SilentNotary

Whitepaper

Pre-Introduction

SilentNotary is a multi-platform decentralized service recorded in digital format, providing the ability to confirm the existence of certain 'events.'

An 'event' can be defined as an image, a video file, an E-mail, and/or instant messaging communications.

SilentNotary converts an 'event' into a legally significant piece of evidence, and as a result, removes any possibility of falsification.
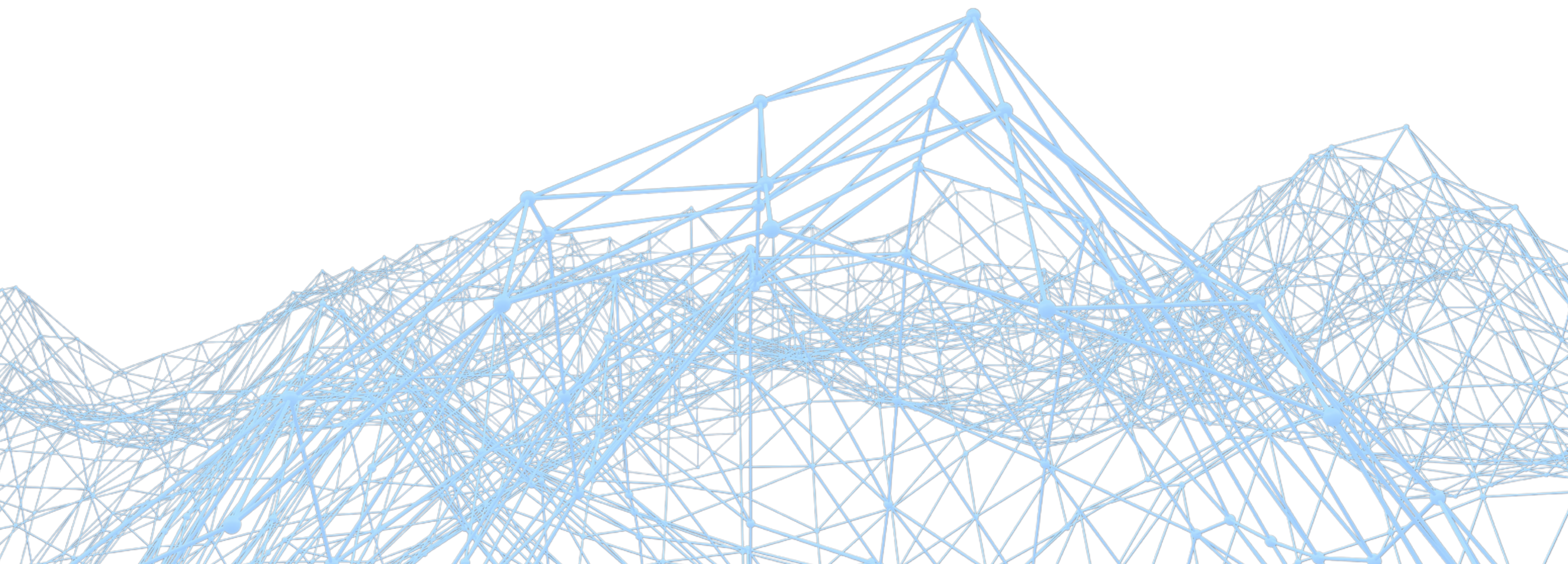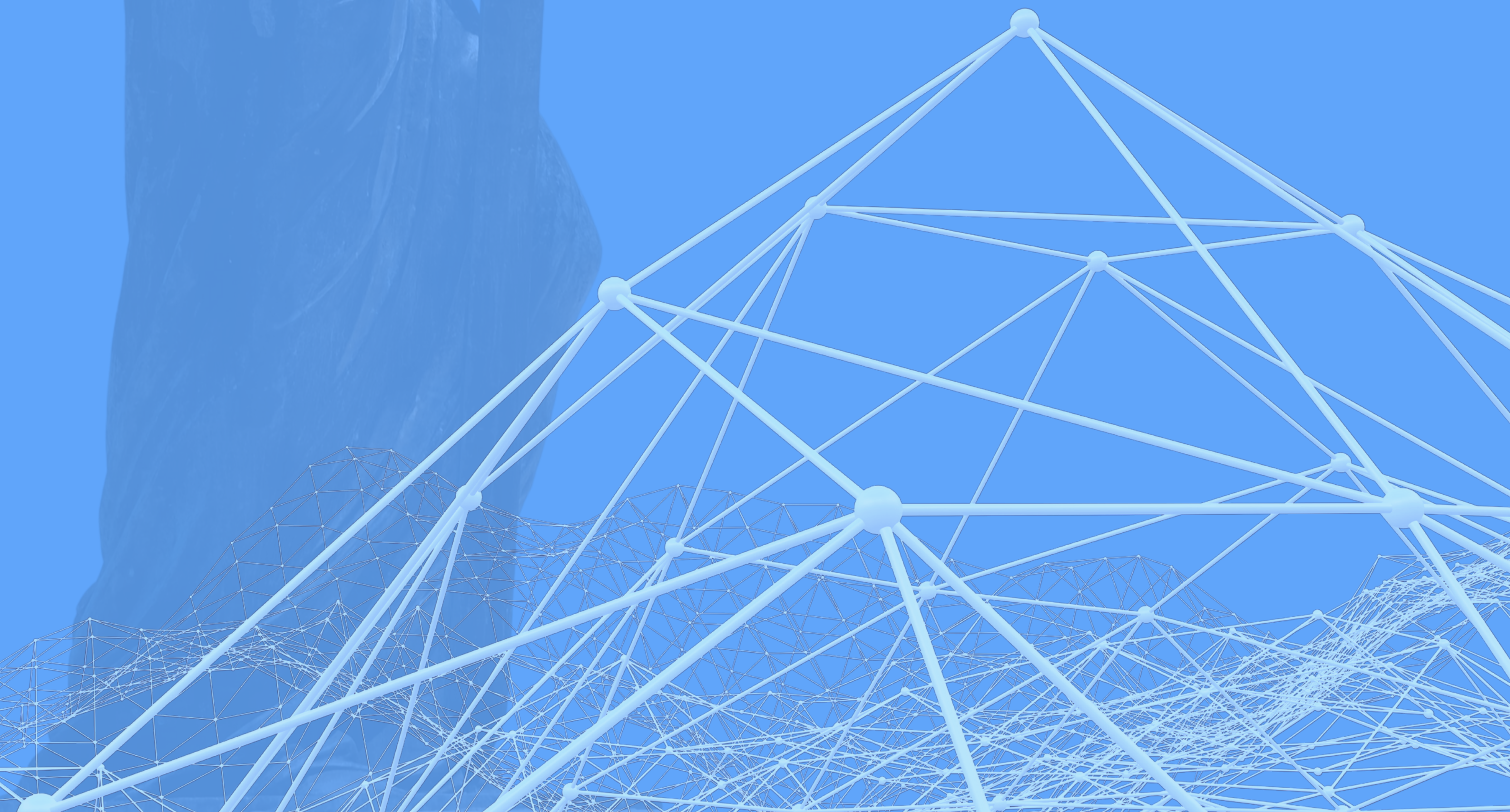
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Introduction

Introduction

Just a few years ago, a solution was found to building a technologically fortified and definitive layer of trust - distributed ledger technology. The first transaction written on the ledger was of financial nature, and it provided each transacting party with the simultaneous access, validation and updating of records. With this, Bitcoin was born. Today, we live in a world full of distrust, and in certain cases of misfortuneand mishap, we must prove that certain facts are both verifiable and accurate.

