Technical Details and Appendix to Snowden-Coin-Whitepaper

Blockchain, Ethereum, and Tokens Blockchain is a Distributed Ledger Technology (DLT) invented to support the Bitcoin cryptocurrency. It is a distributed database designed to maintain a continuously growing list of records called blocks. Each block contains a timestamp and a link to a previous block.
A blockchain is managed by a peer-to-peer network collectively adhering to a protocol for validating new blocks and additions to the database. Once recorded, the data in any given block cannot be altered retroactively. Functionally, a blockchain can serve as an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way.
Blockchains are secure by design and are an example of a distributed computing system with a high Byzantine fault tolerance. This makes blockchains potentially suitable for recording events, records, identities, transactions, and other documentation. The database is not contained on one central node. Rather, it is contained in its entirety on every node on the network, which means it is more secure.
Bitcoin, the largest (by market-cap) cryptocurrency, has fostered interest in and the development of other blockchain-based technologies, including Ethereum.
Ethereum is an open-source, public blockchain-based DLT featuring scripting functionality. This means, among other things, that the Ethereum blockchain can be used for purposes beyond cryptocurrency and it can facilitate online contractual agreements called smart contracts. In the past year, a popular use for the Ethereum blockchain has emerged: token issuance and Initial Coin Offerings (“ICO”).

MADE IN GERMANY

1) Detailed Descriptions of Benefits for Participants

Unique Benefits for Uploader

Early bird benefits: The first uploader for a given file (hash unique) will earn all self defined uploader-revenues for a lifetime. Download and re-upload of content will not circumvent that flow of revenue.
Fully anonymous: as all files are dechunked on your local machine. A hoster will never know what you are uploading. A hoster receives only a fraction of some chunks from your IP (never a complete file).
Publisher friendly : An uploader can define if all publisher shall be noticed about the new content or only a subset or none, if an uploader wants to act as an exclusive publisher too.

“Upload your content, we provide the payment engine! ”

Unique Benefits for Downloader

Fully anonymous! While within a peer to peer network (e.g. Bittorrent) everybody can watch what you download (and upload!), as everybody can be your peer, a download here is protected twice:
1. only the hoster itself can see your IP
2. the hoster has no knowledge about the content or even the filename.
You download only senseless pieces (chunks) of a file from each hoster. The rechunk-process will be done on your local machine, regenerating the original file.
Ultra fast! As a Server is faster than a p2p-network, here you use up to 100 Server (each for a chunk) in parallel. The hoster network acts as a super fast download cache-shell around the robust, decentralized, uncensored p2p kernel.
Very low fees: Because all servers compete for the chance to host, the cheapest hoster will provide for you.
Secure: No malicious ads, no virus, no malware, since you never have to visit a hoster website.

“ Ultrafast anonymous downloads + streams “

Advantages for publisher

No censorship-hassle: All take down notices, DMCA requests, trademark claims, government censorships, user comments are handled centrally by deactivating one instance of several access links within the network.
No database necessary: Once registered, you receive new content links by mail, RSS or within your account. Easy drag + drop on your website, which can be hosted anonymously by zeronet.io e.g.
Your website, your price: Publisher declare the price for each content according to their target group. Feel free to grab a cheap link from another site and sell it for a higher price or vice versa. Your house, your rules.

Flexible pricing: Currently we offer 3 Models: 1. Fixed Price, 2. Fixed additional charge on hosting costs, 3. flexible % charge on host costs. Be as competitive as your customers demand.
Easy content management: Pictures, Meta-Text, File attributes describing the content in multi languages and additional user comments can be grabbed from a central resource, the GFR GlobalFileRegistry.org.

Advantages for hoster

Monetization: You declare your costs per GB (Bandwidth) and all downloads are payed without the hassle of own payment and subscription management
Easy setup: You declare your bandwidth costs and add an address for your free storage space to the cache-shell. All management between the p2p core and your storage is done by the system (upload, replication, deletion of low traffic files, optimisation of storage/download ratio, time zone optimisation = no low traffic over night of your zone).
No censorship, take down abuse: You are part of an global ultra-RAID-system without any knowledge about content. What you host are chunks of data, without any use to anyone. Legally you benefit as a transmission-cache from service provider privileges. You are free to delete any chunk at any time, since replication is done by the system.

2) Publishing problems of storage solved by UU

Introduction

Problem	Solution in general (details in chapter 2)
Cloud storage has come to rely almost exclusively on large storage Publishers acting as trusted third parties to transfer and store data. This system suffers from the inherent weaknesses of a trust-based model. Because client-side encryption is non standard, the traditional cloud is vulnerable to a variety of security threats, including man-in-the-middle attacks, malware, and application flaws that expose private consumer and corporate data. Moreover, because many storage devices rely on the same infrastructure, failures are correlated across files and systems.	A decentralized cloud storage network offers many advantages compared to datacenter-based cloud storage. Data security can be maintained using clientside encryption, while data integrity will be maintained via a proof of retrievability. The impact of infrastructure failures and security breaches will be greatly reduced. An open market for data storage may drive down costs for various storage services by enabling more parties to compete using existing devices. Data on the network will be resistant to censorship, tampering, unauthorized access, and data failures.
For more than 15 years the system of online Storage has not changed and the market suffers from a lack of innovation. A high amount of untrustworthy and off-shore Publishers has lowered the trust of people in the current Storage market. It is never completely guaranteed that users are safe. All these problems have one common ground—centralization. Centralized systems create excessive risks for users like	This paper describes a concrete implementation of such a network, and a set of tools for interacting with that network. Since starting our project in 2017 –we've pursued the objective to change the nature of online Storage. The mission of UU is as simple as it is powerful: establishing a new level of trust, privacy and censorship resistance, yet unknown in the world of online Storage.

exploitation of user data, prohibitive legal regulations, vulnerability to manipulation and denial of withdrawals.	
Today‘s Storage system is neither transparent nor trustful. Centralized systems are perfect targets for attacks from inside and outside.	That is where the blockchain and UU come into place. UU´s solution is a decentralized Storage system that will bring transparency and trustless Storage to all users around the world.

Current Video distribution is unfair

Current dominant video distribution solutions are arguably unfair to their key stakeholders: Content creators have little or no control over the monetization model that is used to sell their work. Either way, the revenue they generate will undergo significant taxation by a for-profit entity.
Users have their attention sold for fractions of cents in Audio/Video On Demand (AVOD) models (measured in impressions), while their personal data is mined and sold for profit. In most cases, users are essentially marginalized in the economic equation, under the guise of “free” content and basic service.
Attention marketers (advertisers, sponsors and agents alike) to whom audience is a key metric must trust third-parties for what they buy. Incentives between them are rarely aligned: fraudulent charging mechanisms of traditional platforms not only account for fake traffic, but are also more permissive with fake traffic when audience is being paid for.
In short, participants in the current video distribution and interaction ecosystem are effectively disenfranchised and their interests are often misaligned. Properly incentivizing content creators, developers and publishers for proposing unique viewing experiences to an audience and transparent and verifiable metrics to advertisers will be key to nurturing the future of content consumption.

