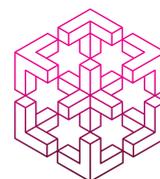


# VAULTSECURITY WHITEPAPER

US Patent: 62/688,544

August 2018



VAULTSECURITY

# Previously...

... the only people who had access to security for wealth, assets, information and property were those who could afford it and knew how to attain it.

# In the future...

... this security will be available to anyone who has access to the internet. Blockchain is the technology making this happen. Its fundamental purpose is security.

# Introduction

Vault is the first blockchain-technology-based global database for registering and identifying assets (including lost or stolen property or items).

**The database is accessible to everyone. It lets users register and search for items on the blockchain, including any of the following:**

- **Property of any kind**
- **Assets**
- **Electronic devices**
- **Jewelry**
- **Collectibles and valuables**
- **Documents and contracts**
- **Sports and hobby equipment**
- **Pets**

At present, you cannot report stolen or lost items in a way that is convenient, real-time, and user-friendly. Similarly, you cannot

make this data available worldwide. Consequently, it's difficult to locate lost or stolen items, or identify them if found.

Accessing information on property ownership is restricted by international jurisdictions, database formats, laws and access rights, as well as slow admin processes.

#### **What does Vault do?**

Vault gives users a chance to protect their property (i.e. items) and lets finders or potential buyers identify lost or stolen items.

Vault's system protects property, reduces crime, and provides rewards for identifying, reporting and retrieving lost or stolen items.



**Protect**



**Identify**



**Reward**



**Prevent**

Vault is a leader in blockchain innovation that will not only increase property security, but also benefit society.

# The goal

Vault's vision is tackling the increase in theft, illegal possession, item trading and fencing by:

# 1

**Creating a global database for registering and reporting items.**

We aim to establish Vault as the market leader, as a result of its unique system and technological lead.

Vault's model has the potential to enhance security and reduce crime globally. It does

# 2

**Offering a simple-to-use global search engine for lost and stolen items.**

this by making property identifiable, and so less attractive to crime.

**Even a 1% reduction in crime globally would represent a substantial improvement for society.**

# 3

**Reducing the convertibility value of stolen and lost items (and so impacting crime).**

# The market

The section below mainly features official statistics from Germany. Of course, statistics vary by country, but the data is intended to give an overview of the scale of crime and lost items in a country perceived as “safe” and “organized”.

According to official crime statistics issued in 2017 by the German Federal Ministry of the Interior, 2,373,774 cases of theft were reported in Germany in 2016. It's worth noting only 20-30 % of all theft crimes are reported.

Theft makes up 37% of all reported crimes, making it the largest contributor to all recorded crimes. In addition, theft has a low level of solved cases: in 2016 only 31,120 cases of stolen property were solved. This equals a reconnaissance rate of approximately 1.2%. That's around 2.3 million items that aren't returned to their owners. These figures, which only represent stolen property, must be seen in the context of the 100 million items reported lost per year in Germany. With around 20% retrieved, that's approximately 80 million items lost yearly.

The world population is increasing in a never seen high pace and as of now we count more than 7.65 Billion people.

Here are some international figures for lost and stolen items:



# The foundation

Vault's business model is based on public and individual needs.

**Theft crime is a growing problem, and reducing it benefits both the individual and the public. The same can be said for protecting property.**

Locating property while adhering to privacy protection, is another need that, at present, isn't attended to as well as it could. Technologies and services that render property location possible are similarly in the best

interests of the individual and public.

Ambiguous property ownership facilitates theft. If property ownership is identifiable and items locatable, then items cannot be sold, traded or marketed as they're easily traceable.

**Vault approaches this task in two ways:**

# 1

**Protect property by making it identifiable and locatable.**

# 2

**Reduce crime by making it riskier and reducing items' "fencing value".**

In order to achieve its objective, Vault has developed an effective, reliable and user-friendly system, in addition to a business model based on four components:

# Business model

## First component

The focus here is on providing a valuable service to society whilst creating a successful company. To achieve this, Vault has developed a balanced business model that foresees a free-of-charge core service for users:

- Free user registration
- Free registration of items in the personal wallet (After the initial 3 months the membership costs 1 US \$ per item per year.)
- Free search in the database
- Free identification of items (if found or offered for sale)
- Free reporting of lost or stolen items

If a user reports one or more personal items as lost or stolen, a reasonable one-time

reporting fee will apply.

This fee varies by item, category and value, ranging from 5 US \$ for basic items, to 20 US \$ for high-value items.

The reporting fee covers the admin cost as Vault seeks to:

- Make the reported item identifiable as lost or stolen to users worldwide
- Begin procedures to enable the return of the item
- Begin procedures to identify and prosecute suspects

Through this first component of the business model, Vault offers its core services for free, then applies reasonable fees whilst following best practices and securing the company's future.

## Second component

This involves a success-based reward system for users, where Vault gets a participation in the form of commission. This model is based on finders of lost or stolen items receiving a reward for:

- Identifying a lost or stolen item (flag bounty)
- Successfully retrieving the item (retrieval bounty)

Bounties are set by the owners of the items, once they register them. Vault receives a 30% fixed commission of an estimated average bounty of 20 US \$ once it's granted.

# Business model

## Third component

**This component is based on cooperations with official institutions, plus agreements with organizations or legal authorities such as the police, customs or any law enforcement agencies. Finally, it's based on joint ventures with insurers and wholesalers.**

Public, governmental and private entities can all benefit from using Vault's services. Vault will form alliances with these partners

based on mutual agreements, resulting in royalties for the use of Vault's services.

Apart from business-related motives, Vault will seek these alliances so as to expand its services and success rate in identifying and retrieving lost or stolen objects. Establishing well synchronized cooperations with relevant partners creates a win-win scenario.

## Fourth component

**This relates to Vault's online shop, where users will be offered innovative security technology products and services.**

There is no dependency on the shop since it's not a core part of Vault's business. Consequently, Vault can offer products at competitive prices and strengthen its unique selling proposition.

One of the initial products sold will be the Vault Tracker. It's a device based on GPS technology that lets users track any device they attach the tracker to.

While this technology already exists, Vault intends to develop smaller versions, in addition to approved third party tracking devices for tracking vehicles and machinery. Finally, Vaults will offer tracking devices that can be hidden in smaller items such as electronic devices, art objects and collectibles.

Vault's focus is on expanding and enhancing its core offering. However, developing these tracking products and services has genuine potential.

# Use cases

**Users set up an account using the website or app, and can then create an offline wallet and/or a mobile wallet with recovery keys, depending on the device.**

For registration and future logins, users must provide common verification information. Once this process is completed, users can register, update, delete or report assets.

Private users can register an unlimited amount of assets. For corporate accounts, Vault will feature special rates based on their individual needs.

Asset registration must have unique identification vectors (e.g. serial numbers) along with an assignment to matching product categories and asset specs. Alternatively, visual features for pattern recognition can be collected via photo or video.

Additional item description should always be made by text or photo and / or video for all registered assets. As soon as an asset has been registered in the wallet, users can

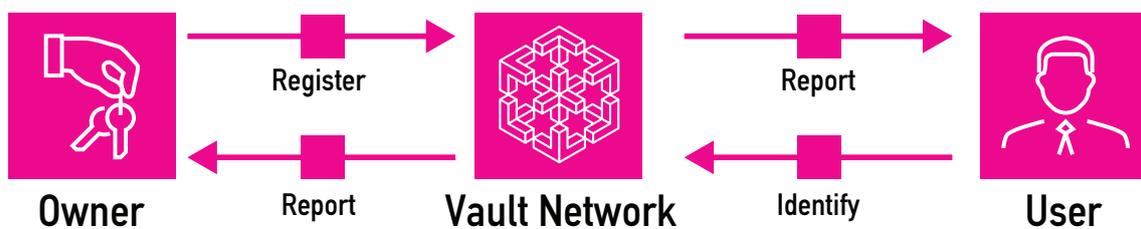
instantly report a theft or loss through the site, app or call center. Once reported, the asset will be tagged instantly and identified as lost or stolen to users worldwide.

Users can identify and report assets using the search interface, accessible via the site, app and call center.

You can query the network for assets by entering individual criteria and / or imagery. The system will provide further features and details to assist in identification of assets and inform, if they are reported as lost or stolen.

Users can inform Vault they have discovered an asset identified as lost or stolen. In turn, they are eligible for a reward.

Once an asset has been discovered, Vault informs the authorities and law enforcement agencies that a reported asset has been identified.



# Rewards

Primarily, Vault’s aim is protecting property. Since the secondary aim is to reduce crime by increasing the risk factor, a rewards program has been developed to encourage users to report any lost or stolen items

The reward program consists of two levels:

**Level 1 (flag bounty):**

This is rewarded to users who successfully identify and report a tagged (lost or stolen) item. The user’s report must include a written description of the item, its location, condition, where, how and through whom it was offered for sale, gift or trade and an item verification must be provided through serial numbers, photos and / or videos.