To do this, we must utilize distributed ledger technology. This technology provides everyone with the ability to record an 'event' - i.e. an image, a video file, an E-mail, and/or instant messaging communications - with the main purpose of creating a proven and definitive layer of trust. This is where SilentNotary's pioneering and revolutionary platform comes into the picture.
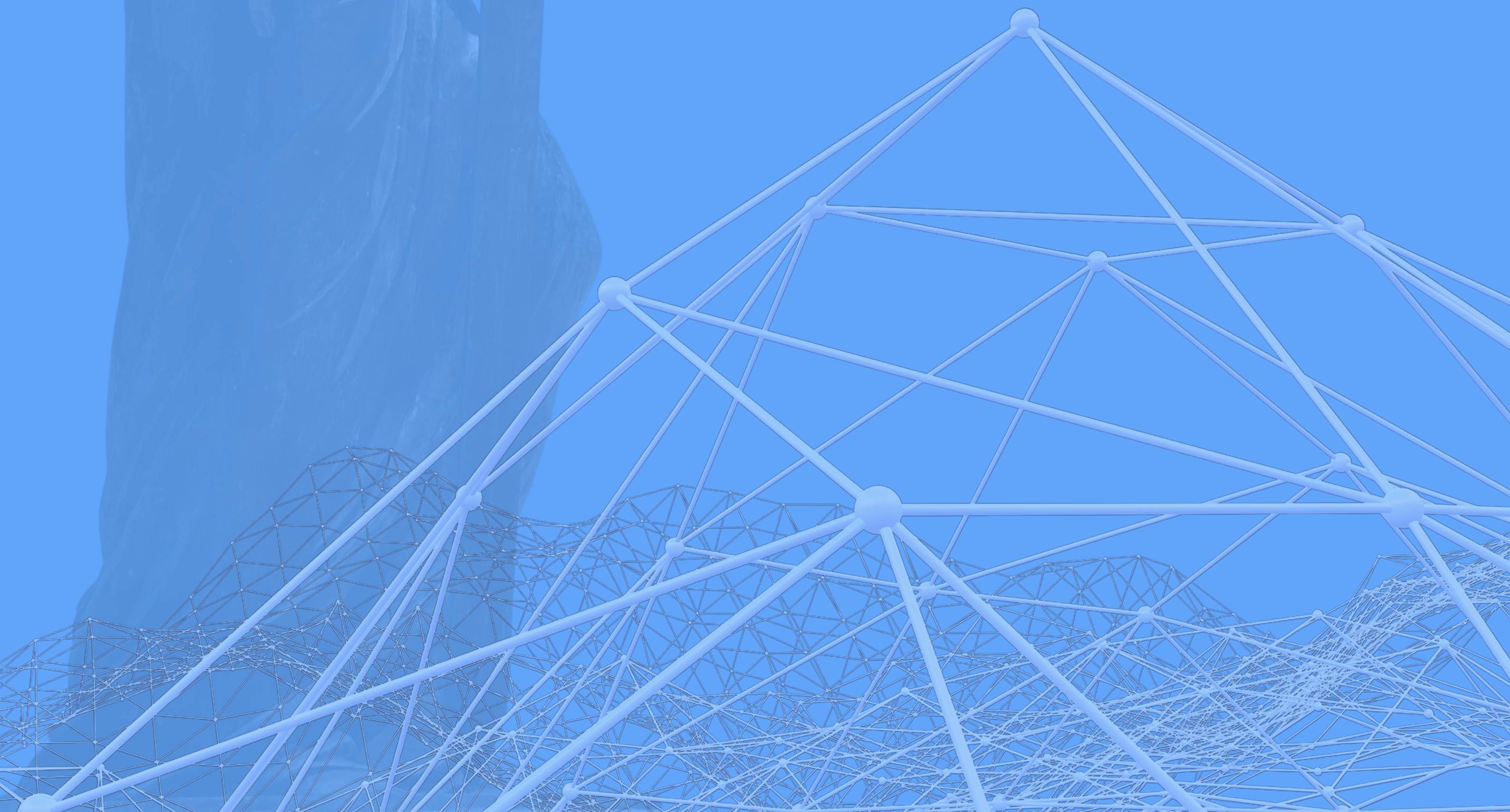
First, certain data metrics surrounding events that have occurred are recorded. There will no longer be a need to 'prove' one's case, as the distributed ledger records information itself and solves the problems surrounding falsification, fraud, and fabrication. Suddenly, we have discovered a way to make the world a better and saferplace with a global system utilized for confirming the existence of certain events!

Distributed ledger technology is very complex and sophisticated bridges are needed between the user and technology. These bridges represent user interfaces, which allow users to transfer data about events recorded in any form - photos, videos, messages, audio recordings and/or documents. The progressive and forward-thinking team at SilentNotary has developed a way to make these interfaces available for everyone's use.
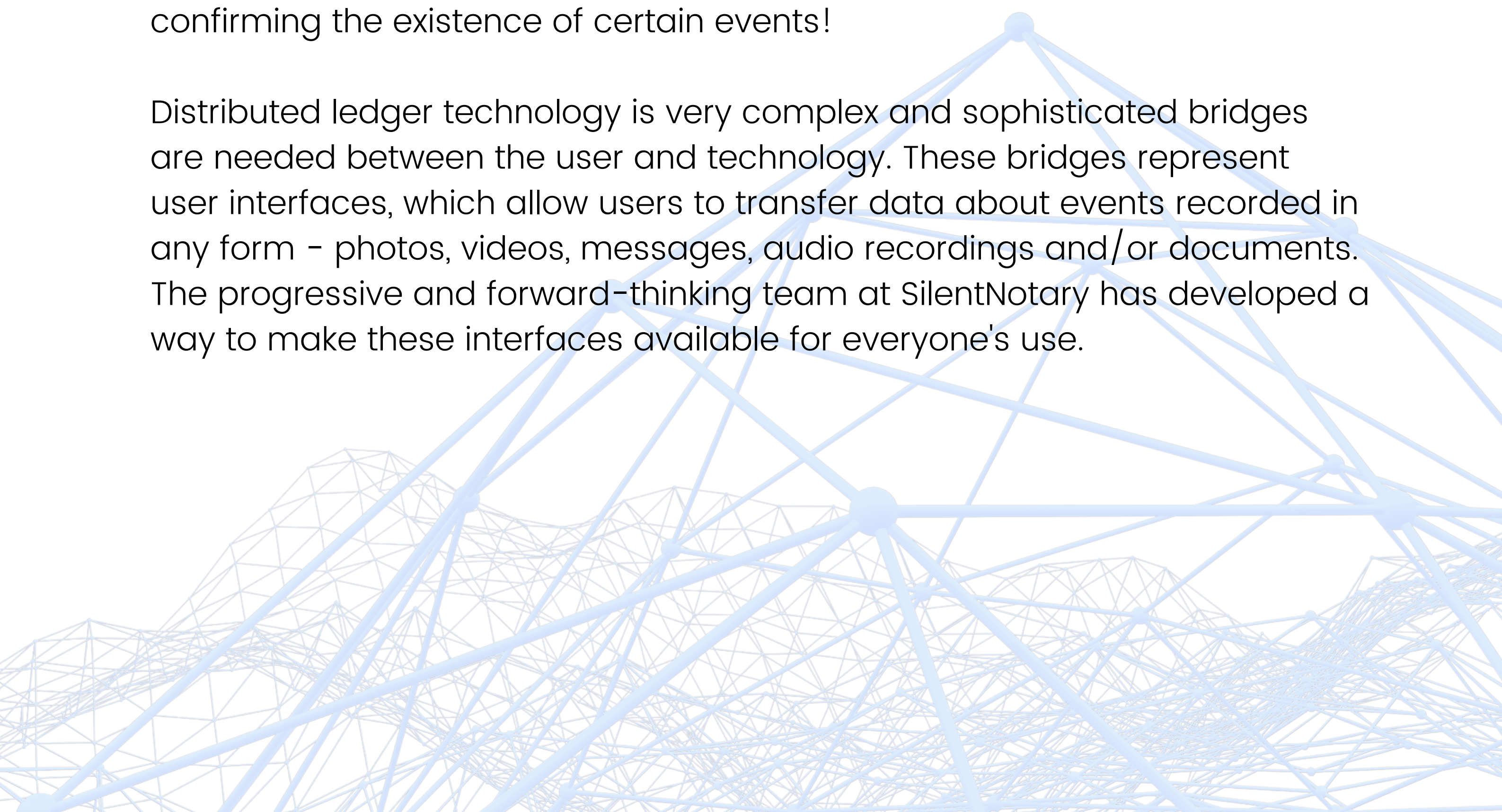
Our Product
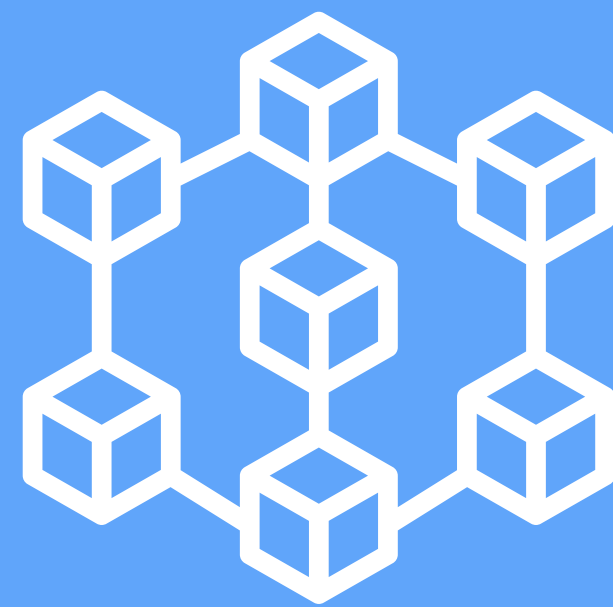
Our Product

