

Members who purchase policies via the marketplace will be able to choose between transferring the purchased policy to their name or engage fidentiaX to hold it in trust.

PORTFOLIO BUILDER

The Portfolio Builder is a bespoke service for buyers looking to customize and build a portfolio of tradable insurance policies. fidentiaX will provide professional services for sourcing, validation and transfer of the desired policies.
fidentiaX will be focusing on building its brand within Asia before executing its global expansion strategy. Key focus countries within Asia are Hong Kong, Japan, Korea, Malaysia and Singapore.

These countries are selected based on the following factors:

- size of the insurance market
- new business generation
- regulatory requirements and oversight
- surrender value
- competitive landscape
fidentiaX will construct a portfolio with the objective of providing superior performance against a similar risk class investments. The model portfolio will be used to demonstrate the advantages of having tradable policies as part of an investment strategy. The returns generated from the portfolio will be used to fund future development of the ecosystem. Here are some examples of portfolio performance in the market.

Fixed Income Fund (higher risk relative to fidentiaX’s model portfolio)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Fund Size (SGD Million)</th>
<th>Annual Expense Ratio</th>
<th>5 Year Performance</th>
<th>10 Year Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>DL Bond</td>
<td>$244.46</td>
<td>0.69%</td>
<td>1.89%</td>
<td>2.35%</td>
</tr>
<tr>
<td>EPI SG Select</td>
<td>$699.1</td>
<td>0.62%</td>
<td>3.84%</td>
<td>-</td>
</tr>
<tr>
<td>LMWA Bond</td>
<td>$103</td>
<td>0.95%</td>
<td>2.91%</td>
<td>3.40%</td>
</tr>
<tr>
<td>LGSF</td>
<td>$104.8</td>
<td>0.67%</td>
<td>2.55%</td>
<td>3.28%</td>
</tr>
<tr>
<td>MLS Bond</td>
<td>$19.26</td>
<td>1.07%</td>
<td>3.04%</td>
<td>-</td>
</tr>
<tr>
<td>NAHS Fix Inc</td>
<td>$23.92</td>
<td>1.27%</td>
<td>1.96%</td>
<td>2.24%</td>
</tr>
<tr>
<td>PBS Bond</td>
<td>$396.28</td>
<td>0.87%</td>
<td>3.40%</td>
<td>2.98%</td>
</tr>
<tr>
<td>SRF Income</td>
<td>$405</td>
<td>0.71%</td>
<td>2.01%</td>
<td>-</td>
</tr>
<tr>
<td>USB</td>
<td>$205.65</td>
<td>0.80%</td>
<td>2.99%</td>
<td>3.56%</td>
</tr>
</tbody>
</table>

Money Market Fund (similar risk relatively to fidentiaX’s model portfolio)

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>Fund Size (SGD Million)</th>
<th>Annual Expense Ratio</th>
<th>5 Year Performance</th>
<th>10 Year Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Fund</td>
<td>$108.20</td>
<td>0.35%</td>
<td>0.37%</td>
<td>0.52%</td>
</tr>
<tr>
<td>LMWA MM</td>
<td>$1557</td>
<td>0.48%</td>
<td>1.57%</td>
<td>-0.57%</td>
</tr>
<tr>
<td>LG SG MM</td>
<td>$206.2</td>
<td>0.34%</td>
<td>0.79%</td>
<td>0.98%</td>
</tr>
<tr>
<td>P MM Classic</td>
<td>$872.2</td>
<td>-</td>
<td>1.83%</td>
<td>-0.42%</td>
</tr>
<tr>
<td>P MM</td>
<td>$818.87</td>
<td>0.49%</td>
<td>0.63%</td>
<td>0.81%</td>
</tr>
</tbody>
</table>
Our model portfolio will be constructed with a core component in Endowment, Whole Life, Universal Life and Annuity policies with tactical allocations to Investment-linked policies depending on market conditions and directions. Examples of some of the policies:

<table>
<thead>
<tr>
<th>Plan Type</th>
<th>Initial Outlay (SGD)</th>
<th>Projected Returns Value (SGD)</th>
<th>Projected Returns (SGD)</th>
<th>Years To Maturity/Surrender</th>
<th>Projected Returns On Maturity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endowment</td>
<td>$31,777</td>
<td>$41,311</td>
<td>$9,534</td>
<td>7</td>
<td>3.82% p.a.</td>
</tr>
<tr>
<td>Endowment</td>
<td>$32,049</td>
<td>$41,343</td>
<td>$9,294</td>
<td>7</td>
<td>3.73% p.a.</td>
</tr>
<tr>
<td>Endowment</td>
<td>$8,885</td>
<td>$11,892</td>
<td>$3,007</td>
<td>9</td>
<td>3.29% p.a.</td>
</tr>
<tr>
<td>Whole Life</td>
<td>$56,655</td>
<td>$98,109</td>
<td>$41,454</td>
<td>15</td>
<td>3.73% p.a.</td>
</tr>
</tbody>
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fidentiaX’s model portfolio will be comprised of very liquid assets (tradable policies) which can be converted to fiat currencies within days.

The comparison above provides a clear indication of the potential outperformance of more than 4 times that of a similar risk-class portfolio and >25% higher performance relative to a higher risk portfolio.
fidentiaX membership marketplace will be generating revenue via the following:

**Membership Fees**
Access to products and services of the platform would be via membership fees which will be levied on an annual basis.

**Transaction Fees**
Facilitating members of the ecosystem (policyholders and buyers) on transactions which will be subjected to transactional fees for selling and buying.

**Portfolio Builder**
Providing professional services to construct customized portfolios by sourcing and acquiring policies from the open market according to buyer’s investment objectives.

**Model Portfolio**
Building a tradable-policies portfolio allows fidentiaX to grow its revenue via the following:

**Portfolio Returns**
Our model portfolio of tradable policies could potentially return 3.5%p.a-4%p.a which is significantly higher than a similar risk-class portfolio.

**Mortality Upside**
The model portfolio main engine of growth would be the returns on the policies, however in the event of the demise of the original policyholder prior to the maturity of the policy, the policy would be paid out to fidentiaX as the owner of the instrument.

**Sale of Policies**
Selected policies within the portfolio will be put up for sale with a reasonable markup.

**Repurchase Option Fee**
Policyholders who sold their policies to fidentiaX will have the option of repurchasing their policy within a stipulated timeframe by paying a Repurchase Option Fee. The Repurchase Option Fee would be dependent on the type of policy and timeframe of the option.

Repayment from the model portfolio will be used to fund operations and development cost of the marketplace.
Upon successful completion of the Initial Token Offering, fidentiaX will allocate the raised funds to the following categories:

MODEL PORTFOLIO

70% of the funds raised will be set aside to purchase tradable policies from the open market to create a model portfolio with the following objectives:

- Demonstrate the benefits of having tradable insurance policies in an investment portfolio. Key statistics of the portfolio will be shared on the platform (e.g. portfolio size, average yield at maturity, average investment tenure, etc.)

- Facilitate trades on the platform during the initial stage, this will be done through direct acquisition of policies in a number of countries and listing them on the platform. This is necessary while we build market awareness of the first global marketplace for tradable insurance policies.

- Utilize the portfolio returns (3%-4% p.a) to fund future development of the platform as well as funding a non-profit foundation to proliferate the adaptation of blockchain technology in the Insurance Industry.
Funds collected from the Crowd Token Contribution will be transferred to a Trust (managed by a Legal Firm as Trustee) with a clear mandate on the utilization of the monies towards building the world’s first marketplace for tradable insurance policies and proliferation of blockchain technology for the insurance industry.

Aug 2016—
Business Concept Development

Feb 2017—
Market Research & Feedback from Industry Leaders

Aug 2017—
Preparation of Whitepaper and Legal Opinion

Nov 2017—
Launch of Crowd Token Contribution

May 2016—
Ideation

Nov 2016—
Formation of Core Team

May 2017—
Conceptualisation of fidentiaX Membership Marketplace

Oct 2017—
Announcement of Crowd Token Contribution

Feb 2018—
Launch of fidentiaX Membership Marketplace

Jun 2018—
Launch of fidentiaX Model Portfolio

Sept 2018—
Full Blockchain-powered Marketplace for Tokenization of policies

2019+
Partnership with leading Insurance Companies on direct issuance of policies onto the Blockchain

2023+
Industry Leader for Policy Ledger to safe keep insurance policies and Marketplace for Tokenization of policies
fidentiaX’s platform will be based on a customized version of NXT blockchain (www.nxtplatform.org). Following is an outline of the high-level aspects of the platform.