The broken link between publishers and consumers

Problem	Solution
Storage runs the Internet, fortunately and unfortunately. Fortunately, because it allows the audience to consume from online publishers a lot of content. Unfortunately, because the marketplace has become a terrible mess, ripe with fraud, invalid bot traffic, costly intermediaries,	The UU Network offers e-commerce user-experiences built to shorten the funnel and increase downloads. To offer a new way to download and share, copying expert traders’ movements. To offer an exchange where users can exchange their digital goods in a fast and secure manner. In addition to creating a safe platform to buy

increasing complexity, abuse, lack of trust and privacy, a decreasing quality of the ad content, ineffective adtech, decreasing margins, bad user experience, and a blatant convenient blindness from the audience. Digital storage is broken in its current form and the industry is now looking to clean up its own mess.	and sell crypto currencies, we have implemented several unique selling points which enable us to approach and attract a wider audience.

Transparent hosting market

Problem	Solution
Real-time bidding platforms and their manual counterparts offer limited (or, in many cases, no) information about storage bids. Uploader have no method to verify if they are paying a fair market rate. Additionally, hoster have no verifiable way to confirm they are receiving a fair price for traffic. Networks and platforms provide their own dashboards for reporting, which can be manipulated to highlight top-performing metrics while avoiding others. This is a business-side information asymmetry (and ethics issue) that can be addressed with the transparency of a blockchain solution. There is no network-side economic incentive to be anything but opaque in this regard, especially as the cost of running a bot farm or bot operation decrease—it may be an economically reasonable practice in some instances. A malicious publisher has economic incentive to report all traffic as verified traffic. It is for this reason that impressions are a weak indicator of human page views. The hoster is, of course, incentivized to scrutinize the downloads data they receive but the task is nearly impossible, especially with so many individual steps and layers between the hoster and the publisher. Identifying the inefficiency in a three-to-ten party chain (which may include storage agencies and	These funds will be generally leveraged to develop a blockchain-backed transaction database to support the function of our storage platform and business, detailed in the “The UU Network” section, below. Blockchain will be incorporated in the UU storage platform with the goal of addressing transparency issues in storage. UU developed methods to validate traffic and offer this information to all parties. Introducing the UU Network, the Developer aims to disrupt the online Storage industry as we know it today. The Developer aims to shape the future of a trustless and transparent Storage economy which enables it to bring back lost dynamics and trust of today‘s Storage systems. The build in general reward system opens new opportunities for existing and emerging communities. A streamer, for example, would be able to incentivise their existing viewers in customized private streams and would get rewarded through the UU network itself for the creation of the shows. Thus, the UU Network not only creates new streams of income for everyone helping to grow the network, but also the expansion of

(which may include storage agencies and sub-networks) and distilling hosting performance against simple pricing schemes is nearly impossible.	the network itself increases the worth of each Snowden-Coin because of its limited supply. The economics underlying the Snowden-Coin are chosen to benefit the community and the UU Network, creating a natural demand on the open market and thereby a healthy growth of value.

Definition of Terms

This section includes terms and phrases that may have multiple or alternative meanings. For clarity:

● Hoster refers to a server owner who is offering storage

● Publisher refers to the owner of a website or domain who has placed UU-Links on their website for the purposes of monetization or for free or vice versa pay user for watching.

● Downloader refers to an end-user visiting a page and subsequently requesting the content of file/link and/or page be served to their internet browser.

Technical Description

The following part of this Coin Offer Document outlines a technical overview of how the UU Network and the UU work.
First, an overview of the relevant entities of the UU Network is given. This is a simplified view of how the entities work together. The entities are described in the definitions below.
It is deployed on the blockchain when a downloader creates the download. In its initial simplest form, it is responsible for the buy-in USER DL INTERFACE IMPLEMENTATION and pay-out.
Future implementations may decide and pay-outs trustless and decentralized on their own.

„Publisher“:

A Publisher offers a platform where Downloaders can find their content as a link into the UU system. The Publisher creates (deploys) Implementations on the blockchain and is able to manage them.

„Downloader“:

The Downloader is a user of the platform of a Publisher. He participates in Content which a Publisher offers.

Download Creation

Downloads are implementations of the Download Interface. The Download Instances are exchangeable. This means that new Download Implementations with new functionalities can be added later. That way, the long-term goals of the Developer can be reached step by step without the need of forking. The Developer offers templates of Download Implementations

which fit the needs of different Publishers. As a result, UU gets more and more use cases and fields of application.
During the setup of a Download, the Publisher has to specify the data, which is required for the Download Implementation used. The first Download Implementation will be rather simple and only needs the following data:
Wallet ID of the Publisher;
Buy-in callback address of the Publisher;
Publisher reward (percentage of the Content Price);
General Reward (percentage of the Content, at least 1.00 percent).

With this set of data, the Download can handle the buy-ins and pay-outs of all Downloaders.

Download Joining

If a Downloader wants to join a Download-Link, he or she triggers a buy-in at the Publisher. The Publisher triggers the transaction on the wallet of the Downloader. The buy-in is transferred from the Downloader‘s wallet to the Download Instance and is now part of the Content. After the buy-in transaction was successful, the Download calls the buy-in callback address of the Publisher. As a result, the Publisher can guarantee that UU are now in the Download smart contract and the Downloader has certainly paid the buy-in. In the end, the Download smart contract knows how many Snowden-Coins are currently in the Content and how many and which Downloaders (wallet ID from buyin) are participating in the Download.

Download Finish and Pay-Out

After the results of all host targets of a Download are known by the Publisher, the Download is finished. The Publisher can interact now with the Download smart contract to trigger the finish process. After that, the smart contract divides the Content into three different sub Contents: a. „Publisher Reward“: The Publisher Reward is defined as a percentage of the Content. It is set by the Publisher who interacts with the Download smart contract. It should be seen as reward for the effort a Publisher had, similar to mining of bitcoins. After the Download ended, the Publisher Reward is transferred to the Publisher‘s wallet address, which is also provided at Download setup.

Download Process

The introduction of a UU storage marketplace and a Snowden-Coin blockchain will enable greater oversight, control, and transparency to the process: Each time an end-user makes a URL request at one of the UU publisher properties, the request is received and UU determines whether it has a hoster to serve. If the inventory is available, bid considerations may be made (awarding the display to the lowest-value bid), and the storage is approved for release. Simply, each serve requires two successful Snowden-Coin transactions: one from the hoster (who is effectively paid for the storage) and one from the publisher (who is doing so too) create a record of acceptance on the blockchain).
When UU matches the two parties and receives a download serve request from a publisher property which passes our traffic verification test, UU can claim that a download was served with confidence and the payout will be made.
This record of verified traffic will be available on the public ledger and in a UU-provided dashboard accessible by the involved parties.