SilentNotary is a multi-platform decentralized service that utilizes blockchain technology to ensure the existence, integrity and attribution of communications, processes and data that are important to both individuals and businesses.

SilentNotary provides anyone with the ability to certify and authenticate any kind of data without relying on third parties.

The following are examples of user interfaces that the SilentNotary team has already developed to aid in the quest of event confirmation:

1. Chatbots for Telegram have been developed to record information. This is currently available in production and beta-versions.

Chatbots can be installed on almost all smart phones. This convenient interface method provides SilentNotary with the ability to send files and communicate with it's users in real-time.

2. Web interface has already developed and is available in a beta-version.

3. The Mobile Application for Android and iOS devices has been developed and is now available in the Apple App Store and the Google Play Store.
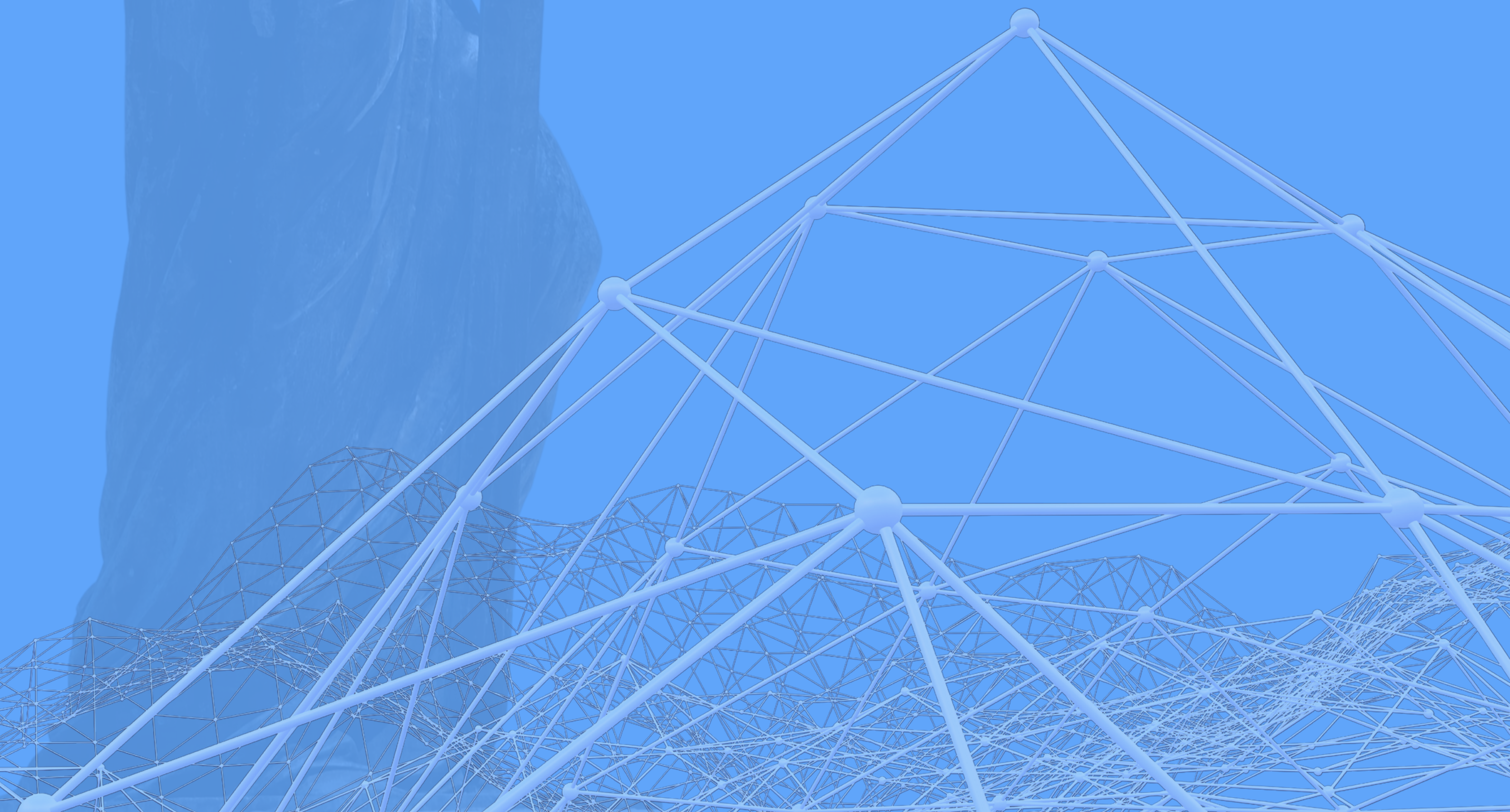
4. 'Mail-bot' feature has been developed and is available in production version. Our 'Mail-bot' is used to certify E-mails, documents, and written communications with any number of counter agents.