1. **TOKENS**

The platform will use 3 different types of token:

- Crowd Token Contribution (Ethereum Blockchain) - fdX
- Currency Representation Tokens – (eBTC, eETH, eUSD, eEUR, eSGD, eJPY, eKRW, eMYR, etc)
- Platform Unified Tokens – ISX

On a regulatory level, sellers may only cash out the policy using the currency in which the policy was issued (e.g. a Singapore Dollars Policy will only be able to cash out in Singapore Dollars).

To allow seamless transition between currencies, fidentiaX’s cash management system will include various fiat currency accounts linked to internal Currency Representation Tokens which can be exchanged against the Platform Unified Token (ISX) that is pegged 1:1 to the US dollar.

This allows buyers to top up their fidentiaX account by purchasing ISX with their preferred fiat currency, and sellers can cash out ISX at its USD value against the fiat currency in which the policy was issued with minimum forex charges.
2. ACCOUNT MANAGEMENT

fidentiaX’s platform relies on asymmetric cryptography to manage its user accounts. This process includes the generation of a private key used to log in and digitally sign data and transactions.

A private key is not just a password, it is a unique representation of a user’s identity and should never be shared. Consequently, its safe storage is extremely important, and recovery procedures are more complex.

Nonetheless, as a great majority of internet/app users are used to password recovery systems, fidentiaX will implement a hybrid method to ensure the user safety and the ability to recover credentials.

- After registration, a hardware signing device can be used to log in and sign transactions.
- Administrators will hold special rights, allowing them to transfer user metadata and policy ownership from one account to another after a multi-step confirmation procedure initiated by the private key owner. This transfer will require the digital signatures of several administrators.

When a user initiates an account recovery procedure, administrators will:

- confirm the legitimacy of the request.
- create a new account on behalf of the user.
- transfer metadata, balance, and policy ownership to a new account.
- send the user a new hardware signing device containing the new account’s private key.
3. USER TYPES

The fidentiaX platform aims to make its user experience as seamless as possible. Because not all users will perform the same actions, three user types will be defined, each focused on a different user role:

**SELL ONLY**

Users wishing to sell their policies without engaging in trading

- No membership required
- Cannot buy policies or access policy marketplace
- Automated/Semi automated KYC and policy metadata population

**BUY AND SELL**

Users wishing to trade policies to build a portfolio

- Membership required
- Can buy and sell policies on the Policy Marketplace
- Access to policy ledger function
- Automated/ Semi-automated KYC and policy metadata population

**Trusted 3rd Parties/ Partners**

Partner trading of policies as a service on behalf of others

- Membership required
- Can buy and sell policies
- Manual entry of third party’s KYC and policy metadata
- Responsible for verification of their clients KYC and policy metadata.
4. PAYMENT

When a user’s ISX balance is sufficient to process a payment, fees will deducted from the balance. Users whose balance is insufficient to process a payment will be prompted to top up.

Top ups will be available via several online payment methods using their respective APIs.

5. CASH OUT (WITHDRAWAL)

Users will be able to cash out their balances monthly, at a fixed date

- User decides on an ISX amount to cash-out.
- ISX amount is deducted from user’s balance
- U.S. Dollar value of ISX is transferred to user’s fiat account on the next cash-out date.
- User can decide to cancel the cash-out any time before cash-out date.

6. POLICIES

Policies are unique, non-duplicable objects comprising a unique ID, a set of metadata (policy details and requirements) and a set of supporting documents (KYC, photo of the original paper policy, etc). Each policy is verified by fidentiaX before being listed on the marketplace.

Policies previously processed through a standard (off-platform) sale cycle don’t require extra processing since their metadata has been verified by their respective insurance companies at inception.
7. METADATA

The term ‘metadata’ refers to the set of information which defines a policy’s content and lifecycle, including but not limited to:

- Ownership history
- Creation timestamp
- Validation timestamp
- Supporting documents hashes
- Supporting documents URL
- Currency
- Price
- Policy details

8. SUPPORTING DOCUMENTS

Supporting documents added to a policy will be hashed and uploaded to a cloud storage service. Calculating hashes of each document will allow the verification of uploaded data.
9. COVERAGE

At launch, fidentiaX will cover a limited range of countries and insurance companies. This number will increase with the opening of local fidentiaX branches to process local KYC verification and regulations.

10. KNOW-YOUR-CUSTOMER (KYC)

KYC is required for every user of the fidentiaX platform. In the future, users will be able to share their fidentiaX KYC and policy details with other services on a need-to-know basis.