UU will attempt to accommodate such activity. In the event that a publisher deposits a Snowden-Coin and a downlaod is not served, it may appear on the Snowden-Coin blockchain but those without a UU-confirmed match are not to be considered verified traffic. UU will hold such deposits until there is an additional transaction to match it with, at which time the download will be served. UU will explore the development of a system that may cause transactions to fail deliberately if suspicious or abusive traffic is repeatedly requesting download displays from a single source.
While the development of such tools may shrink the size of the UU download network business, it will result in an increase in quality for all parties involved. It is important to note there are a limited number of Snowden-Coin available and, upon full issue, those Snowden-Coin will be subject to market forces. Additionally, the UU download marketplace will foster an environment where publishers and vendors, merchants, and brands choose to do business with each other rather than working with an automated bid system that may result in low-quality matches. There are greater business implications which extend beyond the scope of this white paper but this fact should be noted as it relates to the economics of Snowden-Coin. In recognition that the public Snowden-Coin ledger is an important component to the design of this network, UU will develop a tool to explore and verify transactions on the ledger. Depending on network traffic, verified traffic and confirmations may be accessible between real-time and within a matter of hours of the downloads display. This represents a significant improvement over the existing tracking process for the network, publisher, and vendor.
Should the performance of a dl-server become comparable to or better than existing server solutions, UU will consider this feature addition.
It is also important that our business is already operating, but off of the blockchain and that the Snowden-Coin blockchain requires a clearly defined, often done development: Transfer the client server database into a distributed database (blockchain).
While we expect that the aforementioned process is how the Snowden-Coin blockchain will operate, there may be material differences in how our public release functions.

Technological Advantages, The Cointype Advantage

UltraUpload directly addresses the public sphere, such as the arena of politicians, news organizations, civil society, the various services and brands we know and use, and the various platforms in existence today including Facebook, Twitter and so on.
In order to be truly decentralized and fundamentally independent, one has to go deeper into underlying financial structures. The platform offers a suite of banking and financial services which disrupts the way banking, payments, and financial transactions are conducted..
This essentially means all the banking/wallet technology and the actual exchange of money on the UltraUpload system will be handled with our state of the art technology. Together, this unique UltraUpload integration will be able to withstand any external pressure - financial or political.

- 2.1 Elementary Components

The UltraUpload.io system builds upon four novel components:

- 1. Decentralized Storage Network (DSN)

We provide an abstraction for network of independent storage providers to offer storage and retrieval services.

Different to today‘s Storage system, the Developer has created a fully transparent system allowing a natural expansion by its own community on top of the UU Network. This new decentralized model gives back a part of the rake to the community to let users participate in UltraUploads success.

- 2. Verifiable Markets

We model retrieval requests as orders in a decentralized verifiable market operated by the UltraUpload.io network. Verifiable markets ensure that payments are performed when a service has been correctly provided. We present a Bandwidth Market where hoster and clients can respectively submit up/download orders.

- 3. Data Structures with Chunks

A chunk is some part of data that a uploader is storing in the Ultra-Raid (DSN). Data can be divided into many chunks and each chunk will be stored by a different set of Hosters.

- 2.2 Features of the UltraUpload. io Network

The UltraUpload.io Network is made up of the unused hard drive space, processing power and data connection of its users. Secure Access For Everyone: It offers a level of security and privacy not currently available on the existing Internet and turns the tables on companies, putting users in control of their data, rather than trusting it to organisations.

A number of features make this possible:

Self-Encryption: Data which encrypts itself, with itself.
Files uploaded to the network are broken into pieces, encrypted and distributed across the network. This process is called Self-Encryption.
When a user uploads (or saves) a file to the network, via one of the UltraUpload. io Network apps, the file is automatically broken up into chunks. These chunks are then encrypted (encoded so that only authorised parties can read it), randomised and stored on the computers of other UltraUpload. io Network hoster. These encrypted chunks are completely unreadable and inaccessible to anyone other than the paying user.

Distributed network
The UltraUpload.io Network (V2) is fully decentralised, with files distributed and stored all over the world on different devices. This allows the network to be robust to attacks, with no central point of weakness.
The distributed nature of the network provides your data with physical security, meaning that no third party can access or delete it, as can happen with existing centralised solutions.

Data availability and built-in redundancy.

The network is programmed to keep duplicate copies of each piece of data at all times. As hoster turns their computers off, the network makes more copies and stores them on other machines, ensuring that users always have access to their files.
This constant movement of data (called churn) is a key part of the security that the UltraUpload. io Network offers because there is no central point for hackers to target as the data locations keep changing.

Unneeded duplicates are automatically removed.
Once a file is uploaded, other users who upload the same file will be automatically referred to the original, limiting the number of copies and reducing the computing resources needed to store it.

Global distribution without human intervention.
Hosting: an incentive for a crowd sourced Internet.
Payments are given as an incentive to users for providing their upload-resource to the network. This resource is their bandwidth (not storage space, not CPU) that enable the encrypted chunks of network data to be stored and retrieved from their computer. Each piece of encrypted network data is stored in a Hosters Vault, a data storage and management location on the Hoster computer. The UltraUpload. io network is designed to self-manage these resources.

Resource based economy.
As network data is retrieved from a computer, the network pays to the hoster. This payment takes place every time data is retrieved. The payment is automatically paid by the network into the users wallet address that is tied (cryptographically) to their vault. The amount of payment a hoster can earn is directly linked to how much resource they provide to the network.

Proof of resource.
The resource provided by each hoster is continually checked by the network to make sure that it is still available. It does this by attempting to store a random piece of data. Should the network find that the resource committed to the network is no longer available, it reduces the rank of the vault.

- 2.3 Overview: UltraUpload solved/unsolved problems..

- Reached Innovations = solved problems

- Innovation 1: UU combines Download with Payment (realized 2017)

with 1 download click the user pays the publisher, the hoster, the service and anybody helping him to find this source (onion recursion system)

- Innovation 2: Hoster is safe and paid (realized 2017)

No takedown-notice-hassle, no payment-integration, no customer management, one click docks a server to the storage-network

- Innovation 3: downloaders (you) are anonymous (realized 2017)

Nobody knows who downloads what, all encrypted chunks are recombined only at the client side

- Innovation 4: Uploaders are anonymous (realized 2017)

Nobody knows who uploaded what, all cryptic chunks are generated at the client side, payment id can vary from uploader account

- Innovation 5: publishers are anonymous (realized 2017)

Nobody knows for what content you are paid, payment id can vary from publisher id,

- *Innovation 6: Hoster need no RAID or other data protection systems*

Cloud object stores typically use RAID schemes or a multi-datacenter approach to protect the file from physical or network failure. Since data protection and redundancy is managed by the system, no protection is necessary on hosters side, saving up to 200% storage place and costs.