5. API for IoT solutions, integration with applications and corporate systems.
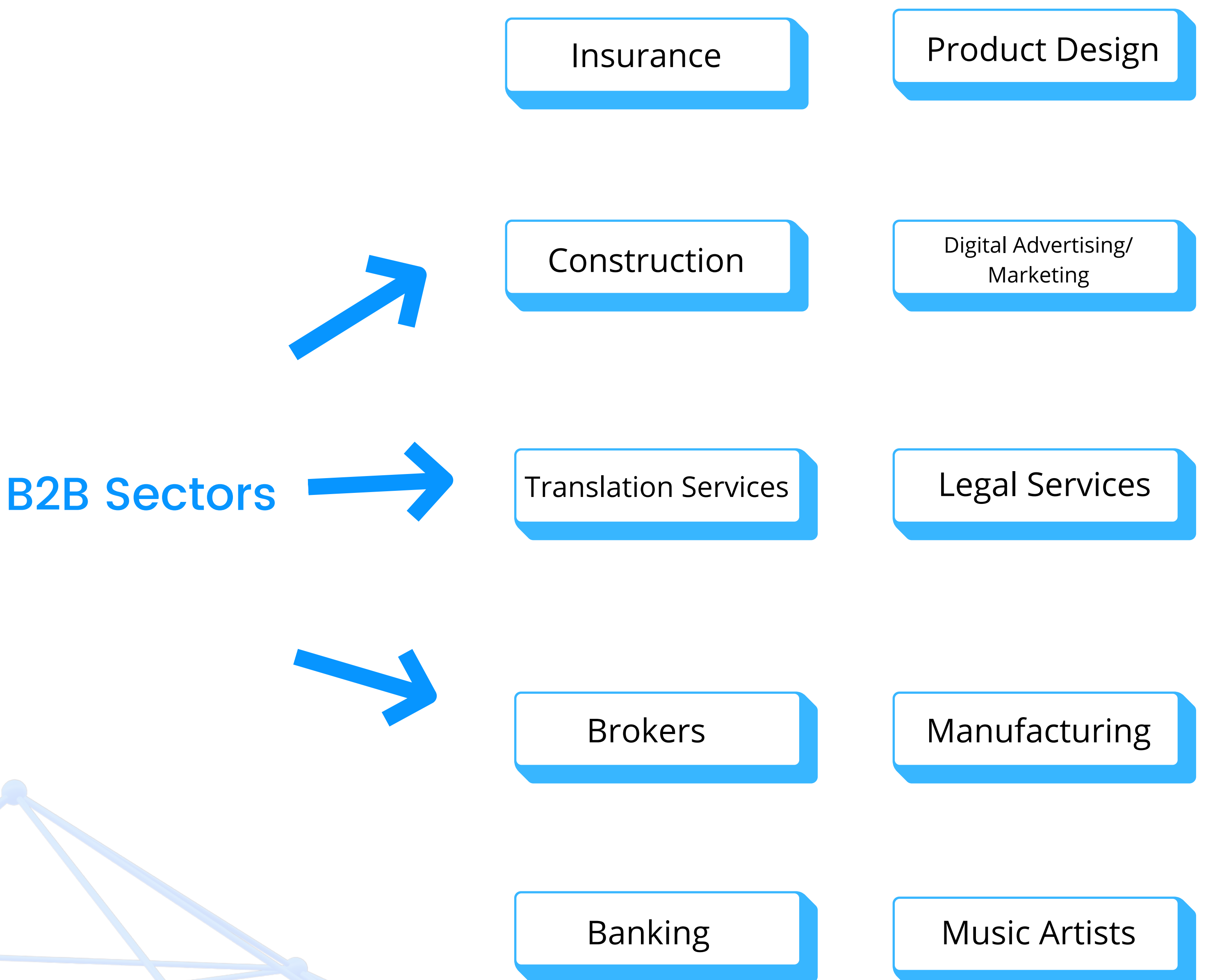
Global Solution

Global Solution

In order for us to promote our product in the global market, we have to understand varying e-commerce business models and who our end customers are:
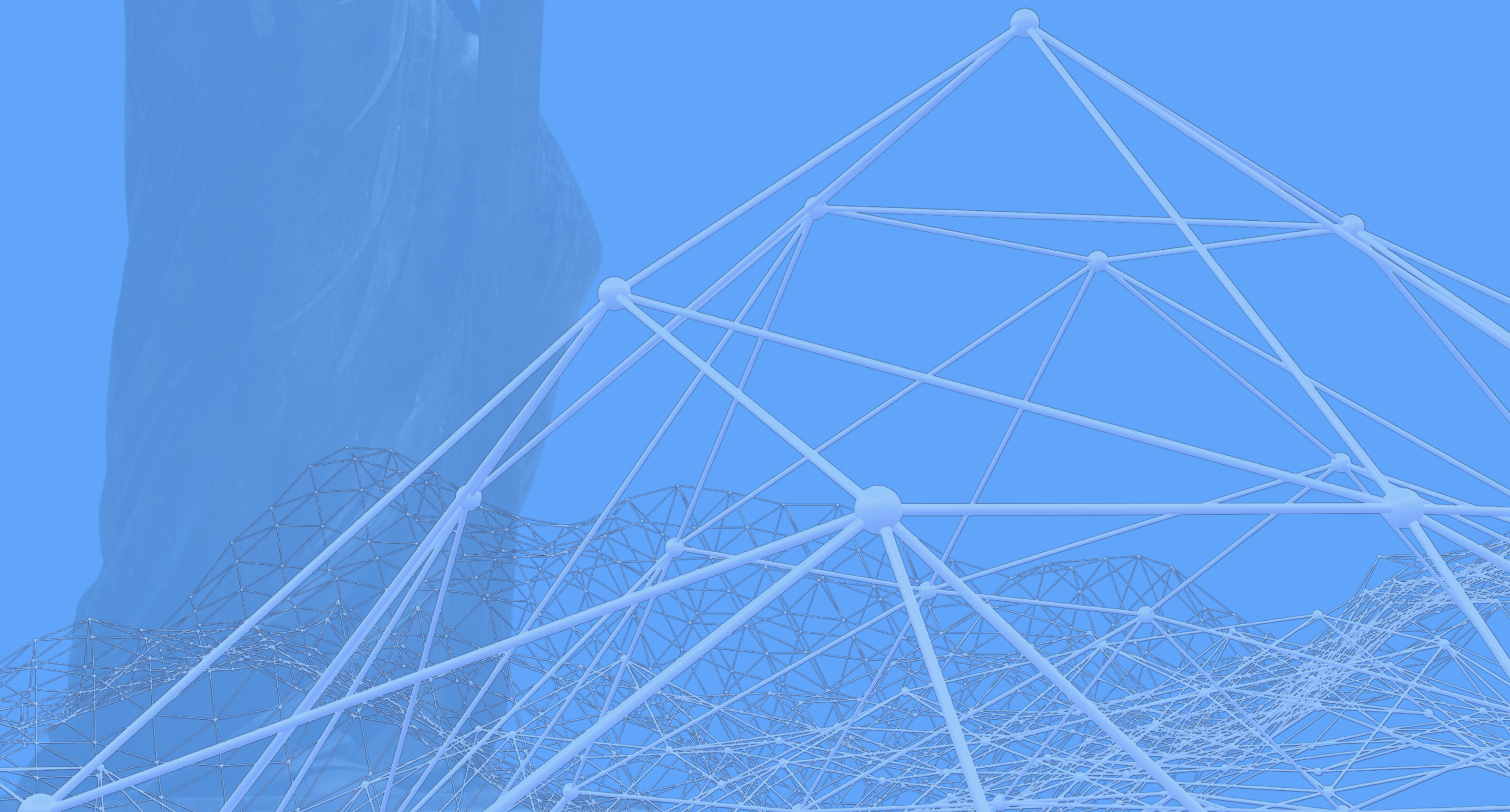
1. B2C (Business to Consumer): The simplest interface, understandable to the common user and can be integrated with social networks.

2. B2B (Business to Business): License schemes, corporate accounts (available in beta version), access delimitation, and API for integration with corporate document management systems available.

SilentNotary is Targeting to Disrupt Several Billion & Trillion Dollar Industries:

Insurance	Product Design
Construction	Digital Advertising/ Marketing
Translation Services	Legal Services
Brokers	Manufacturing
Banking	Music Artists

B2B Sectors

Use Cases

Use Cases

How Can SilentNotary help you?

The following are examples of instances in which the delivery and confirmation of evidence may be required:

1. Performed work and rendered services

SilentNotary makes it easy to create records of progress made and final results of performed work and rendered services. Just launch your favorite messenger and send images and/or video files of the progress made and final results to the SilentNotary chatbot. You can share the received link with a colleague, employer, and/or client. In doing so, you will be able to prove - at any given moment in time - that certain work was completed. If certain work was not finished within the agreed timescale, or if there were deficiencies detected, the employer and/or client can provide evidence in the form of images and/or videos. SilentNotary grants the ability to certify and prove the quality and timescale of specific work and/or services performed.