KYC must at least include:

- Permanent currency settings for the account. This guarantees that an account can only buy and sell ISX tokens within the system using selected currencies (policy specific), and cannot use the fidentiaX platform as a general currency exchange, which may expose fidentiaX to a different class of regulatory requirements.

- Local fidentiaX branches will be progressively opened to process country-specific KYC.

11. CONSENSUS

fidentiaX’s platform blockchain will be based on custom consensus rules, developed to support and streamline the specifics of insurance policy trade and its corollary regulatory requirements, including:

- All transactions (except trivial transactions) on the fidentiaX Blockchain which are initiated by a buyer or a seller will be implemented as ‘phasing transactions’ which will be pending until fidentiaX performs the correct action or verification (such as changing the policy owner with the insurance provider, verifying the existence and ownership of a policy to be listed, etc.)

- The fidentiaX Blockchain will be private and not directly accessible to the public, with one or several nodes being operated by each fidentiaX office. User applications will work against middleware which then operates on the private blockchain.

- fidentiaX controls the nodes and has direct economic incentive to do so. The public cannot directly post transactions on the blockchain, and forging fees can be entirely disabled. Actions such as buying or selling a policy automatically generate a charge to the user, so the system cannot be overwhelmed with bogus transactions.

- Country offices and trusted partners run independent nodes that form the global fidentiaX Blockchain. This makes it difficult for an internal malicious actor to compromise the integrity of the blockchain and is one of the core strengths of running a blockchain.

- The status of the blockchain can be explored via a blockchain explorer exposed only to paying members or other relevant parties, as dictated by the permissions set in the middleware.

12. Encryption

Key exchange on the fidentiaX platform is based on the Curve25519 algorithm, which generates a shared secret key using a fast, efficient, high-security elliptic-curve Diffie-Hellman function. This algorithm is implemented in the same way as the Nxt.org Blockchain, on which the fidentiaX Blockchain is based.
fidentiaX will be issuing 100,000,000 fdX tokens for Crowd Token Contribution (CTC) with bonus program for early contributors based on the following:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>CTC (Day 1~2)</strong></td>
<td>1 ETH = 575 fdX (15% bonus)</td>
</tr>
<tr>
<td><strong>CTC (Day 3~5)</strong></td>
<td>1 ETH = 550 fdX (10% bonus)</td>
</tr>
<tr>
<td><strong>CTC (Day 6~30)</strong></td>
<td>1 ETH = 500 fdX</td>
</tr>
</tbody>
</table>

fidentiaX will conduct a Private- Contribution exercise prior to the Public- Contribution for strategic partners, company affiliates and angel investors.

CTC will end after 30 days or upon reaching 100,000,000 fdX target whichever is earlier. In the unlikely event that the CTC total contributions during the period is less than US$1mil at the end of CTC period, all contributions will be refunded in full (less off any transactional cost) to contributors.

Any unallocated fdX after the offer period (subjected to meeting the minimum funding requirement of US$1mil), will be burnt.
Allocation of fdX tokens

The founder’s interest will be aligned with the growth of the ecosystem and tokens will be “vested” based on the below:

<table>
<thead>
<tr>
<th>Vesting Period</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Months from CTC</td>
<td>30%</td>
</tr>
<tr>
<td>24 Months from CTC</td>
<td>30%</td>
</tr>
<tr>
<td>36 Months from CTC</td>
<td>40%</td>
</tr>
</tbody>
</table>

*Bounty Campaign / MGM Program* allocation will be set at 1% of the total token distributed during the CTC, capped at 1,000,000 fdX tokens.

Any unallocated fdX tokens after the CTC will be burnt.
Bounty Program / Member-Get-Member (MGM) Program

We will be launching bounty and MGM program during the CTC and tap on the community to spread the word on fidentiaX.

Bounty Program

Please see Bounty Program to be announced on bitcointalk.org and our website for more details.

MGM Program

To encourage participation and reward early participants of the crowd contribution round, fidentiaX will introduce an MGM program to reward both referrer and referee:

<table>
<thead>
<tr>
<th>Tiers</th>
<th>Number Of Referrals</th>
<th>Rewards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver</td>
<td>5-15</td>
<td>0.5% of Total Contribution (referrer/ referee)</td>
</tr>
<tr>
<td>Gold</td>
<td>16-25</td>
<td>0.5% of Total Contribution (referrer)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.75% of Total Contributions (referrer)</td>
</tr>
<tr>
<td>Platinum</td>
<td>&gt;25</td>
<td>0.5% of Total Contribution (referrer)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1% of Total Contributions (referrer)</td>
</tr>
</tbody>
</table>

MGM program will be set at 0.20% of the total token distributed under Private Contribution, capped at 200,000 fdX token on a first-come-first-serve basis.