- 9/18 Solved problems:

- Investors shall participate (solved by ICO) (Roadmap 1st 2018)

With introduced Snowden-Coin, download revenue pays back to investors, transparently

- *Transparent payment* (solved by coin blockchain) (Roadmap 2nd 2018)

Even all cash flows are anonymous, all participants can proof the correct amount of pay outs: Publisher, Hoster, Downloader, Investor etc. via public blockchain

- UltraUpload central location database will be unstoppable (solved by blockchain/DHT)

The chunk location database is the last single point of failure. By moving it into the blockchain the UU service is completely unstoppable and resilient against censorship.

- Design of UltraUpload

UltraUpload is a system that creates a distributed network for the formation and execution of storage contracts between 3rd party hosting servers. The UltraUpload system enables datacenters on the network to negotiate contracts, transfer data, verify the integrity and availability of remote data, retrieve data, and be paid by downloaders. Each peer is an autonomous agent, capable of performing these actions without human interaction. The peer-to-peer cloud storage network (www.ultraUpload.io) implementing client-side encryption allows users to transfer and share data without reliance on a third party entity. The *removal of central controls* would mitigate most traditional data failures and outages, as well as significantly increase security, privacy, and data control. Peer-to-peer networks are generally unfeasible for production storage systems, as data availability is a function of popularity, rather than utility.
We propose a solution in the form of a challenge-response verification system coupled with direct payments. In this way we can periodically check data integrity.

- General information about TCU AG (Developer)

UltraUpload is run by a multidisciplinary team of technologists, business leaders, and strategists.

- The main business field of the Developer is currently software development:
- p2p-Software (Live-TV over real time p2p),
- Web hosting (maintaining over 150 servers in 6 nations worldwide (USA, Switzerland, Germany, Rumania, Czechoslovakia, Spain).
- Web interfaces (coding portals with 500K+ user)

In the past TCU AG was always on the cutting edge of technology:

- Founded with the first TV ad blocker worldwide (won against largest broadcaster at the highest german court BGH)
- Tvoon-Media-Center (2 years before Microsoft but with tv ad blocker)
- Own Android media box with tv ad blocker (www.fernsehfee.de)
- First real-time streaming of TV/Video with peer to peer technology (2 years ahead of bittorrent, flash based, no additional software required, now market leader, Html5 based). Serving up to 100.000 spectators with 1 average server, saving billions of bandwidth costs for broadcasters.

In particular, the Developer has created and operates the Storage and sharehoster platform www.Ultraupload.io since 2017.

Our organization has:

A fully-functional storage network which includes the business partnerships necessary to execute this effort at scale
A proven ability to execute technical and business projects,
A viable business that generates revenue at a $1 million in annual run-rate,
A track record of being efficient with the use of our funds
A defined framework for the distribution and management of the Snowden-Coin.
We are prioritising the development of systems that enable transparency in UU operations and in the release of funds.

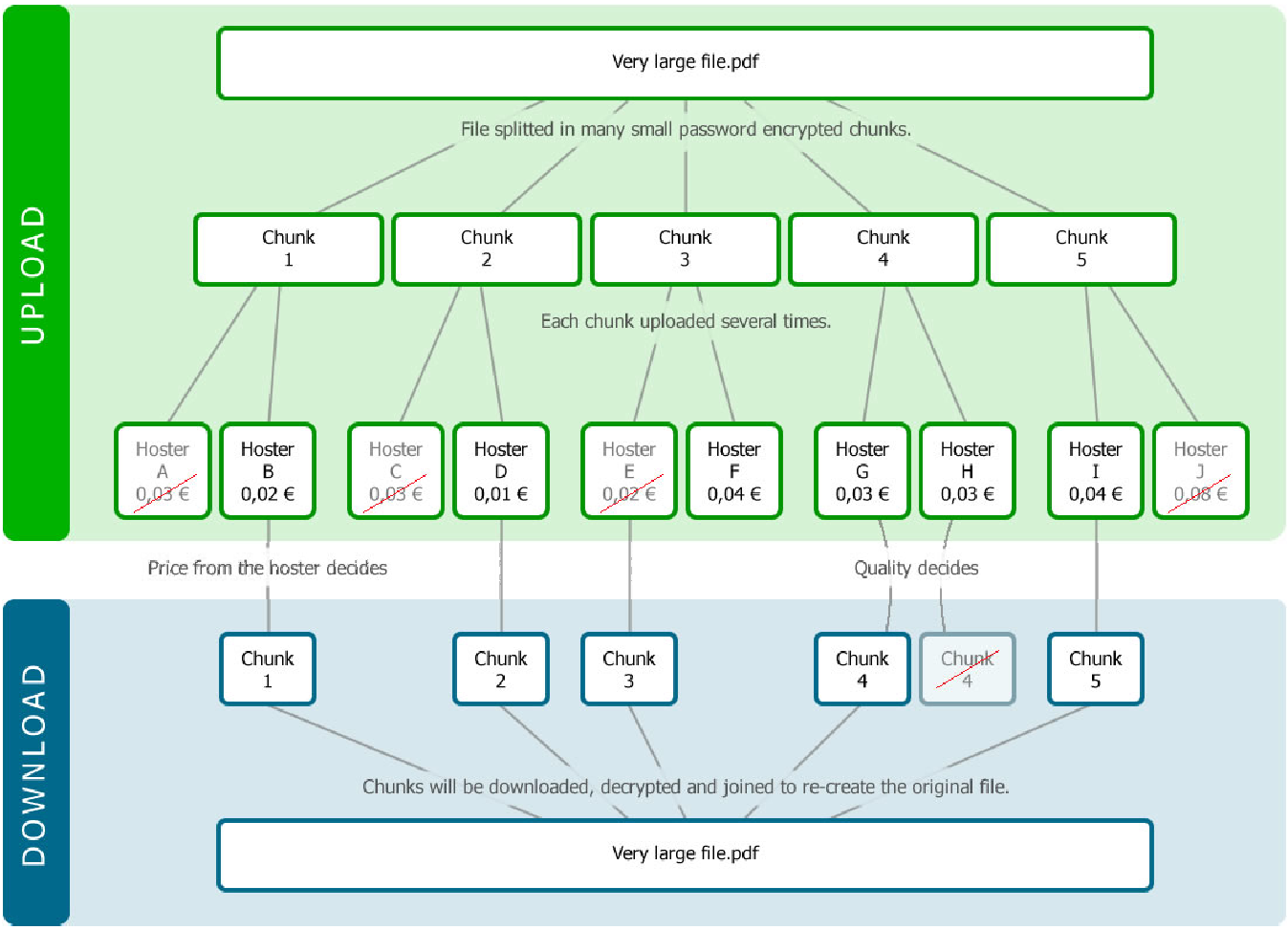
- 2.4. Details about how UU solves the problems of file sharing industry

- Files as Set of Encrypted Chunks

A Chunk is a portion of an encrypted file to be stored on this network. Chunking has a number of advantages to security, privacy, performance, and availability. Files should be encrypted client-side before being Chunked. The reference implementation uses AES256-CTR, but convergent encryption or any other desirable system could be implemented.
This protects the content of the data from the storage hoster or farmer, housing the data. As the set of chunks in the network grows, it becomes exponentially more difficult to locate any given chunk set without prior knowledge of their locations. This implies that security of the file is proportional to the square of the size of the network. Chunk size is a negotiable contract parameter. To preserve privacy, it is recommended that chunk sizes be standardized as a byte multiple, such as 8 or 32 MB. Smaller files may be filled with zeroes or random data. Standardized sizes dissuade side-channel attempts to determine the content of a given chunk, and can mask the flow of chunks through the network. Chunking large files like video content and distributing the chunks across nodes reduces the impact of content

delivery on any given node. Bandwidth demands are distributed more evenly across the network. In addition, the enduser can take advantage of parallel transfer, similar to BitTorrent or other peer-to-peer networks. Because peers generally rely on separate hardware and infrastructure, data failure is not correlated. This implies that creating redundant mirrors of chunks, or applying a parity scheme across the set of chunks is an extremely effective method of securing availability. Availability is proportional to the number of nodes storing the data.