2. Communication via E-mail

SilentNotary allows for Emails of critical importance to be saved and certified by simply adding the SilentNotary address into the list of recipients. The system certifies the Email's contents and data from the mailing servers (RFC-title of the letter). This means that the list of recipients, the fact of dispatch, delivery, and email routing will be recorded.

3. Offers made in a digital format

Any company that sells something on the Internet is essentially making a public offer to its buyers /clientele. Simply put, text of the offer is published on the website. This text may be changed at any time. There are many cases that require confirmation of the offer, and evidence of it's publishing on a website. Both the seller and the buyer may need it. you can now use the SilentNotary website to certify the documents and the location of where it was published. Just send a link to the page and order a certification of the page's content.

4. Website content copyrights

Almost every website shows its users a copyright protection (©) symbol. As a matter of fact, placement of the copyright protection symbol is essentially a meaningless ritual. It is very hard to prove that certain content was present on a website at a time in the past. Now, you can certify website content by using SilentNotary. SilentNotary can help if you need to protect your rights and fight against plagiarism. Just send a link to SilentNotary and order a certification of the website pages and their content. Afterwards, you can publish a link of the certified content and place it next to the notice of copyright protection.

5. Agreements

You can now record any negotiation and decision taken. Just conduct negotiations through the multi-chat feature in our chat-bot.
The chat-bot will prepare and certify the conversation protocol on your command.

6. License agreements

How many times have each of us agreed to the terms of use for some random software program? The text found on these terms of use can be replaced at any moment in time. If a user violates the terms of the agreement, it may be impossible to prove which text was published at the moment the user agreed to it. You can now send a link of the terms of use page to SilentNotary. SilentNotary will record the fact of publication at a specified address, the date of said publication, and all published content.

7. Whitepaper and other types of public statements

Oftentimes, people want to be able to prove that - at some point in time - certain text was written on whitepapers and public statements. For example, to participate in an ICO, common practice in the industry is for an investor to first read the whitepaper. SilentNotary makes it possible to record the content found on a whitepaper, and the fact of its publishing at any moment of time. Just send a link of the published document to SilentNotary to certify the fact of its publication, the date of its publication, and all published content.

8. Verbal agreements

In today's world, it is very hard to prove a verbal agreement in court. There is now an easy solution for this. Just launch the SilentNotary chat-bot and record your conversation. By doing so, the audio file will be recorded and verbal agreements will be certified..

Important Notice

The use of SilentNotary's service is not limited to the above and hereinafter mentioned examples. There may be a need for external / extra evidence in all stated situations. Thus, certain rights and duties of users cannot be guaranteed by the use of SilentNotary. We believe that our users will find a lot of new and beneficial solutions by using our service.

Usage of SilentNotary should not contradict local norms, rules and laws. In instances of wrongful use of the service, responsibility for said usage lies with the respective user.
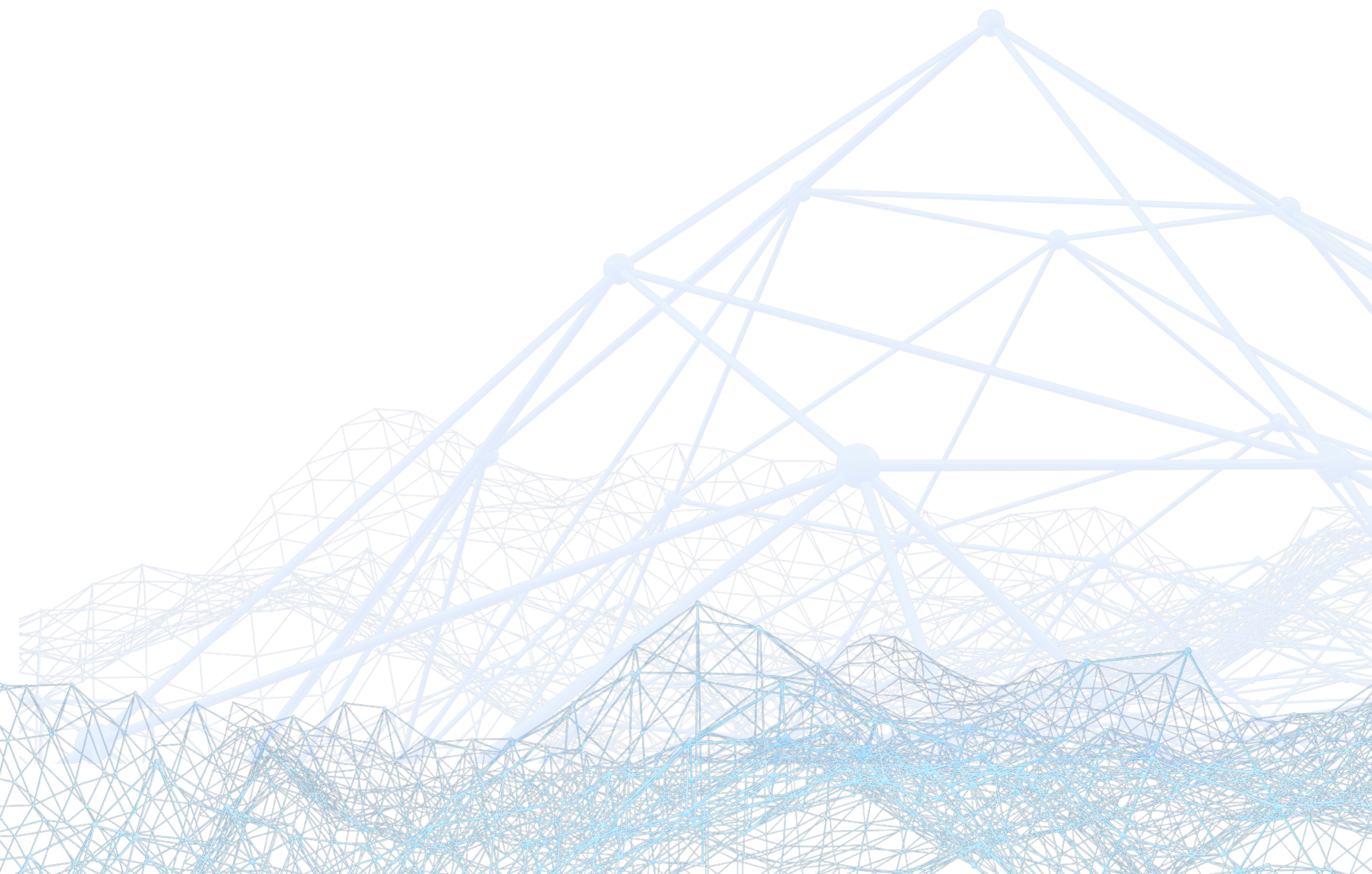
User Interfaces
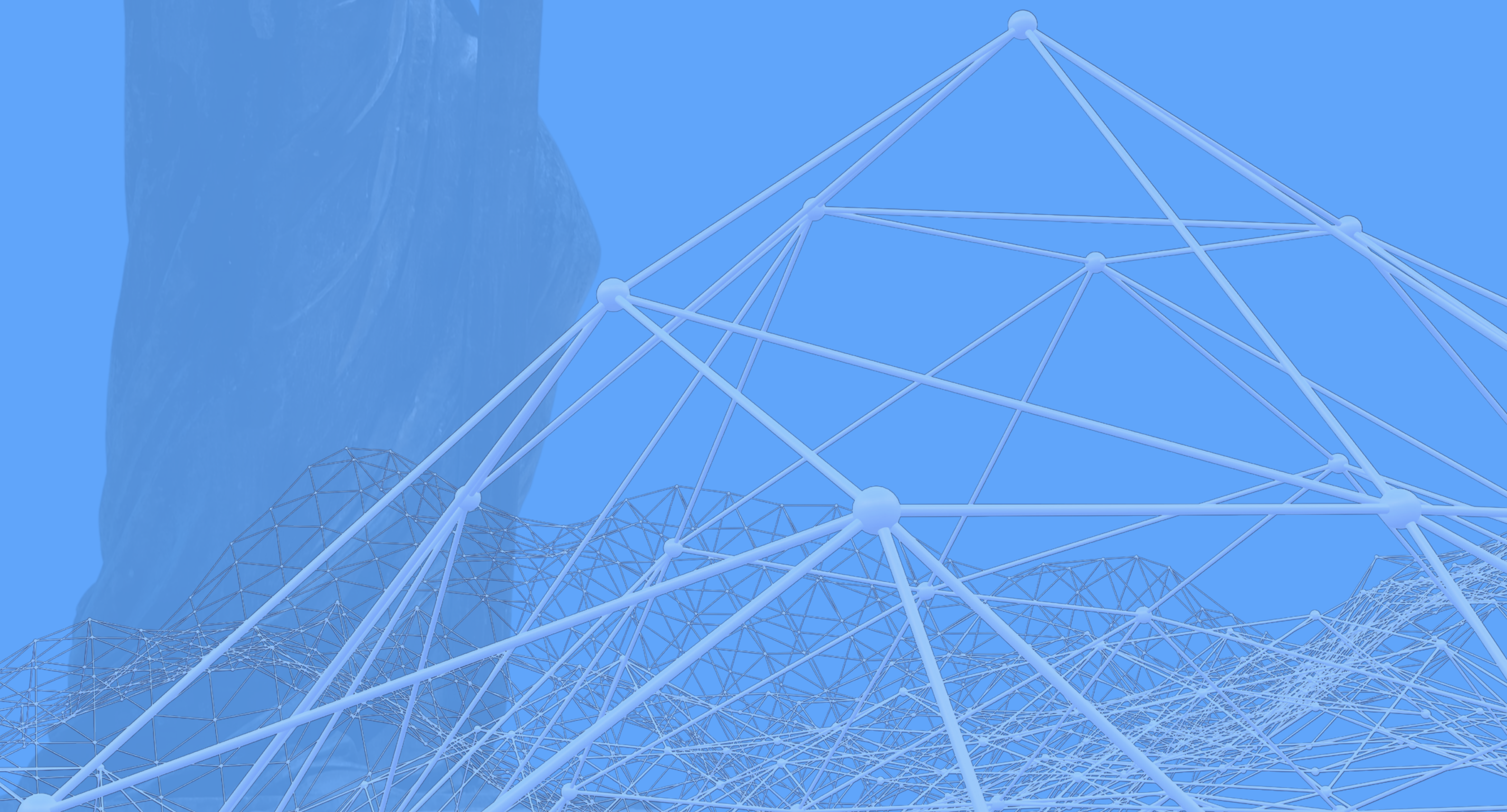
User Interfaces