Once this information is submitted, Vault starts the process of successfully retriev-

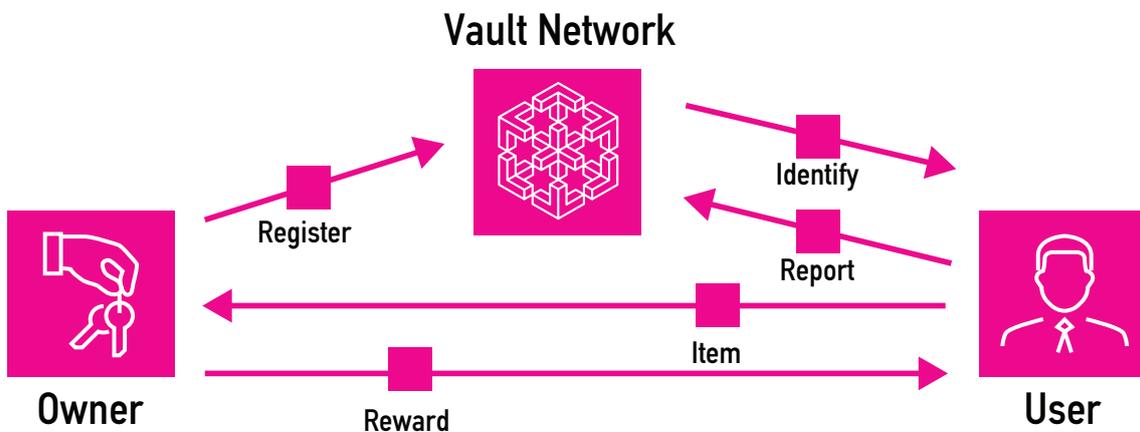
ing the item. This may include forwarding all information to local authorities, law enforcement agencies, institutions, insurers, networks, social media, platforms or private investigators.

The amount of the level 1 reward is set by the original owner of the item, once it’s reported as stolen or lost.

**Level 2 (retrieval bounty):**

This is rewarded when the submitted report leads to a successful retrieval of the item and is returned to the original owner.

The identification or any legal consequences faced by the subject to criminal offense have no effect on the reward. As with the 1st level reward, the 2nd level reward is set by the original owner once they report the item as stolen or lost.



# Business model potential

Vault provides straightforward solutions to real-world problems.

## Problems

### Users

- Loss and theft
- Property difficult to protect
- Property not locatable
- Risk of buying lost or stolen items
- Difficult to establish ownership of found items
- Reporting loss / theft is time consuming
- Low chance of retrieval

### Partners

- Unable to offer protection services
- Unable to identify lost / stolen items
- Issue of stock loss in warehouses.
- Insurers have high pay outs
- Theft is the highest contributor to all crimes
- Poor database communication
- Time-consuming procedures
- Difficult to acquire new customers

## Solutions

### Users

- Loss can be solved and theft reduced
- Property now protectable
- Property now locatable
- No risk of purchasing lost / stolen items
- The owners of found items can be identified
- Real-time one-click reporting of loss / theft
- Convenient and simple process
- Higher chance of retrieval

### Partners

- Able to provide protection services
- Able to identify lost / stolen items
- Protection of stock and merchandise
- Insurers' pay outs are reduced
- Theft portion in all crimes lowered
- Effective database communication
- Convenient and simple processes
- More likely to acquire new customers

# Business model canvas

## 1. Partners

- Developers, engineers, inventors, communities.
- Insurances, manufacturers, wholesalers, authorities, law enforcement agencies.

## 2. Activities

- Expand services, innovate, develop new products, build cooperations and alliances.
- Enhance system efficiency and user experience.
- Hire experts in the appropriate research and development sectors.

## 3. Resources

- Technology, artificial intelligence (AI), partner businesses and their products and services, expert workforce and excellent working environment.

## 4. Value proposition

### Users:

- Users use Vault's core services for free.
- Possible to protect / locate property.
- Bounty for finding / identifying property.
- Protection against buying, trading or selling lost or stolen items.
- Decreased risk of becoming victim of theft crime.
- Increased chance of finding and retrieving lost or stolen property.

### Partners:

- Insurers extend their customer base and offer better services.
- Lower volume of cases and pay outs for insurers.

- Law enforcement agencies, authorities or institutions can identify property anywhere and anytime.

## 5. Customer relationship

- Interaction through social media, forums, marketing, consultation, information.
- Vault offers information, updates, newsletters, videos on property protection topics.

## 6. Channels

- Users interact with Vault through the site, app and call centers.
- Vault promotes itself on relevant media channels.

## 7. Customer segment

- Everyone wanting to protect property, assets, information, documents etc.
- Insurers, manufacturers, wholesalers, law enforcement agencies, authorities.

## 8. Cost structure

- Employee payroll
- Research and development
- Advisors and legal
- Products and suppliers

## 9. Revenue streams

- Reporting loss or theft
- Commission on bounty / rewards
- Cooperations (licensing)
- Online shop
- Products and services (future new developments)

# Revolution

**We're seeing a paradigm shift that started in the banking and investment sectors, and now affects nearly all sectors of industry and society. Businesses, institutions and governments are increasingly aware of the benefits of blockchain.**

Blockchain technology's core principles have been around for decades, but only recently have the public become aware of blockchain and cryptocurrency.

The market cryptocurrency capitalization in the first quarter of 2017 was more than 25 billion US \$, of which Bitcoin alone accounted for approx. 17 billion US \$. A rapid increase followed in the third and fourth quarter, which led to a capitalization of over 100 billion US \$.

Cryptocurrencies and blockchain technology are often seen in financial terms. However, this misses some of the technology's potential.

Blockchain gives everyone with access to a smartphone the chance to participate in the economy and to create and manage assets or wealth in an easy and unrestricted way. This will fundamentally change the way we do business, i.e. create and manage traditional contracts and transfer commodities or assets.

What's more, it will significantly enhance the protection of wealth, transactions and information.

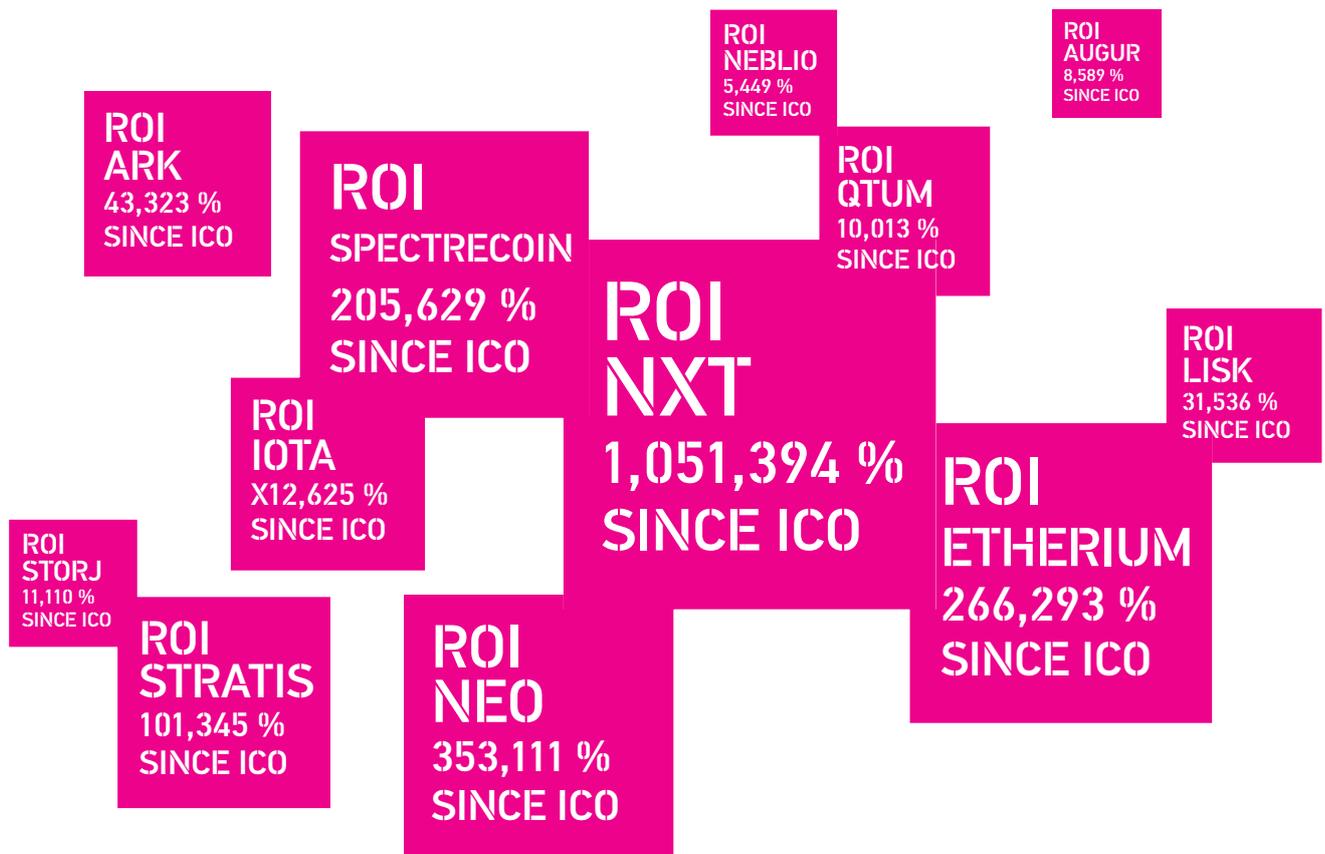
Protection will not be limited to digital information: as interfaces emerge, they will connect the digital world with the real world.