- The Chunking Process



1. Files are encrypted.
2. Encrypted files are split into Chunks, or multiple files are combined to form a chunk.
3. Audit pre-processing is performed for each chunk
4. Chunks may be transmitted to the network.

UltraUpload in its current version is build as client-server database, and is planned to convert into a distributed hash table (DHT) and now is starting to be developed as blockchain based database, in order to add full transparency to all participants.

It is important to note that chunks are not stored in the hash table. The hash table may be used only as a store for data location information, or other purposes.

As such, each Node ID in the UltraUpload network II is also a valid Ethereum address, which the node can spend from.

Contract information will be stored in the Blockchain, which may allow some outside verification of relationship terms.

- Payment

UltraUpload is payment agnostic. Neither the protocol nor the contract requires a specific payment system. The current implementation assumes Snowden-Coin, but many other payment types could be implemented, including BTC and Ether. The reference implementation will use Snowden-Coin micropayment channels.

The use of a separate token creates a certain amount of insulation from outside volatility and Snowden-Coin‘s large supply minimizes the impact of token escrow on the market. New payment strategies must include a currency, a price for bandwidth (not storage like Storj.io), and a payment destination. Micropayment networks, like the Lightning Network, Implementation details of other payment strategies are left as an exercise for interested parties.

- Snowden-Coin (TM)

Snowden-Coin was created in a token generating event (TGE). Its details, terms and conditions, and detailed schedule will be announced later in this document.

- Store data into the blockchain?

To be sure, you can already store data in the blockchain. There are also decentralized file storage apps such as IPFS, Swarm, and Storj, and databases like BigchainDB are starting to emerge.

But: The chain is not designed for high throughput or low latency, it does not scale, and storage is expensive. What is needed is a natively decentralized data backbone as a complement to decentralized apps. This real-time data backbone will be the missing link, and the link that we want to help provide. The infrastructure we create consists of a technology stack which helps connect and incentivise computers in a global peer to peer (P2P) network. This is a network which provides low latency, robust and secure data delivery and persistence, and all at scale. Đapps of the future are fuelled by data, and our mission is to make sure that the data keeps on flowing.

For storage with much more granularity and querying features, decentralized databases such as BigchainDB are emerging. A solution like this is a likely candidate for storage in the UltraUpload Network. However the landscape is changing rapidly, and we won’t commit to a specific storage solution at this time.

Our stack is built on a decentralized transport layer.
Apart from greater robustness, resilience and fault tolerance, decentralization facilitates openness, transparency, and community building. The power over data is not with large corporations like Google, Amazon, Microsoft, and IBM. The network consists of a multitude of data producers, data consumers, and message broker nodes in between. We believe that sustained growth of the blockchain community will be facilitated by having a good usability layer in place.
We foresee an ecosystem where there are several usability platforms and tools available. The existing UltraUpload platform already implements some elements of the usability layer, with more functionality being added in the coming months and years. The aim is to reach a stage where you can build and deploy a useful and functioning data driven smart contract in minutes.

- The UltraUpload Vision

The future of the decentralized web is dependent on the next generation of decentralized financial infrastructure. In order to sustain future growth and facilitate the influx of new members to the space, it's important to create a financial base layer that is capable of handling such influx.
UltraUpload vision is to considerably lower the barrier of entry to the token economy for service Publishers and end users alike by offering a superior experience. To that end, we aim to introduce an innovative and robust blockchain architecture that addresses the above issues. Our goal is to design a highly performant and scalable infrastructure.
In addition to the fact that this system creates new revenue streams for everyone in the community and helps to grow the network, it enables also a natural increase in the value of Snowden-Coin due to its limited supply.
There is a reason why Storage persisted throughout societies for hundreds of years—We bring it to the next level with UU.

- Additionally Incentives

The implementation allows for multiple separate incentive models in pool-based way. One example that will be included on the platform UltraUpload.io is publishing related rewards. Other than the general reward System (which aims to reward all Coin Holders), the publishing related reward aims to incentivize the downloaders of a specific platform. Therefore, it may look different on every platform. The general aim is to reward the downloaders according to their amount of Snowden-Coin used, so only downloaders that take part in a pooling will receive Snowden-Coins, others will not. Such reward is paid out not only to downloaders of that specific site but to all downloaders on that platform depending on their usage of Snowden-Coin on this platform. This is an incentive to keep Coin Holders from hoarding as it rewards them for actually using their Snowden-Coin on the market.

- Current state

The platform provides a functional starting point, but to reach full decentralization it must be refitted to run in a decentralized container and use the new UltraUpload Network layer for message transport. We do not start from scratch. There's a functional and highly

advanced platform in place for creating data pipelines, visualisations and off chain processing. The software is built for the cloud environment with scalability, integrations and fault tolerance in mind. The current platform is functional, scalable, and in live use by corporate customers. Most of the components do not, however, translate directly to the new world. Storage needs to be decentralized, messaging, pub/sub functionality, and data monetization and encryption built into the transport layer, and the peer to peer network established along with node coordination and incentivization. The roadmap of how to do these things is presented in the next sections.

Our technology stack is layered and modular, and it is built on a decentralized transport layer. There is a peer to peer network consisting of incentivized broker nodes. The network hosts a publish/subscribe mechanism and supports decentralized storage of encrypted events. Throughput scales linearly with the number of participating nodes.

UltraUpload is part of the computing revolution where monolithic solutions are being superseded by decentralized computing alternatives.

There's a power transfer taking place from corporations and enterprises to individual citizens, autonomous agents, apps, and machines, leading to improved privacy, efficiency, resilience, and fault tolerance, and ultimately higher welfare for the good denizens of the connected society.

- Goal for UU's blockchain: unstoppable data sharing

UltraUpload delivers unstoppable data to unstoppable applications. It is the real-time data backbone of the global supercomputer. It is a decentralized network for scalable, low latency, untamperable data delivery and persistence, created by the Snowden-Coin.

Anyone — or anything — can publish new data to data streams, and others can subscribe to these streams to power Đapps, smart contracts, micro services, and intelligent data pipelines.