*Referrals qualification:
- employees of fidentiaX are not eligible to participate in the MGM Program
- referrer must be a contributor of the CTC of minimum 500 fdX.
- self-referral will not be accepted for the MGM program.
- minimum 500 fdX contribution by the referred party.
- only one referral for each referee will be counted, in the event that a referee is referred by more than one referrer, the successful referral will be based on the 1st submitted wallet ID.

(please refer to Appendix A for examples of the MGM program)
There are 3 main utilities for fdX tokens issued during the CTC, namely:

**Membership**

fidentiaX is a membership-based platform whereby users need to be a member to access the range of services available on the platform.

The annual membership fees shall be payable via fdX tokens and any token collected will be consumed. This would effectively decrease the total float of fdX in the market.

*For example:*

fidentiaX's marketplace has 200,000 users and each membership is set at 20 fdX tokens per annual. A total of 4,000,000 will be consumed that year. This will reduce the total float by approximately 3% assuming 100% of the tokens were distributed during CTC.

**Member's Auction**

fidentiaX will hold exclusive auction for fdX token holders whereby policy will be put up for auction at a significant discount off the cash value.

*For example:*

fidentiaX list an endowment policy with cash value of $100,000 at 25% discount, i.e. $75,000. Holders of fdX tokens would then be able to place a bid on the policy using fdX tokens. Successful bidder would walk away with a substantial discount for a real-world asset which he could put up for sale in our marketplace.

**Exchange for Platform Unified Token (ISX)**

Transactions on fidentiaX platform will be conducted with a platform unified token (ISX) for better management of forex risk and risk management (Anti-Money Laundering).

fidentiaX will hold exclusive and limited sale for fdX token holders, giving them the opportunity to purchase ISX tokens at a discount. ISX tokens are pegged to US$.1.
Membership
Membership access to the platform will be via consumption of fdX tokens thus reducing supply in the market.

Member’s Auction
Listing of insurance policy at significant discount for auction exclusive to fdX holders.

Exchange for ISX
Trade fdX tokens for platform unified tokens (ISX).
Establishing the fidentiaX Open Source Foundation (FOSF)

The insurance industry, in its current oligopolistic state, will consistently seek to undertake innovation and transparency in a commercially self-beneficial manner. With its legacy systems, antiquated business models and its undying focus on cross-cannibalizing each other’s market share to increase shareholder value, we believe that altruistic technology changes can only materialize if they are built on an open framework. The establishment of the fidentiaX Open Source Foundation (FOSF) will be a framework that is built by the community, to serve the community.

The FOSF provides an established framework for intellectual property and financial contributions that simultaneously limits potential legal exposure for our project committers. The FOSF’s seeks to create an equal opportunity community of contributors from both developers and industry contributors to successfully collaborate to develop freely available enterprise-grade insurance blockchain solutions, benefiting millions of users and insurers worldwide. Its core focus is to develop, proliferate and promote an open-source blockchain architecture that is not owned by any traditional large insurance institution or blockchain development firms.

The funding derived for the FOSF will support, elect and facilitate a panel of non-partisan cross functional industry experts to drive meaningful technological contributions and to engage like-minded contributors to become FOSF members. The members will periodically elect a Board of Directors to manage the organizational affairs of the Foundation which will adhere to the FOSF by-laws. The Board will, in turn, appoint a number of officers to oversee its day-to-day operations with the public records of the Foundation made available to the community on the blockchain. We envision a future where all stakeholders of the insurance industry use the solutions distributed under the FOSF free-to-use license; and the community actively participates in FOSF activities, mentoring initiatives and development conferences.

More information will be made available in the middle of 2018.
Alvin Ang, Co-Founder—

Multi-disciplined entrepreneur with extensive experience in Technology, Engineering, Banking and Insurance sectors. Alvin held senior positions at Standard Chartered Private Bank and OCBC Bank focusing on sales strategy, wealth management, compliance and people development.

He is passionate about leveraging technology to solve real-world issues and disrupt the status quo.