Vault is such an interface. It creates a link between blockchain and the real world in order to transfer the protective benefits of this technology to non-digital assets, such as physical property. This leads to new levels in ownership protection, while reducing property crime.

# Cryptocurrency

2017 showed what the cryptocurrency market is capable of. The impact of cryptocurrency was felt globally. Bitcoin was valued at approx. 100 US\$ in 2013, set a record in 2017 when it came close to the 20,000 US\$. Despite the recent drop to 5,755 \$ in June of 2018, Bitcoin's growth is still remarkable.

Other cryptocurrencies have followed in the footsteps of Bitcoin's success. Ethereum, Litecoin, Lisk, Monero and more have multiplied their values since the start of 2017. In addition to showing the potential of cryptocurrencies, this fact shows cryptocurrencies develop like classical values: people buy silver when gold gets too expensive.



\* These examples are not guarantees for any future performances.

# Blockchain

**The technology behind blockchain is formed on principles drawn from cryptography, game theory and peer-to-peer networking.**

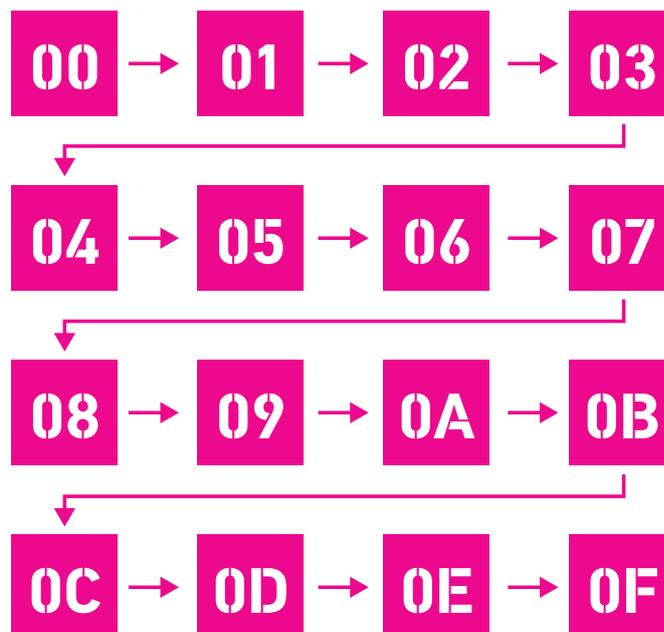
It delivers trust each step of the value chain, from product design and chain of custody through to transactional information.

Blockchain makes the ledger (the book of record) available to all participants in the network. This allows any unique monetary data exchange to get past the problem of double spending. It also creates a process by which a consensus can be reached in

changes to the ledger.

It does this by creating a database of entries (each built from a preceding block of information and stored as a copy) secured by a mathematical algorithm. This makes it difficult for criminals to perform fraudulent transactions.

Although still a growing technology, blockchain can simplify existing relationships, reduce fraud, improve transaction speed and enhance the exchange of information. This leads to freed-up capital and improved cash flow, as well as stronger relationships between those involved.



# Smart contracts

**With Ethereum's arrival (ethereum.org) and smart contracts, more advanced blockchain asset management platforms are being created.**

Rather than publishing the current state of a transaction or dispute on blockchain, a contract will be created as a smart contract

on the blockchain. Smart contract operations are executed independently on the blockchain. This facilitates complex contract scenarios, like distributed organizations, trading and asset management platforms. In turn, this gives transparency to all the contract parties.



## Distribute ledger

Benefits of smart contract adoption

<p><b>Independence:</b> No need for lawyers to make agreements.</p>	<p><b>Savings:</b> No need to involve intermediaries.</p>	<p><b>Validation:</b> Transactions validated through the node network.</p>
<p><b>Backup:</b> Documents duplicated on the blockchain.</p>	<p><b>Trust:</b> Documents encrypted on a shared ledger.</p>	<p><b>Accuracy:</b> No errors from filling out multiple forms.</p>

# Vault

Vault operates multiple layers of software, hardware and personnel to establish simple ways to register, identify and return items:

- Transparent cryptographic registration and query network.
- Bounty incentivized recovery and return of items.
- Tracking and securing of special interest items.
- Open API to enable service providers and law enforcement.

Services:

Identity & personal data management

Asset management

Asset query & reporting

Vault created a blockchain and smart contract based system to develop a platform for registration and identification of all assets.

The key features are speed and liquidity — in comparison to real world processes: Tokens and smart contracts can be used to digitize practically any type of asset, and token transactions are faster than moving an asset in physical form or getting paperwork done.

Contrary to traditional transactions, tokens also offer more transparency, by recording

transactions on a public ledger. They do so while keeping the identity of those involved absolutely anonymous.

Finally, Vault Tokens (VSS) can be used for a bounty and accreditation system, where users are encouraged to participate and report lost, stolen or found items.

Applying a token model makes sense in a digitally unique asset economy, where supplies of information are overwhelming and users need to be incentivized to contribute.

# Vault

## The company at a glance

**Key to Vault's operations are its token and applications. The token (based on the ERC20 standard) is used with various contracts to enable, incentivize and govern network participation. The applications are used to access assets and interact with network participants.**

### Mobile application

The mobile app delivers the following services:

- **Item registering, identifying and reporting**
- **Signing transactions**
- **Inventory management**
- **Item queries**

### Web and desktop application

These service apps serve as interfaces for:

- **Accessing Vault when on the go (e.g. at airports)**
- **Businesses (e.g. mass transactions, ERP systems)**

### Costs and subscriptions

Registration, KYC, general access, item registration, management and identification are free and unlimited for private users and small businesses. In addition, Vault offers paid subscriptions and additional paid services for larger businesses.

All user and asset data is encrypted and only accessible by the legitimate creator. It can also be made visible individually to third parties, where the privacy and security is assured.

### Revenue from fees

In order to reduce costs for Vault users, the main revenue is derived from bounties and transaction fees. The fees and costs to return items vary depending on the bounty model.