To incentivize user participation in the network, there's a built-in mechanism for data monetization.

Data streams, smart contracts, and decentralized computing resources can be interconnected in a low code environment using high level building blocks. A revolution is taking place where centralized cloud services are one by one being superseded by tokenised, decentralized solutions.

Golem, for example, replaces Azure Virtual Machine, and IPFS replaces Azure Blob Storage.

Inspired by the above stated observations, the Developer has created a system that could lead to a solution for some of the most pressing issues.
Here's where the blockchain technology comes in place.
The system relies on an innovative system that makes it possible to revolutionize the monotonous storage market and to bring back the lost thought of Sharing.
The blockchain allows for the creation of smart contracts that run business logic autonomously in the blockchain.
These smart contracts enable secure and reliable processing and the transaction structure behind them. Payouts are processed automatically by the smart contract on the blockchain.

- UU serve as the currency for these exchange.

All UU transactions as well as all downloads created are publicly verifiable, viewable, resistant to counterfeit, and not subject to the risk of institutional processing. Additionally, the decentralized model reduces transaction and operating costs which gives the UU Network not only an advantage over centralized competitors in safety and transparency but also enables the Developer and other Publishers of online Storage to run on lower margins than usually seen on traditional Storage Publishers.

3) P2P-Backup Core for UU

Decentralization offers obvious benefits (presented in previous sections) compared to traditional platforms such as Youtube and Facebook. As such, we will focus on blockchain-based projects that are already leveraging the power of decentralization.
As both the video and the storage industry represent massive opportunities and Snowden-Coins have been the best way to tackle these opportunities from a blockchain perspective, some competitors in either industry but no project has had the vision to target UU's value proposition.
UU will consider opportunities in this space as the technology evolves, following technologies like the blockchain-powered file storage solution Storj and IPFS (realized 2017) or Sia http://sia.tech/

Redundancy Schemes

Cloud object stores typically own or lease servers to store their customers files. They use RAID schemes or a multi-datacenter approach to protect the file from physical or network failure. Because UltraUpload objects exist in a distributed network of untrusted peers, hoster should not be relied upon to employ the same safety measures against data loss as a traditional cloud storage company. Indeed, a hoster may simply turn off their node at any time. As such, it is strongly recommended that the data owner implement redundancy schemes to ensure the safety of their file. Because the protocol deals only with contracts for individual Chunks, many redundancy schemes may be used. Three are described below.

Simple Mirroring

The simplest solution is to mirror Chunks across several nodes. Mirroring protects against hardware failures by ensuring that multiple copies of each Chunk exist. Availability of the Chunk with this scheme is P = 1 − Qn 0 an where an is the uptime of the node storing Chunk n. Since all Chunks are required to assemble the file, availability of the file is equal to the availability of the least available Chunk. In the case of a dropped contract, a redundant copy of that Chunk can be retrieved and a new location found for it on the network. This is the current behaviour of the reference implementation.

K-of-M Erasure Coding

UltraUpload will implement client-side Reed-Solomon erasure coding. Erasure coding algorithms break a file into k Chunks, and programmatically create m parity Chunks, giving a total of k + m = n Chunks. Any k of these n Chunks can be used to rebuild the file or any missing Chunks. Availability of the file is then P = 1 − Qm 0 am across the set of the m + 1 least available nodes. In the case of loss of individual Chunks, the file can be retrieved, the missing Chunk rebuilt, and then a new contract negotiated for the missing Chunk. To prevent loss of the file, data owners should set Chunk loss tolerance levels. Consider a 20-of-40 erasure coding scheme. A data owner might tolerate the loss of 5 Chunks out of 40, knowing that the chance of 16 more becoming inaccessible in the near future is low. However, at some point the probabilistic availability will fall below safety thresholds. At that point the data owner must initiate a retrieve and rebuild process. Because node uptimes are known via the audit process, tolerance levels may be optimised based on the characteristics of the nodes involved. Many strategies may be implemented to handle this process. Erasure coding is desirable because it drastically decreases the probability of losing access to a file. It also decreases the on-disk overhead required to achieve a given level of availability for a file. Rather than being limited by the least available Chunk, erasure coding schemes are limited by the least-available n + 1 nodes.

4) UltraUploads current Token Technology

The UltraUpload 2.0 platform will harness the power of the Ethereum blockchain to create, manage and direct the tokens in the platform. The platform runs on Ethereum based smart-contracts. This enables seamless transactions which are on the publicly visible ledger. Each smart contract is an ERC20–compatible contract and implements an interface between the depository Platform Wallet with income, and external addresses such as exchanges or ETH wallets.

Create Contracts

First the contract owner has to create the Crowdsale Contract (C1) and the ERC20 Contract (C2). The Crowdsale contract is used to collect and authorize user addresses, collect payments and compute balances at the end of the ICO. If a minimum amount is not raised, then the contract can refund all users. If a maximum amount is raised the contract can stop collecting funds. If for any reason the contract owner decides to stop the crowdsale campaign, the contract can be refunded. The crowdsale contract is only active during a specific time period.

Download Contract Templates

The company aims to bring more transparency to the whole online Storage market which is an ambitious goal. The Developer is aware of the fact that Downloads are handled very differently among Publishers. However, the Developer still wants to offer Download smart contracts that can be used by a wide range of existing and upcoming Publishers as well as future community projects. Therefore, the Developer has developed the above described architecture. The Download smart contracts are implementations of the Download Interface. This means that the Download Interface will be deployed on the blockchain right at the

beginning. This Download Interface cannot be changed easily afterwards. It unites all attributes and behaviors which all Downloads have in common.
All Download smart contract instances which implement the Download Interface will inherit these attributes and behaviors.

The General Reward can serve as an example for this.

All Downloads should pay out a General Reward of at least 1.00 percent of the Content price. This could be achieved by packaging this General Reward behaviour into the Download Interface. In this way, all Download smart contracts must pay out the General Reward. Another advantage of this architecture is that the Developer is able to further develop the Download smart contracts and exchange the simple contracts with more complex ones in the near future. The Developer will do this by implementing lots of Download smart contract templates and offering them to existing Publishers. The Download smart contracts will become more complex and will handle more attributes and variations of a Download. The goal of the Download is to automatically calculate the results and payouts. As a result, the whole process from the buy-in and placing the stores right through to the pay-out will be trustless and decentralized. The Developer will start with a first template which is called ‘Simple Download contract‘. It will handle buy-in, Content segmentation, and pay-out of the Publisher and Hoster Reward, General Reward and download price. Although it is rather simple, it already solves the problem of non-transparent buy-ins and pay-outs.

Private Downloads:

Some Publishers (like the Developer itself) will offer private Downloads. This means, that Downloaders can create their own Downloads based on the events which are offered by the Publisher. Private Downloads may have different economics than Downloads which are open for the whole community. A possible scenario could be that the Publisher wants to reward Downloaders who create private Downloads with UU.