Douglas Goh, Co-Founder—

Blockchain enthusiast with 15+ years of experience in Banking, M&A and Fintech in North Asia, Singapore, South Africa and European Union. Specialisation in capital raising, deal sourcing and closure, due diligence and corporate structuring. Current Chief Operations Officer of the Uncharted Group and Executive Director of Uncharted Partners. Extensive pre-seed and series A/B investment experience. Former Citi and OCBC management team. Masters Degree in e-Commerce from the University of Melbourne.

George Agiasoglou, Software Architect—

Versatile and pragmatic software engineer with passion for technology, innovation and customer service, George is a keen follower of the lean and agile movement (scrum, scrumban) with great focus on delivery. Practitioner of best practices and software engineering principles such as DRY, SOLID, KISS and YAGNI.

Dr. Jimmy Moore, Data Scientist—

A data science expert with extensive experience in machine learning and data visualization, real-time systems for complex analysis and extracting insights from complex data. Jimmy is an AI expert with a passion for technology, combining innate technical aptitude with exceptional business acumen to drive innovation and generate growth.

Long Tran Tranh, Applications Architect—

A professional developer with 17 years of experience leading solution development teams in Asia. He has extensive experience working with customers in the US and the UK. Expert knowledge and proven track record in CRM, ERP, CMS and development and integration of live media streaming solutions. Expert level programmer in Java and the deployment using Spring MVC framework, EJB as well as Javascript. Understand Solidity | Ethereum Smart Contracts, JavaScript connecting user interface to blockchains. He has created ICO Smart contracts, and supported clients during the campaign.
Roberto Capodieci, Blockchain Zoo Founder—

Roberto discovered a passion for Information Technology at the tender age of 6. In the formative years of the Internet he expanded his business reach into the online world and quickly found his company’s services in great demand. Roberto, specialised in Lawful Interception systems and big data analysis, is also a consultant to law enforcement agencies. Moving to Asia a decade ago, Roberto is now a renowned Blockchain expert, associate of the Nxt Foundation and the first to apply Blockchain technology to supply chain and trade finance.

Jean-Daniel Gauthier, Blockchain Zoo Founder—

Co-founder of DeBuNe and OTDocs, Jean-Daniel (Danny) has 15+ years of experience encompassing many facets of the IT industry. His natural affinity for languages and communication, coupled with his understanding of technology at its applications, allow him to produce designs, documentation and explanations of complex solutions accessible and beneficial to all.

Barton Johnston, Blockchain Zoo Founder—

Barton Johnston largely taught himself programming during high school and now has 7+ years of software development experience in varied contexts including media research, game design, mobile apps and fleet tracking telemetrics, alongside years of personal fascination with compression algorithms, compiler design, shader programming and anything else that gets down to the nitty gritty bits and bytes.
PLEASE READ THIS DISCLAIMER SECTION BEFORE CONSIDERING ANY ACTION YOU SHOULD TAKE. IF THERE IS ANY DOUBT, YOU SHOULD CONSULT YOUR LEGAL, TAX OR OTHER PROFESSIONAL ADVISOR(S).

This material provided by fidentiaX Ltd is solely for the purpose of providing information ONLY and it is NOT an offer or a solicitation to buy or sell any securities or other financial instruments.

The information set forth above may not be exhaustive and does not imply any elements of a contractual relationship. Every effort has been made to ensure that any information/material in this whitepaper is accurate and up to date. This document in no way constitutes the provision of investment or professional advisory.

fidentiaX membership is a consumption-based product permitting members access to services provided by the platform. Memberships are not intended for speculation and offer the holder no rights in, or claims to, any of the assets of fidentiaX or in any way share in any profits that fidentiaX may achieve.

Interested parties in the platform acknowledge concurrence to the use of electronic records, privacy policies, membership agreement and terms and conditions of the platform. These documents are subjected to change and shall be made available upon request.

fidentiaX does not guarantee, and accepts no legal liability whatsoever arising from or connected to, the accuracy, reliability, or completeness of any material contained in this document. Participants and potential fdX token holders should seek appropriate independent advice prior to relying on or entering into any commitment or transaction based on the information provided in the whitepaper, which is for reference only.

This paper outlines fidentiaX current vision for the platform and we intend to realize this vision, however, our vision is dependent on numerous factors and it is entirely possible that the platform will not be implemented as outlined in this paper.