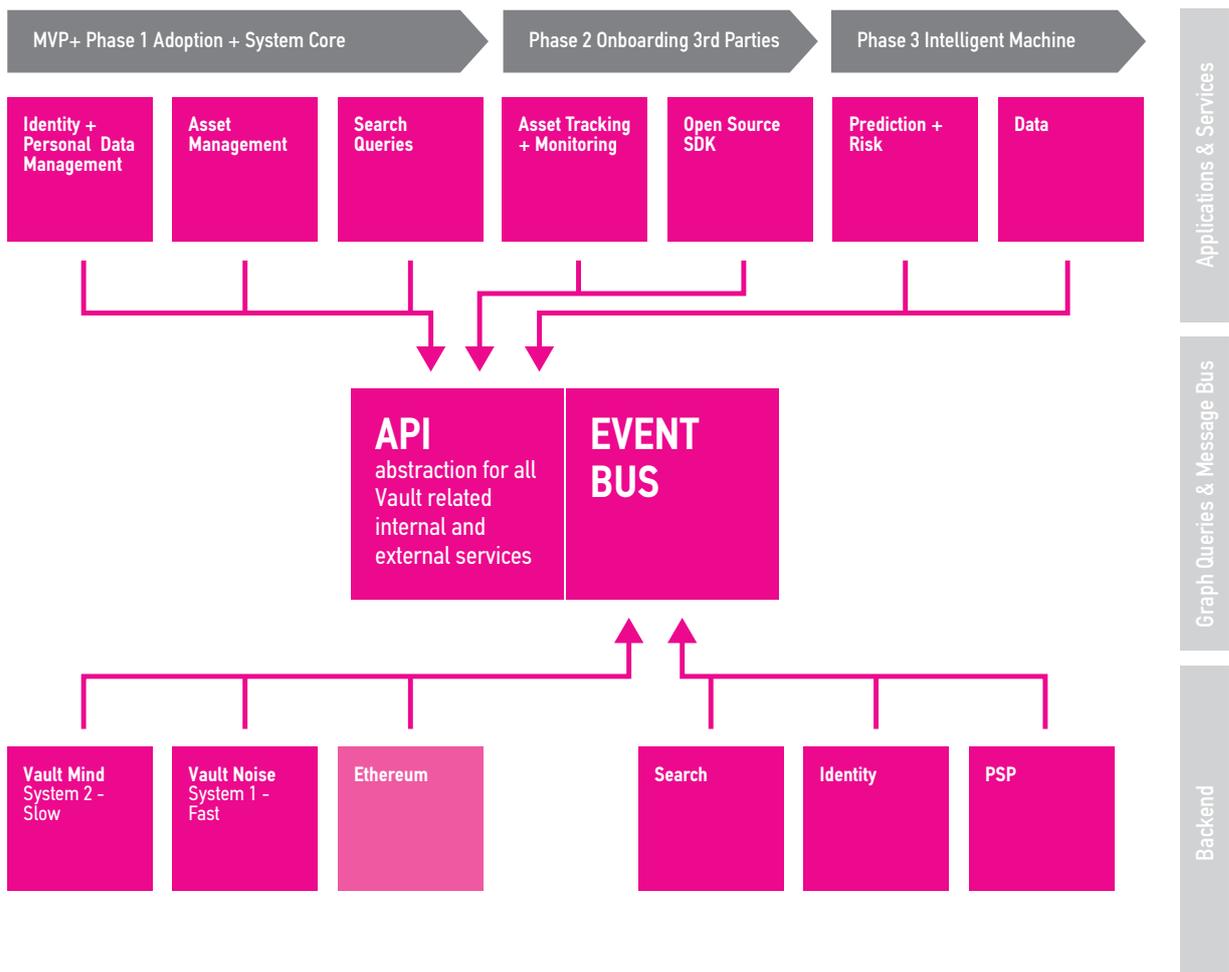
# System overview

**Vault seeks to create stable and scalable services based on both centralized and decentralized systems and network architecture. Vault's systems are inspired by distributed computing, computational neuroscience and more.**

The aim is to deliver a best-in-class user experience across all services. By creating

a secure channel between parties via block-chain, Vault maintains control of the security model through integrated smart intrusion detection systems, plus unlinkable one-time public keys.

It's all part of making an already strong security protocol even stronger.



# Network features

Vault builds on the best cryptocurrencies, network architecture and distributed data sharing systems to develop a new blockchain with long-term viability.

Vault is inspired by the latest ideas in distributed consensus and competitive governance. Some of the foundations come from Bitcoin, Dash, Decred, and Cripviser, allowing Vault to offer the following features:



**Anonymity and privacy**



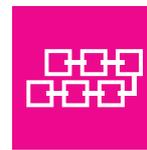
**Real-life verification**



**Real-time status confirmation**



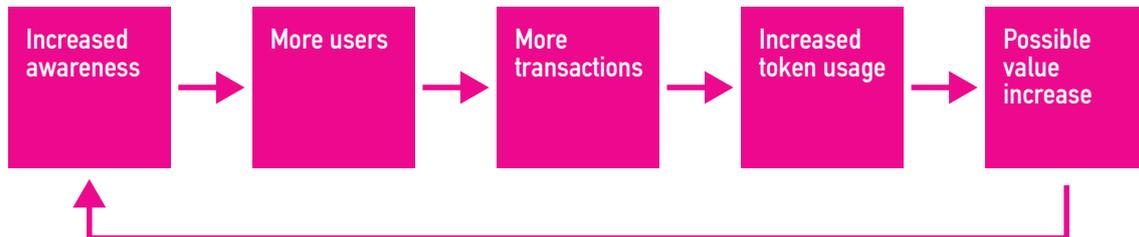
**Efficient permanent data storage**



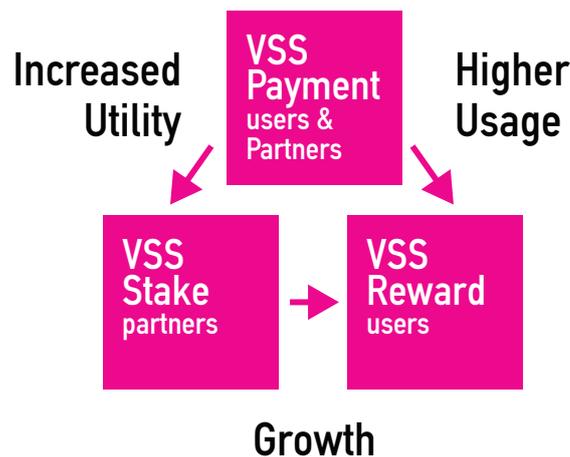
**Adaptive difficulty**

The VSS token is a key component in solving the problems users experience in cases of loss or theft. Promoting Vault's services, providing quality user experience, and

resolving cases will increase token demand, activate network effects and attract more users.



The VSS token benefits users by serving as form of payment, reward and stake.



# Ecosystem

**VSS tokens are created on the Ethereum Network and based on the ERC-20 standard. These contracts employ the OpenZeppelin libraries, which are used in a number of well-maintained token ecosystems and ensure a solid foundation for further developments.**

Even though VSS tokens facilitate the core functionalities, it's not desirable to process all the transactions on Ethereum MainNet for reasons of cost and efficiency. Specifically, not just the volatility of ether itself resulting in a high cost per transaction, but also the bloat of processing resources with numerous micro transactions.

That's why Vault will establish extra functionality on top of MainNet. This will enable low-cost transactions at speed. Utilizing sidechain-like structures (introduced in projects like Lisk, Bitcoin Lightning and Ethereum Raiden/ $\mu$ Raiden) will enable the abstraction and bundling of transactions and functionality, like unidirectional payment

channels without the resource overhead.

VSS tokens drive the key functions and transactions. While registration and identification are free, the actual process requires a network transaction to trigger account creation and processes, like KYC/AML. Creating assets equals encoded datasets on the Vault Network. This results in deterministic and transparent assignment to legitimate owners.

The Vault network performs search queries and forms anonymized results. Depending on the owner's privacy settings, assets can be easily identified, located, and resolved. This even applies to those items that haven't yet been added to the network. If items do not exist, registration can be incentivized.

Finally, governance of public APIs and SDKs lets third party service providers, law enforcement, commerce, ERP, and manufacturing all tie in to the network and service landscape.

# Ecosystem

## Network incentives

**While Vault's main purpose is enabling lost and stolen items to be returned, there is need to incentivize end-users and service providers to use the network.**

Vault will reward network participation and establish mechanisms to create income streams for users in the following ways:

**1.**

Reputation scoring leads to improved trust among users. Scoring is based on users reporting and resolving incidents, which also leads to bigger bounties.

**2.**

Dynamic delegation whereby participants are rewarded for network participation and confirmation of individual transactions with their client app.

**3.**

Asset holders are rewarded on their asset / token ratio. Steady assets and tokens combined with network participation guarantee strong relationships.

**4.**

For businesses with larger asset quantities, Vault rewards continuity and volume with payback models tailored to each cooperation.

The Vault network is an incentive-driven model. The more people participate in the network, the more effective it becomes. This development lets the company gradually reduce its initial promotion efforts and focus on its incentive programs.

# Scaling smart

**As discussed in the previous section, there are disadvantages to running transactions directly on Ethereum MainNet. However, there are also feasible solutions.**

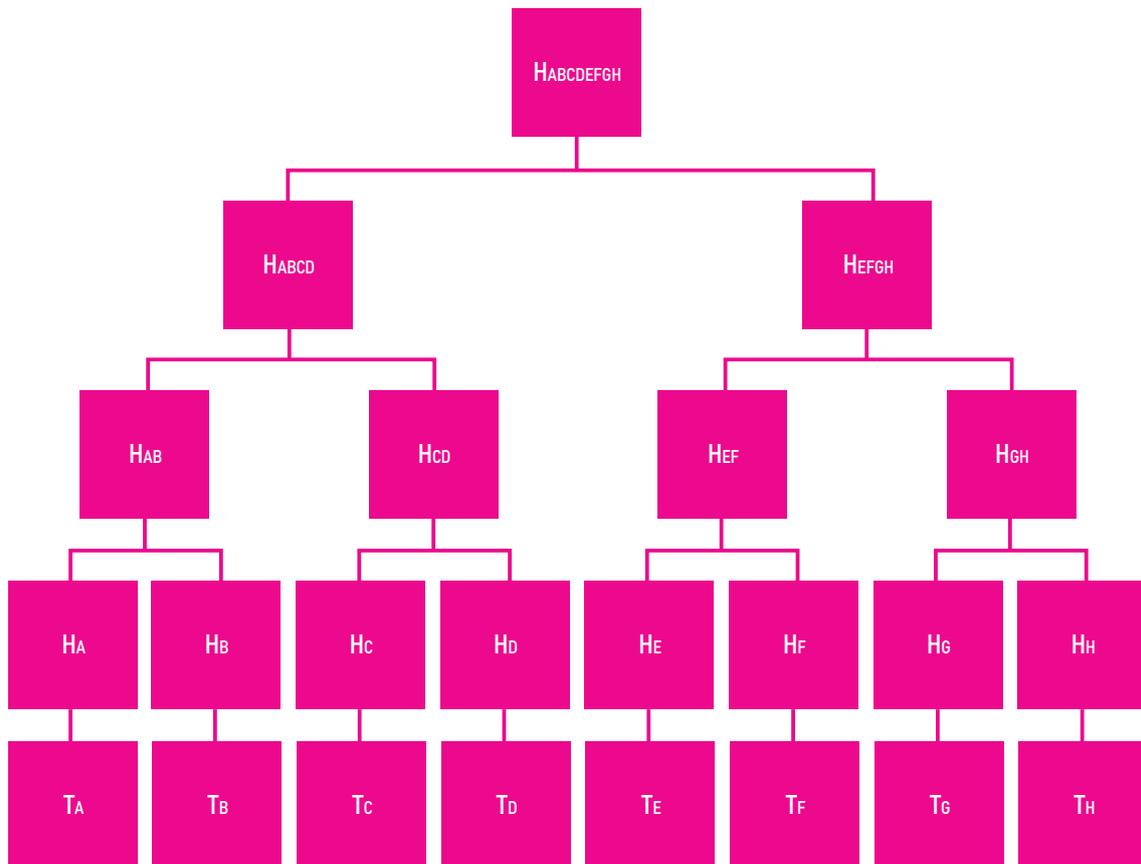
As Vault needs to keep working on its products, its initial approach is starting with a semi-decentralized architecture and trans-

form into a decentralized one where needed.