5) Blockchain

The UltraUpload platform will harness the power of the blockchain to create, manage and direct the Snowden-Coins in the platform but also holding the transaction database as a DHT (distributed hash table).

What Makes Blockchain Special?

Blockchains are simply databases that are maintained by the users of the blockchains as opposed to some third parties who control the databases. Information stored on the blockchain is resistant to any tampering. This is ensured by millions of miners who agree upon the shared ledger in a decentralised way. That means that blockchains provide equal opportunities to everyone in the world to use them without the fear of getting censored or stopped. Totalitarian governments or big corporations cannot prevent anyone’s access to blockchains on a whim and blockchains have already been used to support controversial services like WikiLeaks and others which openly speak about government corruption.

Planned Blockchain-DB

Database storage will rely on a solution similar to BigchainDB. After investigating multiple blockchain based data storage option, we found that our solution had the best technology, fastest blockchain write speeds and seamless integrations. As stated above, the decision of this may change before implementation if a better decentralized database solution arises.

Planned Development

Billing implications are significant as there is a tremendous amount of inefficiency when it comes to storage billing process. In recognition of the fact that token issuance is a new method of fundraising, the Company pledges to publish regular reports on the progress of our technology development and how our business process is evolving as a result.
There are many lessons to be learned which will be of great benefit to the greater Ethereum and blockchain communities. This includes study on the impact of offering organizational ownership through a token method, among many others.
Further, TCU AG Corp. will publish a quarterly report on business performance and hold a quarterly conference call or live-stream to discuss results.
When appropriate, reports will include audited financial reports for both the Snowden-Coin system and the TCUAG Corp. organization. In other words, UU will commit to being a good citizen of the greater blockchain and cryptocurrency community.

Crypto-Currency, more than a hype

Cryptocurrency, specifically Blockchain, has been proven to be a groundbreaking technology in society today, yet it is still in the early stages of adoption. Consequently, many new cryptocurrency concepts are being marketed to bridge the gap between technical complexity and usability of Blockchain. The Potential in this growing market along with increasing acceptance of cryptocurrencies makes new projects extremely appealing. Having easy-to-use, secure cryptocurrency technology that integrates P2P exchange between fiat and cryptocurrency, credit card capability, and cold, secure storage of user funds while providing novice users techniques to improve their skills is the future of safe trading and exchange of assets.
Providing users with a return on gross profits serves as an additional enticement. We are presenting an opportunity for investors to participate in a Token Crowdsale for our new download platform.

6) Long Term Goals:

Content creation as a service

Content creators currently cruelly lack resources to properly monetize the unique experiences they are putting together for their audience. With UU, creators will be able to free themselves from the blatant limitations of certain intermediary platforms and profit directly from the sales and viewership of their videos.

New optimised and more transparent business models will emerge from the Snowden-Coin economy. Creators will be able to, among other things:
Create exclusive content for paid subscriptions
Get paid directly and automatically share royalties with other rights holders in a transparent manner, upon the sale of items tagged on their content or per any set interactions
Raise donations directly from their videos
Receive tips from avid viewers

Application Development Tools

The primary function of the API is to serve applications. UltraUpload.io provides a standard in-browser interface for downloading files from UltraUpload. Though in early stages, it can already communicate, retrieve file pointers and tokens, retrieve Chunks from hoster, reassemble Chunks, and deliver the completed file to a playback element or local file. This allows web developers to easily reference UltraUpload objects from within a page, and rely on them being delivered properly to the end user. This could be used to provide any service from inbrowser document editing to photo storage.
Key and file management tools for web backends are in early planning stages, including UltraUpload plugins for standard backend tools like content management systems. These tools should help content-driven application developers work with files on the UltraUpload network. Standardizing these tools around permissioning files by user could help create data portability between services. Bridges to other protocols and workflows are also planned. The UltraUpload CLI lends itself to shell scripting automation. Similar tools for FTP, FUSE, and common tools for interacting with files will be developed in the future.

General Tech Position

Cryptocurrencies will change the world and UU wants to be there when it happens by offering an innovative and secure platform to allow the world to safely trade and exchange assets. Bitcoins are gaining legitimacy and with increasing numbers of companies like Reddit, WordPress, Baidu, and small businesses (like pizza chains) accepting Bitcoin payments, it's the start of a financial revolution. Binary trading and Forex brokers have begun allowing trades with Bitcoins.
At UU, we are a experienced and innovative company and we seek not only usability, but also hold the intrinsic standards of cryptocurrencies in high regard - the principles of anonymity and decentralization. We aim to minimize bureaucracy and build an easy-to-use, fool-proof platform for the masses.
With this Token Crowdsale we offer you a new business model, which in our vision is bound to succeed.

Media/Press Solutions (Text/Pic Encryption)

The Power of Co-Dependence

The UltraUpload Economy is an emergent property of co-dependence. By connecting interrelated platforms via a secure, real-time data-backbone, a single cohesive whole is manifested, that is greater than the sum of its parts, sustaining the three core pillars of an independent press:

Sustainable for-profit, revenue model
Impartial by presenting a complete spectrum of perspectives
Open to all, but curated and moderated by the community itself

The value of any digital platform derives from the activity promoted by the platform, and the community of users who actually create the value by doing the activity - including participating citizens, journalists, contributors, moderators, NGOs, and investors, along with coders and designers who run these platforms. So, the total value of these platforms is a total of the value contributed by everyone connected to it. By tracking and measuring the contribution of this community on the UltraUpload blockchain, it is possible to share the total value amongst all participants. Today, this value distribution is extraordinarily unequal, amounting to value extraction, certainly not value creation. UltraUpload instead facilitates sustainable co-creation, the value of which is correctly shared among all the co-creators, according to their contribution - with greater contributors achieving a larger share in a way that is transparent. Thus, independence is achieved through co-dependence.

The UltraUpload response to media crisis

There is only one way to salvage our democracies that can actually work: revitalizing a public sphere empowered by civic democracy. Therefore, we need to revitalize media and journalism to transform the way in which people access, process and use information to work and play in the world. Recognizing that the way people deal with information is at the core of the erosion of democracy and the public sphere, UltraUpload makes rebuilding the public sphere its pivotal goal. The UltraUpload solution rests upon a non-extractive, regenerative form of economic production and exchange, that flows capital and resources of all kinds into independent media ventures that sit upon the UltraUpload platform. The key is participation. Rather than simply extracting, UltraUpload builds value at every step of participation, for investors, entrepreneurs, editors, writers, producers, curators, commenters, readers, technologists, coders, inventors, users, subscribers, and participants of all kinds. Here, the accrual of rewards is precisely designed to be assigned to productive action which improves the wider system, rather than depleting it. UltraUpload offers a fundamental redesign for how to create, design, fund, market, and deliver media which meets the real social, civic, economic and ecological needs of people in the real world. UltraUpload empowers them with new ways of harnessing and shaping information flows to facilitate positive change in their own lives and communities.
The UltraUpload system supports a diverse array of independent media companies built upon a mesh of interconnected utilities, tools and capabilities. Every company in the UltraUpload world lives in an ecosystem that supports their ability to reach readers, attract investment, and create multiple revenue streams at a fraction of the cost associated with going it alone. As such, the entire ecosystem of independent press entities are both resilient and adaptive to future scenarios. They can interact with the monopoly aggregators on their own terms, and compete powerfully with them, not by conforming to the rules of their digital landscape, but by creating new rules for a new, emergent media landscape. This, in turn, catalyses the public sphere through the empowerment of our participants, laying the civic foundations for the regeneration of democracy. The result is a vastly superior journalism product that benefits from innovation, imagination and the freedom that only a fully supported independent press can create. This product cultivates a vastly superior public dialogue that is not compelled to demean its quality to sustain depleting storage revenues within the extraction-based attention economy, because it is driven by a non-extractive