The membership platform and its tokens are not intended to constitute securities in any jurisdiction. This whitepaper does not constitute a prospectus or offer document in any form and is not intended to constitute an offer of securities or a solicitation for investment in securities in any jurisdiction.

fdX tokens are functional utility smart contracts within the fidentiaX platform and memberships are not for speculative investment. There is no promise of future performance, or promise of inherent value, or promise of continuing payments and NO guarantee that fdX token will hold any particular value.

If you are a “U.S. Person” which is defined as a natural person residing in the above-mentioned countries or any entity organized or incorporated in these countries, citizen, and/or resident (tax or otherwise). YOU ARE NOT ELIGIBLE to participate in the Crowd Token Contribution.
## APPENDIX A

### Examples—

#### Silver Tier (5-15)

<table>
<thead>
<tr>
<th>Parties</th>
<th>Contribution Amt</th>
<th>Qualified</th>
<th>MGM Reward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referrer:</td>
<td>625 fdX</td>
<td>NA</td>
<td>(625+1500+750+625+875)*0.5% = 21.875</td>
</tr>
<tr>
<td>Referrer 1:</td>
<td>625 fdX</td>
<td>Yes (1)</td>
<td>(625*0.5%) = 3.125 fdX</td>
</tr>
<tr>
<td>Referrer 2:</td>
<td>400 fdX</td>
<td>No</td>
<td>Nil</td>
</tr>
<tr>
<td>Referrer 3:</td>
<td>1500 fdX</td>
<td>Yes (2)</td>
<td>(1500*0.5%) = 7.5 fdX</td>
</tr>
<tr>
<td>Referrer 4:</td>
<td>750 fdX</td>
<td>Yes (3)</td>
<td>(750*0.5%) = 3.75 fdX</td>
</tr>
<tr>
<td>Referrer 5:</td>
<td>625 fdX</td>
<td>Yes (4)</td>
<td>(625*0.5%) = 3.125 fdX</td>
</tr>
<tr>
<td>Referrer 6:</td>
<td>875 fdX</td>
<td>Yes (5)</td>
<td>(875*0.5%) = 4.375 fdX</td>
</tr>
</tbody>
</table>

#### Gold Tier (16-25)

<table>
<thead>
<tr>
<th>Parties</th>
<th>Contribution Amt</th>
<th>Qualified</th>
<th>MGM Reward</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referrer:</td>
<td>625 fdX</td>
<td>NA</td>
<td>(15125*0.5%) = 113.4375 fdX</td>
</tr>
<tr>
<td>Referrer 1:</td>
<td>625 fdX</td>
<td>Yes (1)</td>
<td>(625*0.5%) = 3.125 fdX</td>
</tr>
<tr>
<td>Referrer 2:</td>
<td>400 fdX</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Referrer 3:</td>
<td>1500 fdX</td>
<td>Yes (2)</td>
<td>(1500*0.5%) = 7.5 fdX</td>
</tr>
<tr>
<td>Referrer 4:</td>
<td>750 fdX</td>
<td>Yes (3)</td>
<td>(750*0.5%) = 3.75 fdX</td>
</tr>
<tr>
<td>Referrer 5:</td>
<td>625 fdX</td>
<td>Yes (4)</td>
<td>(625*0.5%) = 3.125 fdX</td>
</tr>
<tr>
<td>Referrer 6:</td>
<td>875 fdX</td>
<td>Yes (5)</td>
<td>(875*0.5%) = 4.375 fdX</td>
</tr>
<tr>
<td>Referrer 7:</td>
<td>1500 fdX</td>
<td>Yes (6)</td>
<td>(1500*0.5%) = 7.5 fdX</td>
</tr>
<tr>
<td>Referrer 8:</td>
<td>625 fdX</td>
<td>Yes (7)</td>
<td>(625*0.5%) = 3.125 fdX</td>
</tr>
<tr>
<td>Referrer 9:</td>
<td>875 fdX</td>
<td>Yes (8)</td>
<td>(875*0.5%) = 4.375 fdX</td>
</tr>
<tr>
<td>Referrer 10:</td>
<td>1500 fdX</td>
<td>Yes (9)</td>
<td>(1500*0.5%) = 7.5 fdX</td>
</tr>
<tr>
<td>Referrer 11:</td>
<td>875 fdX</td>
<td>Yes (10)</td>
<td>(875*0.5%) = 4.375 fdX</td>
</tr>
<tr>
<td>Referrer 12:</td>
<td>750 fdX</td>
<td>Yes (11)</td>
<td>(750*0.5%) = 3.75 fdX</td>
</tr>
<tr>
<td>Referrer 13:</td>
<td>750 fdX</td>
<td>Yes (12)</td>
<td>(750*0.5%) = 3.75 fdX</td>
</tr>
<tr>
<td>Referrer 14:</td>
<td>875 fdX</td>
<td>Yes (13)</td>
<td>(875*0.5%) = 4.375 fdX</td>
</tr>
<tr>
<td>Referrer 15:</td>
<td>875 fdX</td>
<td>Yes (14)</td>
<td>(875*0.5%) = 4.375 fdX</td>
</tr>
<tr>
<td>Referrer 16:</td>
<td>625 fdX</td>
<td>Yes (15)</td>
<td>(625*0.5%) = 3.125 fdX</td>
</tr>
<tr>
<td>Referrer 17:</td>
<td>1500 fdX</td>
<td>Yes (16)</td>
<td>(1500*0.5%) = 7.5 fdX</td>
</tr>
<tr>
<td><strong>1. ENDOWMENT:</strong></td>
<td>A life insurance contract designed to pay a lump sum after a specific term (at maturity) or on the death of the insured. It is used as more of a saving rather than a protection instrument.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **2. WHOLE LIFE:** | A life insurance contract which remains in force for the insured’s entire lifetime (no fixed maturity date) provided required premium are paid. The insurer will pay a lump sum (death benefit) upon the death of the insured.  