Therefore, for Phase 1, Vault will start with a centralized access point to manage accounts, assets, and payments. In transition to Phase 2, Vault will switch to any combination of the following methods.

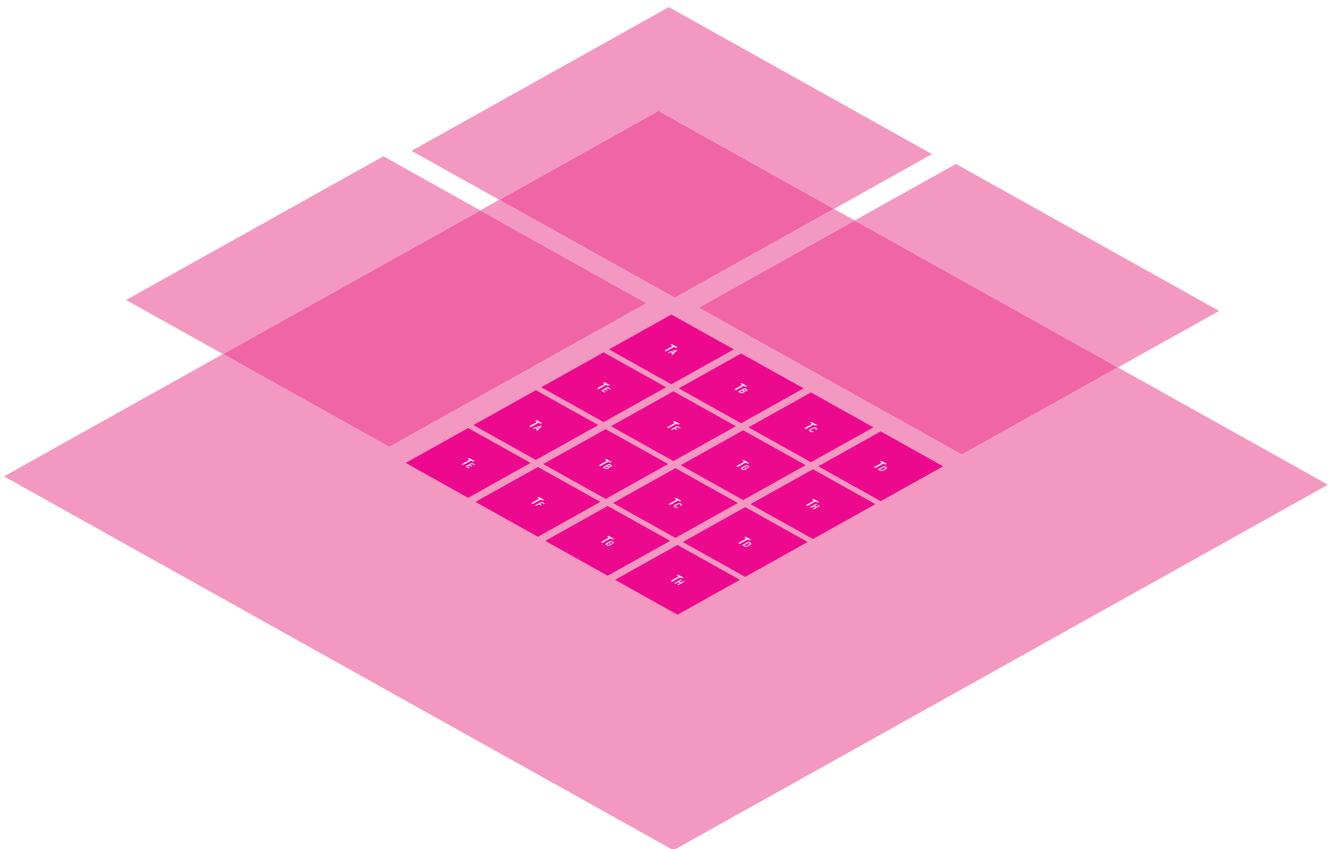
## Sidechains

There are ways to use Merkle Trees to implement sidechains that tie in to the MainNet.



# Scaling smart

By bundling together transactions from another chain, it's possible to create a hash that's representable on MainNet at a reduced cost.



## Payment channels

Sidechains are a simple way to offload transactions and reduce cost and volume on MainNet. But due to the decentralized interactive nature of Vault's product, there's also a need to reduce managing any kind of transactions between nodes, since payment

channels offer direct transaction capabilities between entities.

These channels can be achieved with smart contracts, where participants directly interact with the contract until conditions are met to resolve the respective transactions.

# Scaling smart

## Consensus

Another key blockchain component is its **consensus algorithm**. This is used to agree on the state of data in a distributed system. While there are already competitive and co-operative consensus algorithms, it's possible to create your own.

Delegated Proof of Stake (DPoS) is an alternative consensus algorithm that uses reputation and real-time voting to achieve consensus.

Delegates are selected based on their reputation and network weight. Since their behavior is fully transparent, trust towards the delegates is required. However, network transaction speed is increased since the delegates don't need to be confirmed by the network, thus avoiding added computation.

In the event of malicious actors, they are identified quickly and their behavior leads to a downvote of the delegate and consequent replacement.

# Vault token sale

**500.000.000** tokens will be issued following the breakdown outlined below. The price per token is not yet defined and will be set in US \$ resp. in ether.

## **Pre-sale**

The pre-sale will use an individual smart contract. An ether address will be announced via an instruction email and our pre-sale website [www.vaultsecurity.io](http://www.vaultsecurity.io). The pre-sale will be limited to 100 million tokens and only available for qualifying participants. The Vault team working on the project will be purchasing at this time. The price will be set according to milestones which soon will be published.

## **Main sale**

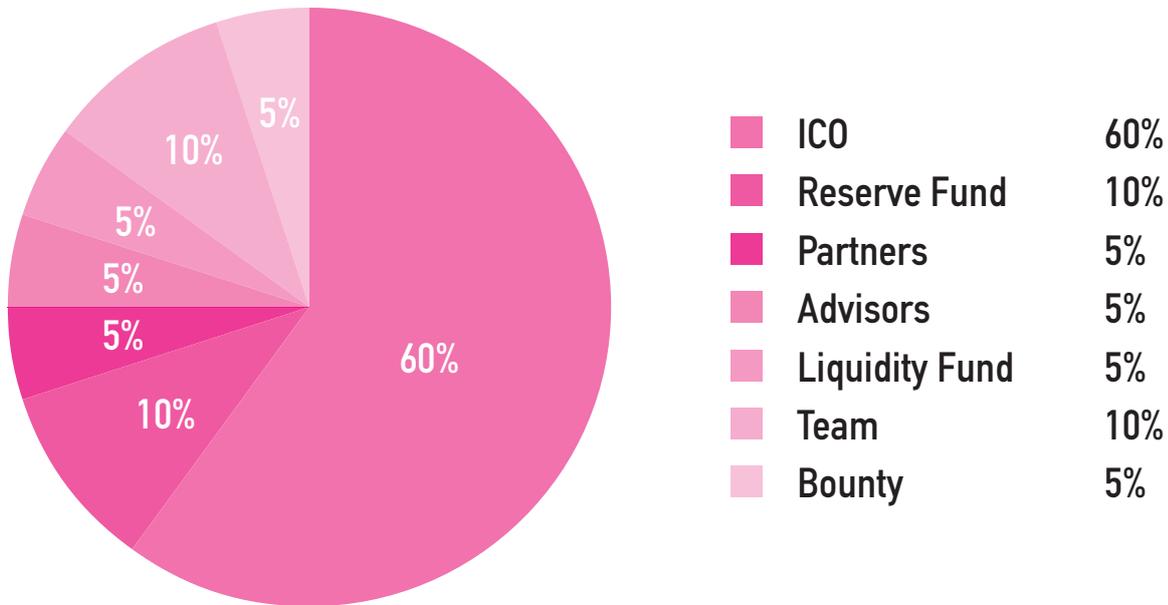
The whole token sale will offer 300.000.000 tokens to the public. These tokens will be

sold using a smart contract until all are sold. In both the pre-sale and main sale, the price will be set in US \$ and ether. Buyers will receive ERC-20 tokens at the conclusion of the sale. The tokens can't be touched during this time, but will stay the property of Vault. After the freeze period, the tokens can be sold, frozen, or burned, depending on the system's evolving token management directives.