As stated in the previous section, our users interact with our service by using many interfaces - Messengers, Websites, Mobile applications, and E-mails.

The working schemes of these interfaces are as follows:

1) Instant Messaging

The capabilities of the chat-bot feature are determined by the functionality that the messenger provides. During the development of instant messengers, these opportunities may change. Our development plan involves working with all popular instant messengers. For implementation in the demo version, the Telegram option was initially selected. Each user can communicate with the chat-bot, and the chat-bot collects two-way communications in the common multi-chat. This way, users can switch between simultaneous conversations
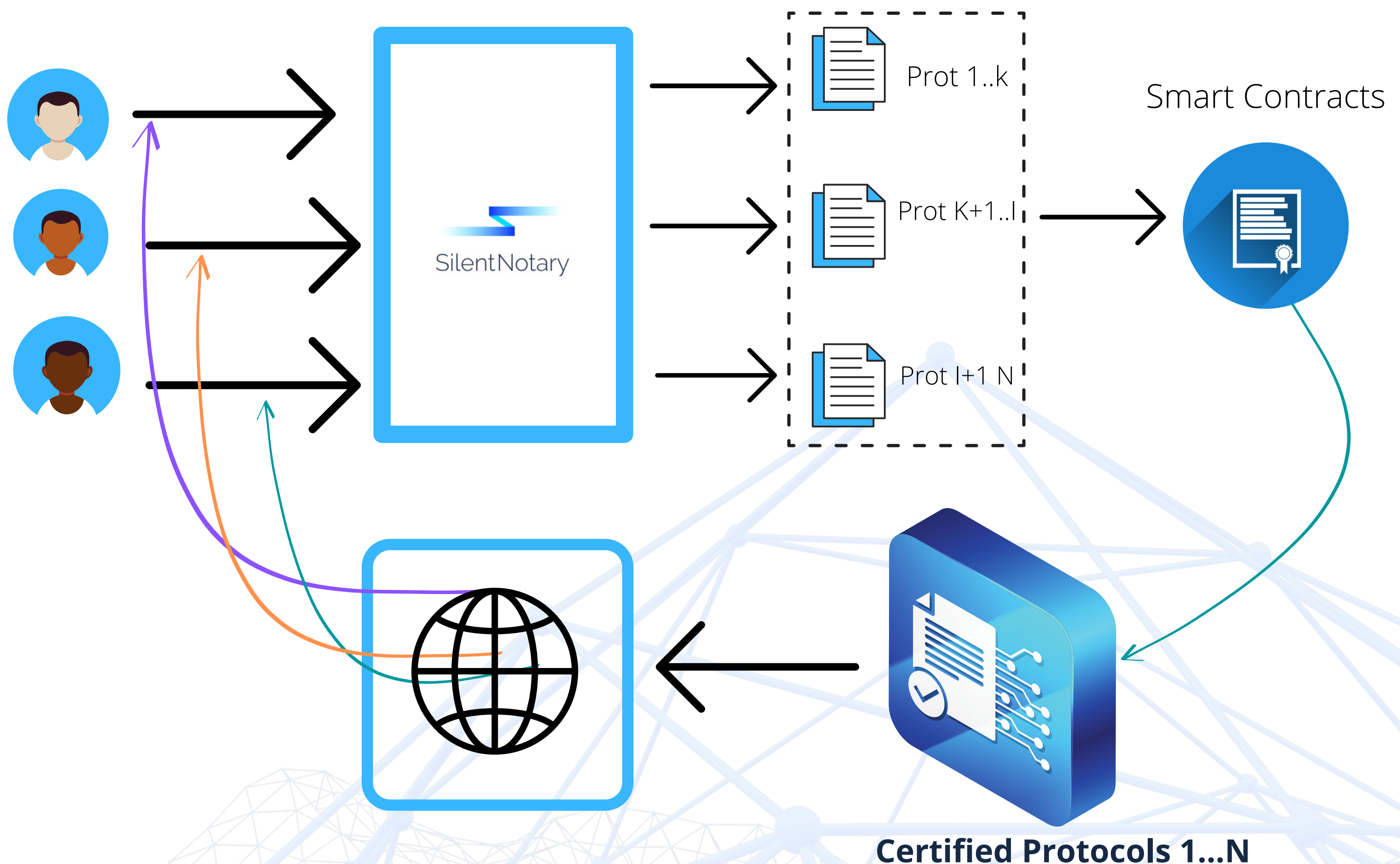

This service provides all instant messaging participants with the assurance and protection of blockchain protocols, and stores conversations in the SilentNotary Vault. Archives will be made available to users on their respective accounts.

2)Web Interface

The logistics of working with SilentNotary through the web are as follows:

The registered user can drag (via a drag & drop feature) a file to the appropriate area on the SilentNotary website, or the user can place a file link on the SilentNotary website for certification.