The policy is made up of insurance and investment components whereby the insurance component provides the payment of the death benefit and the investment component builds up the cash value of the policy.  

Policyholders do not have the right to choose how investments are made and depend on the investment managers of the insurers. These investments are typically in, Fixed income, Money Market, Properties, etc., lower risk asset class. |
| **3. INVESTMENT-LINKED:** | A life insurance contract similar to a whole life policy which remains in force for the insured’s entire lifetime provided premium is paid.  

The policy is made up of insurance and investment components whereby the insurance component provides the payment of the death benefit and the investment component builds up the cash value of the policy.  

Policyholders choose how investments are made by selecting the underlying investment (unit trust). Cash value of the investment-linked policy is dependent on the number of units held in each unit trust of the policy invested and value fluctuates according to the price of the underlying assets. |
| **4. TERM:** | A life insurance contract for a specific term which pays a lump sum on the death of the insured. It only has an insurance component and policy does not build up cash value over. |
| **5. UNIVERSAL LIFE:** | A life insurance contract similar to a whole life policy with added flexibility to review and alter the death benefit, investment component, premium, etc. according to policyholder’s circumstances.  

Unlike whole life policy, insurers guarantees a minimum interest rate and should the insurance company’s portfolio outperform the minimum interest rate, excess earnings may be applied to the cash value of the policy. |
6. KEY-MAN: A life insurance for a specific term on the key person whose skills, knowledge, experience or leadership are important to a business continuity.

7. CRITICAL ILLNESS: A list of illness defined by the insurer usually for a rider attached to a policy which will trigger a payout in the event of diagnosis on the insured. The payout could be added to the death benefit or accelerate the pay out of the death benefit.

Example of Critical Illness defined by Life Insurance Associate of Singapore:


8. TERMINAL ILLNESS: A list of illness that cannot be cured or adequately treated that is reasonably expected to result in the death of the insured within a short period of time.

9. PREMIUM WAIVER: A rider attached to insurance policies that waives the policyholder’s obligation to pay any further premiums should insured become seriously ill or disabled.

10. MORTALITY CHARGE: An amount charged by the insurer for providing the coverage on the insured's life, also known as Cost of Insurance.

The charge is determined by the net amount at risk under the policy, the risk classification and the age of the insured.

11. SUM ASSURED: The guaranteed amount payable on the occurrence of an event defined in the policy before any bonuses accrued by the insurer.
REFERENCE—

1. **Life Insurance Association Singapore:**
   http://www.lia.org.sg/node/108590

2. **Monetary Authority of Singapore:**

3. **Bank Negara Malaysia:**

4. **The Life Insurance Association Japan**
   http://www.seiho.or.jp/english/statistics/trend/

5. **Korea Life Insurance Association**
   http://www.klia.or.kr/eng/consumer/consumer_0202.do

6. **Insurance Authority, Hong Kong**