The soft-cap is 5 million US \$.

The hard cap is 50 million US \$.

# Vault token sale



### Token sale

Tokens will be priced immediately before the sale in US \$ resp. ether. The sale will take place at that fixed price — measured in blocks on the Ethereum blockchain — or until all 300 million tokens are sold.

### Token trading

Vault anticipates listing the tokens on an exchange as soon as possible after the crowd sale has closed. Detailed information will be made public soon after.

### Token facts

The VSS token is based on the ERC-20 token standard.

- **Token name: VSS**
- **Type of token: Utility Token**
- **Network: Ethereum**
- **Start token pre-sale: 01.08.2018**
- **Total supply: 500.000.000**
- **Type of supply: Fixed**
- **Soft cap: 5.000.000 US \$**
- **Hard cap: 50.000.000 US \$**
- **Currency: ETH, BTC, XRP, BCH, LTC**

# Vault ICO

**ICOs enable a global reach and consequently provide the most interesting investment opportunity. As a result, bureaucratic limitations are substantially reduced. This benefits not only companies pursuing this form of capitalization, but also interested investors whose participation in a project is simplified.**

ICOs give a nearly barrier-free entry into the investment market for people around the world. People can invest in projects simply by allocating their digital assets to a project of their choice in a few clicks.

Previously, most projects were funded by a few major contributors. Now projects can be funded by many people who each contribute a lower amount of funds. This creates a different participation structure and risk spread. In addition, process transparency is higher than with traditional investment models since ICOs are based on smart contracts and blockchain technology. Another security aspect ICOs offer is that projects are assessed and ranked by a high number of market participants (both professional and individual). This adds to the transparency and investment safety.

A full audit of our blockchain and smart contracts structure has successfully been concluded.

In order to launch Vault on a global scale, we will issue the Vault utility token for initial fundraising. Many tokens offered in crowd sales are speculative objects, but the VSS token will have direct utility. Since the VSS token is purely a utility token, it's expected buyers during the crowdsale will be end users of our service. While we don't encourage speculation, we will not restrict market forces and the token will be fully and directly transferable. We will not sell the tokens directly on our platform and the price will be determined only by the open market.

The VSS-Token is an Utility-Token which will be converted as a payment token.

The financial section of this document represents a summary of the company's general business plan, which is available upon request.

# Why get involved?

## Innovation

Vault is combining a new market with a unique proposition, with the aim of positioning itself as a global market leader.

## Potential

Global theft and loss accounts for approximately 3,000,000,000 cases each year. This represents a similar number of transactions for Vault.

## Service to society

Vault's claim to benefit society is not an empty marketing ploy. Vault's core service is free of charge.

## Token demand

Demand is driven by the growth of the global user community and the use of tokens on the platform. Again, this represents real transaction potential.

## Future expansion

Vault's plans to expand the business model globally. This will be accompanied by developing and introducing more products and services.

## Experienced team

The Vaults team has over 200 years of combined experience, plus proven track records and highly regarded expert advisors.

# General business plan

## Plan's statement of purpose

The aim is to provide interested parties with an organized, structured and success-oriented business plan, in addition to a financial proforma for future growth and development.

Further more, the plan aims to utilize professional planning techniques and methodologies to develop a meaningful, flexible and dynamic management tool. The plan not only provides tactical and timely financial milestones, but provides a long-term strategic perspective to deliver a meaningful impact.

## Mission statement

Vault will initially focus on developing and implementing its products and services worldwide, so as to establish itself as a successful company and reduce crime globally. Vault's long-term mission is to become a serious influence in global crime prevention.

## Objectives

Corporate development plans are based on determining specific qualitative and quantitative company goals.

Vault will implement a multi-phase development structure:

### Short-term / introduction phase:

Grow operating team and management,

implement plans and controls, optimize systems, services and products, launch marketing campaigns, build customer base.

### Mid-term / expansion phase:

Increase user base, establish brand leadership, seek and secure innovative value-added service and product extensions, generate profits, expand into 25 countries.

### Long-term / consolidation phase:

Position Vault as a market leader, reach 100.000.000 users and achieve a 10% success rate in resolving reported cases.

## General strategy

The general asset strategy is to create and develop Vault's brand, user base, security systems and marketing.

Vault will own, administer and manage the brand rights and will establish commercial relationships. These include (but are not limited to) company-owned joint ventures, joint stock held corporations, contracting agreements, sub-licensed relationships, and representative agencies that are required to market, sell, and produce its products and services.

Vault will recruit and retain highly experienced professional managers with an entrepreneurial track record in all relevant fields of expertise.

# General business plan

## **Operating strategy**

The following strategies are guidelines from which specific plans, tactics and actions can be developed to support the general strategy goals. Vault aims to do the following:

**Create and maintain innovative solutions and a customer-oriented market leadership strategy.**

**Utilize all measures of legal intellectual property protection to support and secure the brand.**

**Invest in research for new products and services.**

**Manage and control a strict “customer first” service quality.**

**Initiate strategies to cultivate career growth and satisfaction for all staff.**

The purpose of this strategic business, marketing and development plan is to incorporate the strategies into specific time-coordination, financial budgets, tactical actions and strategies. Through this detailed process, Vault will identify ways to realize fully the potential of its target market.

**The company’s business plan represents the best estimate and analysis of the potential market, opportunities and difficulties facing Vault.**

## **Revenue recognition**

The company prepares its financial statements on the accrual basis of accounting. Revenues are recorded when they are earned and expenses recorded when they are incurred.

## **Property and equipment**

These are stated at cost. Depreciation will be computed using the straight line method based on the estimated useful life of the asset, which ranges from 3-7 years.

## **Use of estimates and assumptions**

Ensuring financial statements conform to accounting principles requires management to make estimates that affect the reported amount of assets and liabilities. Actual results may vary from those estimates and assumptions.

## **Summary of significant projection assumptions and accounting policies**

This financial projection represents the business' expected results of operations for the projection period, to the best of the management's knowledge. The projection reflects the expected course of action based on circumstances as of March 1, 2018 (the date of this projection).

# Roadmap

July 2018	<b>Team Expansion, Blockchain Programming</b>
August 2018	<b>ICO Preparation New York, USA, SEC</b>
September 2018	<b>CO Phase 1: Getting Members onboard</b>
October 2018	<b>ICO Phase 2: Marketing Phase 1</b>
November 2018	<b>ICO Phase 3: Product adjustments and corrections</b>
December 2018	<b>ICO Full Roll out, Marketing Phase 2, 1 Million users Target acquisition</b>
January 2019	<b>Acquisition with corporate partners</b>
February 2019	<b>Marketing Phase 3</b>
March 2019	<b>Online Shop completed</b>
April 2019	<b>Scaling Business model POC ( proof of concept )</b>
Mai 2019	<b>Increasing Visibility of VSS worldwide</b>
June 2019	<b>Reaching 10 Million Users / Members</b>

# Financial statements

**Along with its unique proposition, Vault is claiming the position of first mover and market leader. While Vault is determined to deliver a valuable service to society, it must still be a self-sufficient and profit-generating company in order to secure its long-term growth.**

Vault's service is designed to protect property and reduce crime. Vault does not charge for the basic use of its core services – registration and identification – since these needs should be a natural right.

Vault's business model foresees the following revenue streams:

- **Reporting lost or stolen items**
- **Commissions from rewards**
- **Cooperations**
- **Online shop**

The next section will explore these streams in more detail:

## 1. Membership

The first 3 months of the membership are free. After that the member is charged 1 US \$ per registered item per Year.

## 2. Reporting of lost or stolen items

Using data pulled from different countries, it's reasonable to estimate the number of lost items globally is 1 billion. Consequently, this represents 1 billion potential transactions for Vault. Assuming Vault can generate even 0.5

% of this potential would result in 5,000,000 transactions per year.

The first revenue stream comes from reporting lost or stolen items to the network. This fee depends on the value of the reported item. The minimum fee will be 5 US \$ for reporting an item. There is a range of categories and calculation models and fees, starting from 5 US \$ (the minimum fee) and going up to 99 US \$ (the maximum fee). Vault estimates the average reporting fee will be around 25 US \$.

Based on a market potential of 5 million transactions per year and an average reporting fee of 25 US \$, the anticipated turnover is 125.000.000 US \$. Based on a reporting fee of 5 US \$, the turnover would still be 25.000.000 US \$. Finally, even reducing market penetration to 0.25 % would result in a turnover of 12.500.000 US \$ for this revenue stream alone.