Smart Contracts

User file download

Personal Cloud
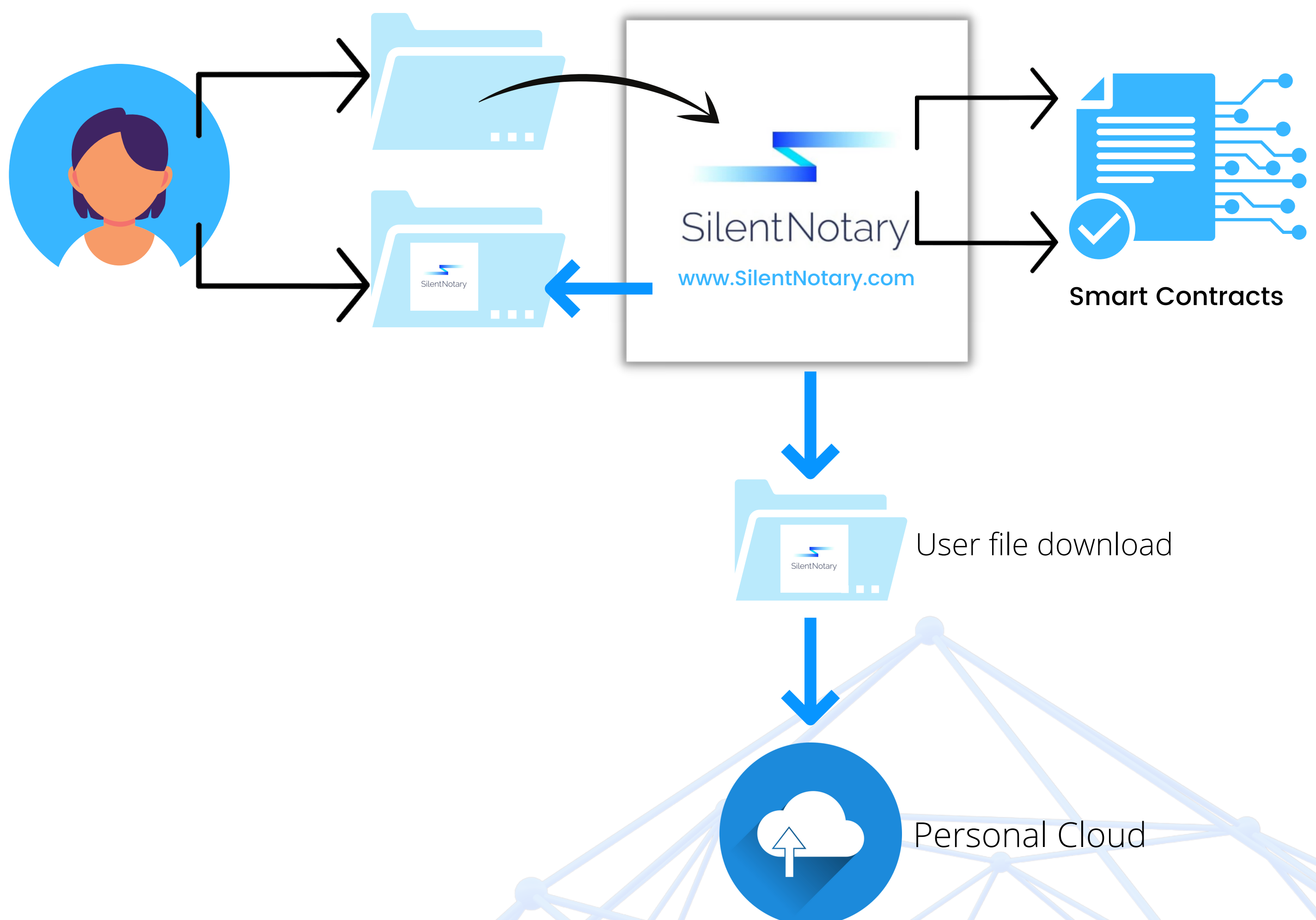
When you save a file and/or a certain website page, an archive is created with the content of the file and/or page. Furthermore, the hash value is calculated, user confirmation is requested, the service is paid, the hash of this archive is deployed into the decentralized ledger (i.e. Ethereum blockchain or UBIX DAG-based graph chain), and the archive is saved in the vault. The archive with the hash and the transaction details are then made available for downloading to your respective account.

3)Mobile Applications

The mobile applications for iOS & Android devices have been developed and are now available for download in the Apple App Store and the Google Play Store.

The following is a list of developments / functionalities implemented to-date, and those currently in development:

• Personal and corporate accounts;

• Real-time audio and video recording capabilities;

• Access to the Notary Vault for all the uploaded and certified content;

• Real-time video recording capabilities, utilizing our innovative LightStamp Technology (in development);

• Secure mode (in development).
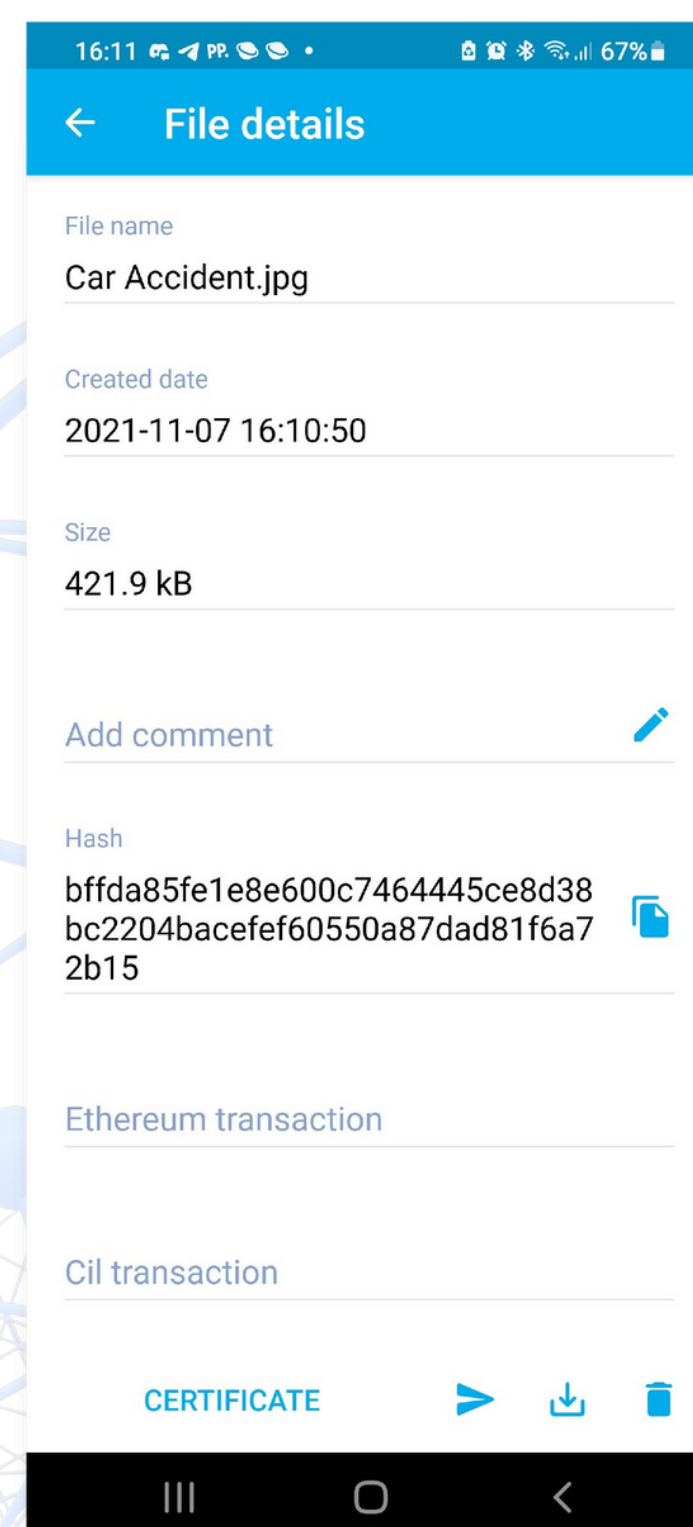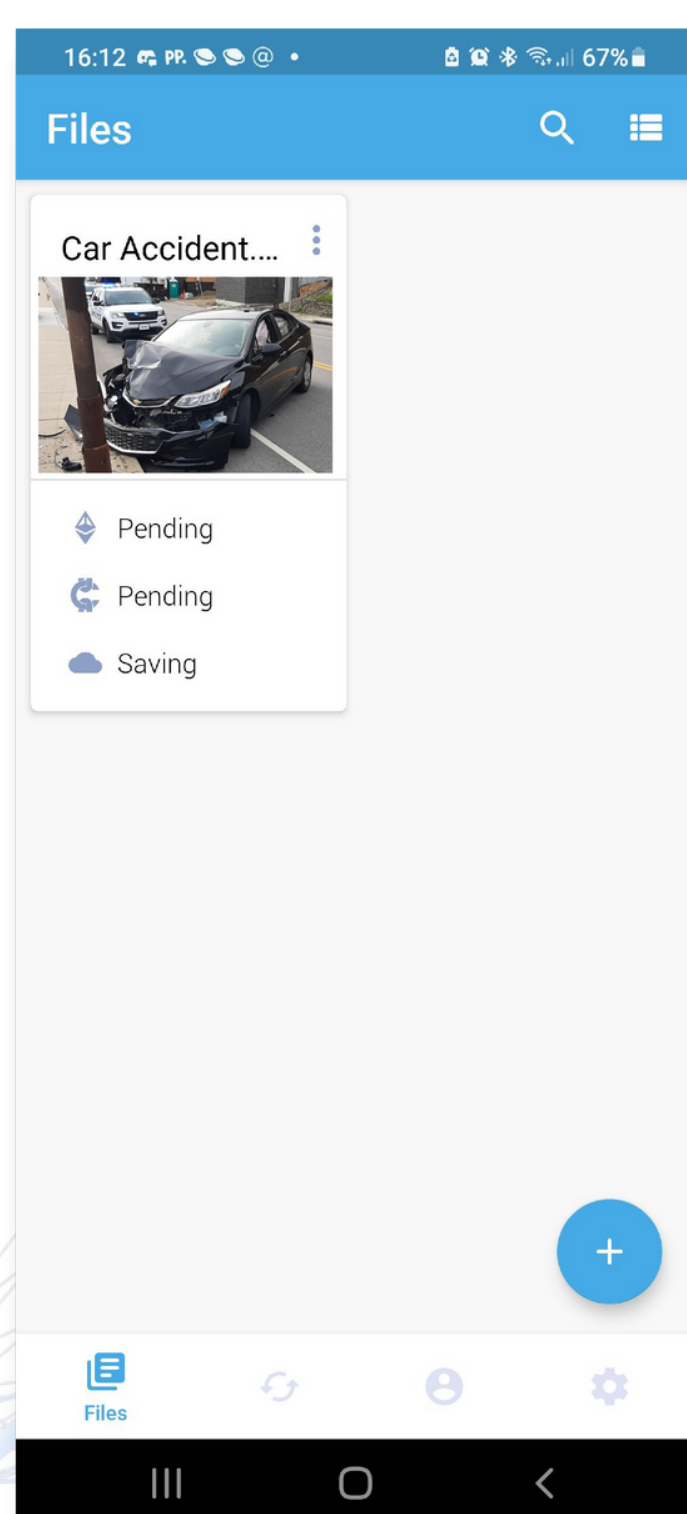
4) E-Mail