regenerative post-attention economy. This higher quality public dialogue sustains a growing intellectual competency society-wide; the ability of the intellect to work with contradiction, to access and process complexity, and to use this to act positively in the world. The final outcome is a polis trained to participate generatively in the public sphere, thus laying out a path towards the restoration of our democratic institutions. In short, UltraUpload is building a new media paradigm for the empowerment of communities and the restoration of democracy.

What does UltraUpload do for the media landscape?

How the UltraUpload platform works

In order to be truly decentralized, this accounting must be transparent. Only blockchain technology can be a reliable store of such data, combining identities and profiles, moderation and contributions, monetary and credit-driven transactions, as well as a complete range of editorial and reporting workflows and collaboration activities. UltraUpload unlocks a way to deeply incentivize involvement on every level in the creation of a decentralized, independent global press.

The Media Status Quo

Journalists and news organizations are fundamental to any strong society. Yet the changing dynamics of the economics of the media industry have led to a weakened journalistic environment all over the world. These dynamics are now suffocating independent journalism - yet they are ripe for disruption by UltraUpload.

The Fall of Journalism

While it is incredibly expensive to produce quality journalism, we human beings only have 24 hours in a day. When two billion of us and counting are spending endless hours on the likes of Facebook, and when advertisers are after one thing and one thing alone - our attention - it is inevitable that they flock to where we spend most of this precious commodity. The exit of storage dollars from journalism to social platforms has happened so rapidly, most news organizations have been unable to anticipate or adapt to the consequences. Meanwhile, most of the content shared on Facebook costs the platform literally nothing. Which means Facebook is monetizing the journalism that we all need, but keeping the largest share of storage revenue for themselves because of their distribution monopoly power. Hence, there is no commensurate revenue-share back to news organizations. And their lack of technological prowess has hastened their creeping demise. Those that are still around will either find new, deep, relevant niches, or dramatically different business models. Most will simply shrink or die. This is not good for anyone, except the Facebooks of the world. The resulting weakening and degradation of journalism has disastrous consequences for the functioning of our democracies, the health of our communities, and the integrity of planetary ecosystems. Rather than empowering constructive action in the public interest, journalism is simply forced to chase declining storage revenues.

Codebase (Komodo)

During the first phase of the rollout, UU is integrated with the existing platform of Ethereum, which has been proven to be a reliable and stable base.

We plan to evaluate migrating the codebase to the WAVES or KODOMO platform once their platforms are mature.

Special Features of Komodo Tokens

The reader may note that this new Komodo asset chain is not a colored-token running on top of a parent blockchain, as is often the case in other blockchain ecosystems (consider the ERC20 token of the Ethereum platform). Instead, this asset chain is an entirely unique and independent blockchain unto itself. This empowers us with significant advantages over other blockchain ecosystems.

The asset chain can run on its own nodes, act according to whatever rules the entrepreneur can imagine, and can scale according to its own audience. Should an asset chain in the Komodo network experience a sudden explosion of activity, the sudden change will not negatively impact the overall Komodo ecosystem. This independence grants a significant competitive advantage in the form of overall security, speed, and ease of use.

Since the coins are immediately available on the BarterDEX exchange for trading, our audience has an immediate trading market. This stands in contrast to today's ICO model, where users often wait weeks or even months before liquidity for their ICO product arises in a centralized exchange.

Finally, through Jumblr technology, participants have the option of privacy when purchasing the dICO product. This enables them to support the crowdsourcing efforts of the entrepreneur within their inherent right to barter in private. Upon conclusion of the distribution of the dICO coin supply the entrepreneur has successfully and immediately completed all the crowdsourcing-related steps that could have taken months in today's typical ICO model. Komodo's dICO model is significantly easier, freer from manipulation, more flexible, and more secure.

The Option of Privacy is Essential to our Ecosystem. One primary goal of UltraUpload ecosystem is to provide our users with the highest levels of security. The option to enable oneself with privacy is an inherent part of a strong security system. Privacy empowers users with the ability to make choices without being directly controlled or observed by a third-party actor. Many of humanity's most meaningful advancements in art, technology, and other human endeavours began in situations where the creator had the security of privacy in which to explore, to discover, to make mistakes, and to learn thereby.

Future Opportunities

Since the start of its project in 2017, UltraUpload pursues the objective to change the nature of online Storage. The aim of the Developer is to provide a system that enables sharers to challenge other sharing enthusiasts on the same level. Through blockchain technology the Developer has the opportunity to cut out the middleman and provide a system without odds and full privacy of all participants.

The Developer strives to create a new level of security and trust in the Storage industry. The UU Network will enable people to compete against others with complete transparency, trust and security. The UU Network can be used for any kind of storage, sharing or press/publishing/payment systems.

Snowden-Coin is used as a virtual currency for the UU Network. The first use case for UU will be the platform of the Developer.

The Developer anticipates that over five million people will use UU in less than two years on the platform alone. Additionally, the Developer will work to establish UU on as many online

Storage platforms as possible in order to establish fair, transparent and trustless sharing globally.
A trustless system is a combination of mechanics that allows for two or more parties to interact with another and fulfil contracts without having to trust any opposing party. This allows for private and business transactions parties without having to fear for money or product loss and without a need to trust the opposing party. On the blockchain this is done using so-called “smart contracts”, which are programmed descriptions of the conditions each party has to fulfil in order to receive their part of the deal. For Storage a trustless system would solve all the problems with current Storage Publishers: Get rid of middle-men and other parties that could influence the results and rely only on what you can double-check and proofread yourself. No need to trust anyone, because the blockchain takes care of that for you.

7) Value of the UltraUpload economy

The value of the UltraUpload economy is a function of the aggregate compounded value of the various interconnected platforms, communities, audiences, engagement, commercial transactions and straight revenue, jobs created, societies sustained, and value created.
In the new world, all this value is captured on the UltraUpload blockchain, via well-documented and federated services that implement the UltraUpload protocols. This value is distributed back to the entire community of users and other entities, based on the nature and value of their actual participation and creation within the UltraUpload ecosystem and econometric model - auditable on the blockchain in an egalitarian manner.

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