## 3. Commission from rewards

Still using the number of 5 million estimated transactions per year and assuming that Vault's service will deliver a 1% case solution rate, the number of reward transactions where Vault is eligible for commission would be around 50.000 cases.

For rewards paid out, Vault's commission is 30% for both types of reward cases. The flag bounty is rewarded when an item has been

# Financial statements

located, found or identified. The amount for this first reward is set by the owner when they register the item in the network. The reward for locating an item will be lower than the reward for its retrieval. Consequently, the average flag bounty amount is estimated at a modest 5 US \$. Vault's participation would be approximately 1,50 US \$.

The identification rate will certainly be higher than the retrieval rate. Regardless, calculations based on the 1% volume would result in a turnover of 75.000 US \$ for Vault's participation in flag bounties.

The second reward, the retrieval bounty, is also set by the owner of the item once it is registered in the network. Again, the reward will vary depending on the item's value. For example, retrieving a 250 US \$ watch will be lower than for a 25.000 US \$ watch. Consequently, it's likely many retrieval rewards will exceed 1.000 US \$.

Nevertheless, calculations are based on an average reward of 50 US \$, which results in a participation of 15 US \$ and an additional 750.000 US \$ turnover for Vault.

Vault's focus will be constantly increasing the volume of solved cases and retrieved items. The target set is 5%. With a growing acceptance of Vault by users – along with more use of its services – would increase the success rate to 10 %.

A 5% success rate translates to 250.000 transactions, with a cumulated rewards participation of 11,50 US \$. This adds up to a 2.875.000 US \$ turnover. This figure is based on an estimated average reward of 5 US \$, respectively 50 US \$.

#### 4. Cooperations

Vault's management has been negotiating with potential partners, including insurers, manufacturers and law enforcement agencies. Estimating the number of transactions that will come out of these partnerships is difficult, since there is no comparable data. However, based on the initial feedback and interest, the turnover potential is considerable.

Insurance companies see the benefits of adopting Vault as a white label tool within their services. Vault would feature in their marketing campaigns, in turn generating more customers. Also, Vault's service could be offered in connection with rewards or discounts to existing and new customers. For example, customers registering an insured item with the network would receive a discounted insurance policy.

Based on the size of the insurance market, this revenue stream has the potential of becoming Vault's main source of income. It is probable other insurance companies will seek cooperations with Vault once a first

# Financial statements

mover enters the insurance market with a unique claim and offering.

Initial calculations have not been considered in the business plan, due to the momentary unpredictability of this model. However, a 7-digit turnover potential seems realistic.

As a result, Vault will promote this area of its business model, since it will reduce fees for the core functionality of the system.

## 5. Online shop

Vault's online shop will be the principal platform for distributing the company's GPS item tracker (currently in development). The number of estimated transactions and potential user volume makes the online shop a profitable and realistic revenue stream.

Based on an estimated target user volume of over 10.000.000 users, Vault anticipates the online shop will create a substantial income.

Existing figures from online shops selling security products show average conversion rates of 3-5 % at average purchases of 49 US \$. Using these figures in conjunction with Vault's traffic volume would result in around 300.000 to 500.000 purchases at an average of 49 US \$, thus generating a turnover of between 14.700.000 and 24.500.000 US \$.

# Financial statements

The assumptions below form the basis of calculations and reflect conservative estimates based on key facts and figures researched by financial advisors and management. Following industry standards, the company will use these conservative figures to calculate its three-year statements. A detailed chart covering every year is available separately.

## Assumptions:

### Users

20% rise in new users each month and 10% de-registration rate per month.

### Items

On average, users register 2 items. 3% of all registered items are reported lost or stolen. 1% of all reported items are identified & returned.

### Fees & commissions

- Average transaction fee for reporting lost or stolen items: 5 US \$.
- Average commission on flag bounty for found item: 3 US \$.
- Average commission on retrieval reward for returned item: 6 US \$.
- Commissions for cooperations are currently based on assumptions.
- Shop sales assumptions: 0,5 % of users make an average purchase of 25 US \$

### Cost of goods

Blockchain cost 0,05 US \$ per item registration. Shop products cost 50% of sales.

### Cost of operations

- **HR: Includes buy outs, pay offs and acquisitions.**
- **Rent: Based on market investigation and offers.**
- **Transport & Travel: Including corporate vehicles and business travel.**
- **IT: Includes all IT-related departments (including outsourced).**
- **Research & Development: All product developments – digital or hardware.**
- **Marketing: Includes all costs for commissions, affiliates, distribution, incentives, and marketing activities.**
- **Insurers: All corporate insurers, excluding those related to HR.**
- **Legal & Advisors: All external advisors.**
- **Operational Materials: Materials for offices and running the operation.**

### Initial investments

Office furniture and equipment, IT equipment, down payments & personal equipment (tablets, phones, contracts etc.)

### Ad hoc expenses

Legal fees, fines, acquisitions and compensations.

# Financial statements

Turnover	Year 1	Year 2	Year 3
Number of members	10.000.000	30.000.000	100.000.000
Turnover from membership fees	30.000.000 US \$	90.000.000 US \$	300.000.000 US \$
Turnover from lost/stolen items 1	6.600.000 US \$	19.750.000 US \$	65.800.00 US \$
Turnover from lost/stolen items 2	3.960.000 US \$	44.437.500 US \$	296.100.000 US \$
Turnover Online Shop	2.000.000 US \$	6.000.000 US \$	20.000.000 US \$
Total	42.560.000 US \$	160.187.500 US \$	681.900.000 US \$
Expenditure	24.000.000 US \$	47.500.000 US \$	85.000.000 US \$
<b>Result</b>	<b>18.560.000 US \$</b>	<b>112.687.500 US \$</b>	<b>596.900.000 US \$</b>

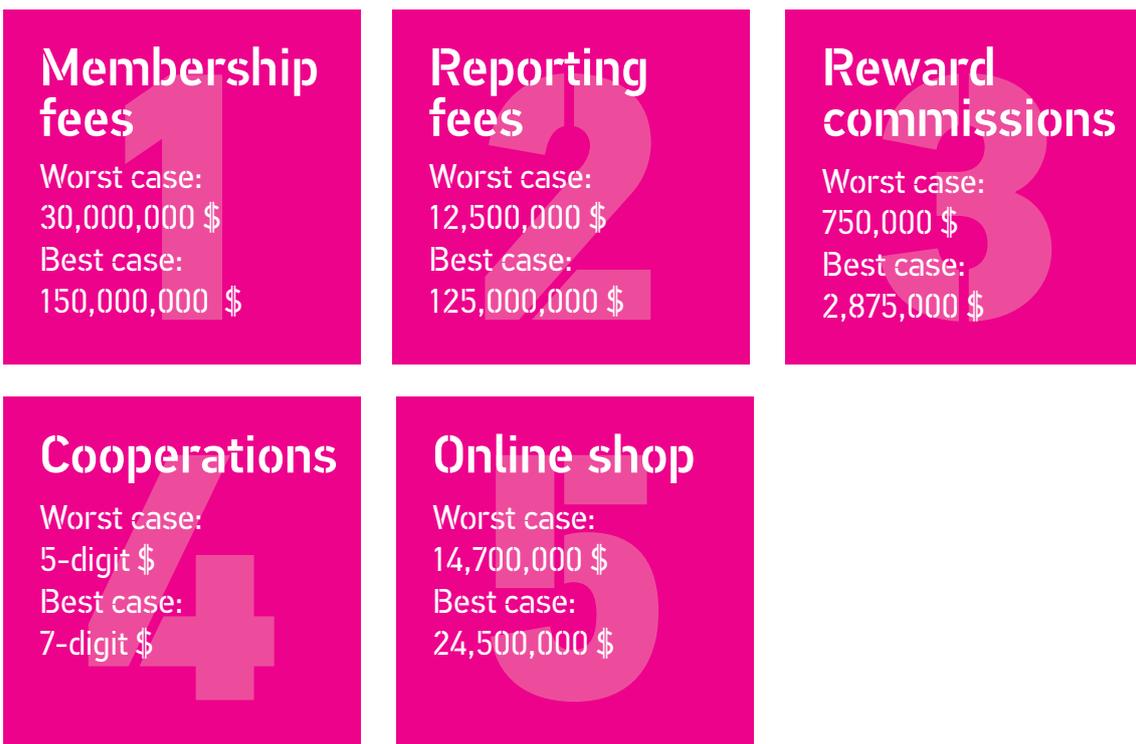
# Financial statements

## Revenue stream overview

**As stated previously, these figures are based on reasonable estimates.**

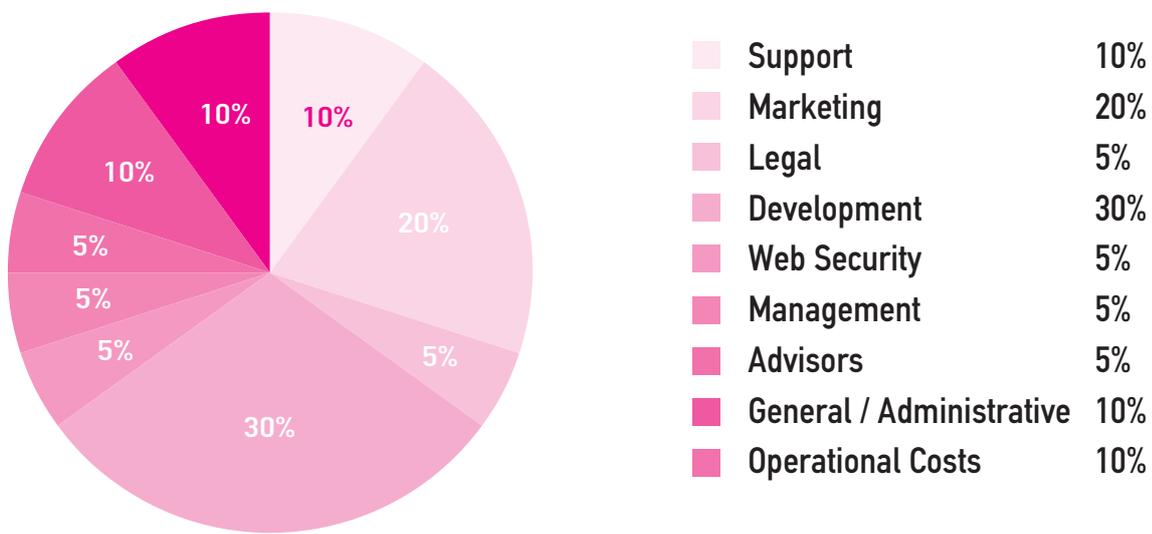
Vault is already pursuing other promising revenue streams. For example, developing a unique coding system that will let Vault users apply highly secure codes to nearly any item.

In the area of service development, Vault is developing systems for risk assessment and prediction, which will increase the company's offerings to corporate and private customers.



# Financial statements

## Fund allocation



### Escrow arrangement

Vault has created a multi-signature escrow wallet to ensure funds are safely kept and spent only on the needs described in this paper

**20% of the profits will be invested in cancer research.**

# Business strategy

Initially, Vault will concentrate on establishing the brand and marketing its services. Since the effectiveness of Vault's service increases with the number of users, it's vital to promote and support the market launch with extensive marketing activities.

Once a user base is established in a targeted market, Vault will encourage word-of-mouth marketing through excellent service standards and user experience. Vault may support this strategy through rewards and incentives. Ultimately, the aim is to reduce marketing expenses as soon as possible to free up funds for research and development.

Vault has developed an innovative marketing campaign that uses both digital and printed media, with a particular focus on social media. Vault's media strategy is divided into:

- **Classic marketing**
- **Viral Marketing**

## Classic marketing

Vault's strategy employs proven techniques for launching a brand, which are based on the team's experience and track record of creating and establishing successful brands internationally. The strategy will include the following activities:

1. Use advertising to position Vault in relevant online and offline platforms.
2. Activate cooperations with affiliate networks and distribution channels.
3. Send press releases and make media packages available on Vault's website, localised to the relevant languages.
4. Seek media appearances and coverage through press articles.
5. Enter into cooperations with relevant market leaders, such as insurers, manufacturers and commercial partners.
6. Enter into cooperations with local law enforcement agencies, legal representatives and organizations.
7. Collaborate with local celebrities and opinion leaders.

# Business strategy

## Viral marketing

Vault will harness the power of viral marketing strategies. Specifically, utilising the viral effects of social networks like Facebook, Twitter and Reddit, plus relevant topic-related blogs and discussion boards.

Essentially, Vault wants to engage people in discussions about the brand and its offerings. Once a discussion is started, it spreads, thus making Vault visible to a number of potential users.

Since negative reviews can spread just as quickly as positive ones, it's key to only enter these platforms when Vault's service is fully functional and beneficial to users.

**Vault's viral marketing strategy anticipates the following activities:**

**1. Create an official Vault presence on relevant social media platforms.**

**2. Engage with platform members.**

**3. Activate an affiliate program for blog operators and actively recruit partners.**

**4. Launch press releases and make media packages available on Vault's website in the relevant languages.**

**5. Collaborate with social media "stars" and opinion leaders.**

**6. Partner with content-related, internet-based companies. For example, from the travel, security, and asset protection sectors, in addition to insurance, crime prevention, hotel and entertainment industries.**

Employing classic and viral marketing strategies will ensure Vault is visible to a wider audience comprised of all ages and demographics.

# The Team



**Arman Sarhaddar Sacher**  
Member of the Board, CEO

20 years of professional experience in wealth management, worked in several big companies in New York, serial entrepreneur in diverse markets, very enthusiastic and passionate personality with outstanding results driven attitude



**Heinz Studer**  
Member of the Board

Classical troubleshooter, organization process optimization, strategic planning, contractual law, over 18 years SRO member, which is under the supervision of Finma, extensive experience in different organizations globally



**Danyele Boland**  
Member of the Board

Founder and CEO of a successful staffing firm in the US. Over 16 years experience in international sales, human resource management and logistics. Dynamic public speaker with industry expertise in telecommunications, construction and civil defense including nuclear, biological and chemical threat mitigation. Driven, innovative, and charismatic leader



**Dr. Roger Oechslin**  
CFP

Chief Advisor Financial Operations of several big holding companies across Switzerland combined with It solutions ( ERP ). Product development and marketing for different industries, extensive knowledge in international economics. Coordination of standard systems for eGovernment in Switzerland



**Andreas Kündig**  
CDO

Economist, Business case post merger integration, Change management, Digitization, 20 years of IT experience, commercialization, extensive marketing experience



**Prof. Eric Bernhard**  
COO

30 years of experience in Universities in Applied Science, since 15 years main focus on e-business and electronic payment systems, Implementation and innovation of study programs in different universities, since 5 year focused on Blockchain eco systems. Project leader in science industries 4.0



**Urs W. Schmid**  
CSO

Over 17 years of experience in the police force and weapon industries, highly skilled network builder, negotiation and communication expert, Author of the book "Superyacht Sales, 7 Swiss Top Secrets to Success", extensive psychological and economical background expert



**Gökhan Altinok**  
CTO

Expert and Lecturer in Blockchain Technologies and Cryptocurrencies. Over 20 years of experience in leading companies in the telecommunication industry, since the studies "Business Information Technology" became expertise in Digital Business and Blockchain Technologies. Extensive Project Management and Consultant experiences

# The Team

## Advisory board



**Remy van Donk**  
Creative & Brand Director

Multidisciplinary creative director with 20+ years of experience. Has worked across creative direction, corporate and brand identity, advertising and digital marketing for a roster of international clients such as Coca Cola, Red Bull, airbnb, Ernst & Young, bwin, Vistaprint, Full Tilt, Schwarzkopf, Persil, Loctite, Siemens, Bank Austria and Henkel CEE.



**William R. Samuels**  
Scarinci Hollenbeck, NY

Based in New York City, Bill started his career as an IP attorney in San Francisco for several start-up companies. Since then, Bill has worked with a number of technology-based and disruptive businesses and regularly handles cases in domestic and international patent and intellectual property matters.



**Dr. Jason A. LaBerteaux**  
Scarinci Hollenbeck, NY

An expert IP and patent attorney located in New York City, Jason earned his Juris Doctorate from the University of Connecticut School of Law, with certification in Intellectual property. He is a member of the United States Patent Bar and has extensive experience in the preparation and prosecution of patent applications throughout the world, conducting patentability studies, freedom-to-operate analyses, and due diligence, as well as providing legal opinions addressing patentability, clearance, and validity inquiries.

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You are strongly advised to take independent legal advice in respect of the legality in your jurisdiction of your participation in this token allocation event.

Prospective acquirers of Vault's tokens should carefully consider and evaluate all risks and uncertainties associated with their purchase. In the event that you purchase tokens, your purchase cannot be refunded or exchanged.

We cannot ensure that there will be any demand or market for its tokens, or that the purchase price is indicative of the market price after they have been made available for trading on any cryptocurrency exchange or market.

There is no assurance of any success of the token allocation event or business platform and service that is yet to be developed as envisaged by the available information.

The value of, and demand for, Vault's tokens hinges heavily on the performance of the company's platform to be developed and the continuous active engagement of its users and success of its contemplated business lines. There is no assurance that the token allocation event will be successful or that its business platform that is yet to be developed will gain or continue to gain traction. While Vault has made every effort to provide a realistic estimate, there is also no assurance that the cryptocurrencies raised in the token allocation event will be sufficient for the development of the company's business platform. For the foregoing or any other reason, the development of the company's business platform and launch of the anticipated Token functionality may not be completed and there is no assurance that it will be launched at all.

We recommend that you seek out independent financial advice before engaging in any sort of business endeavor.

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