The logistics of working with SilentNotary via Email is as follows:

The user sends an email directly to our mail-bot address (go@silentnotary.com), or adds the mailbot address as a CC recipient. SilentNotary creates an archive with the email's details, RFC-title, its content, and any attached documents. The hash of the archive is calculated, and then the user is required to confirm its saving by replying to an automated message.

To: a@gmail.com

cc:go@silentnotary.com
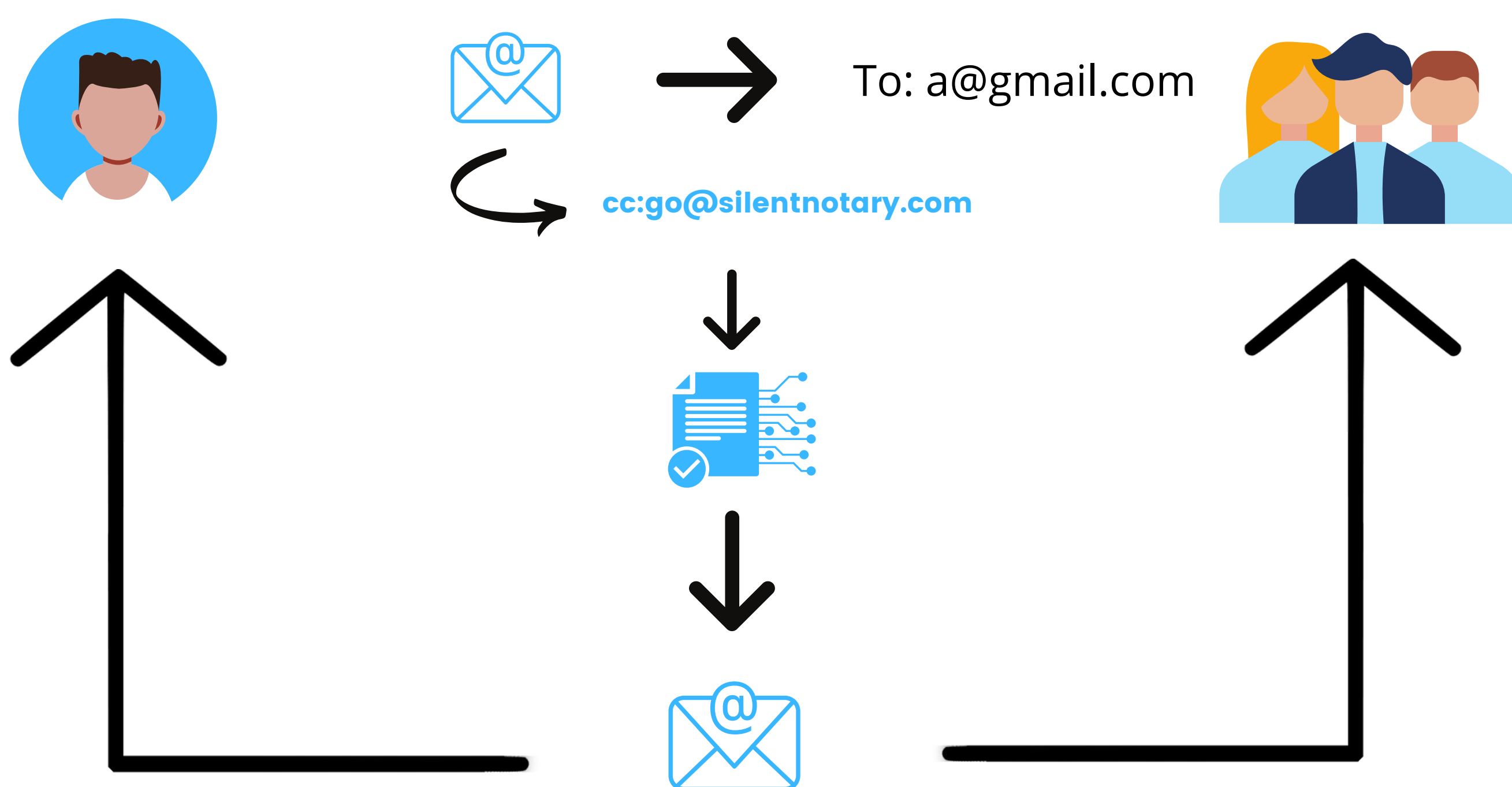
After the document is saved and payment for the service is confirmed by the user, DApp SilentNotary records data hash in the distributed ledger (blockchain / graphchain).

The user then receives a link for the hash transaction. The archive is stored in the repository (in the demo version, Google cloud storage is used, and in the main version, the possibility of using decentralized systems will be considered). After the operation is completed, the user will beable to access the saved information in their personal account
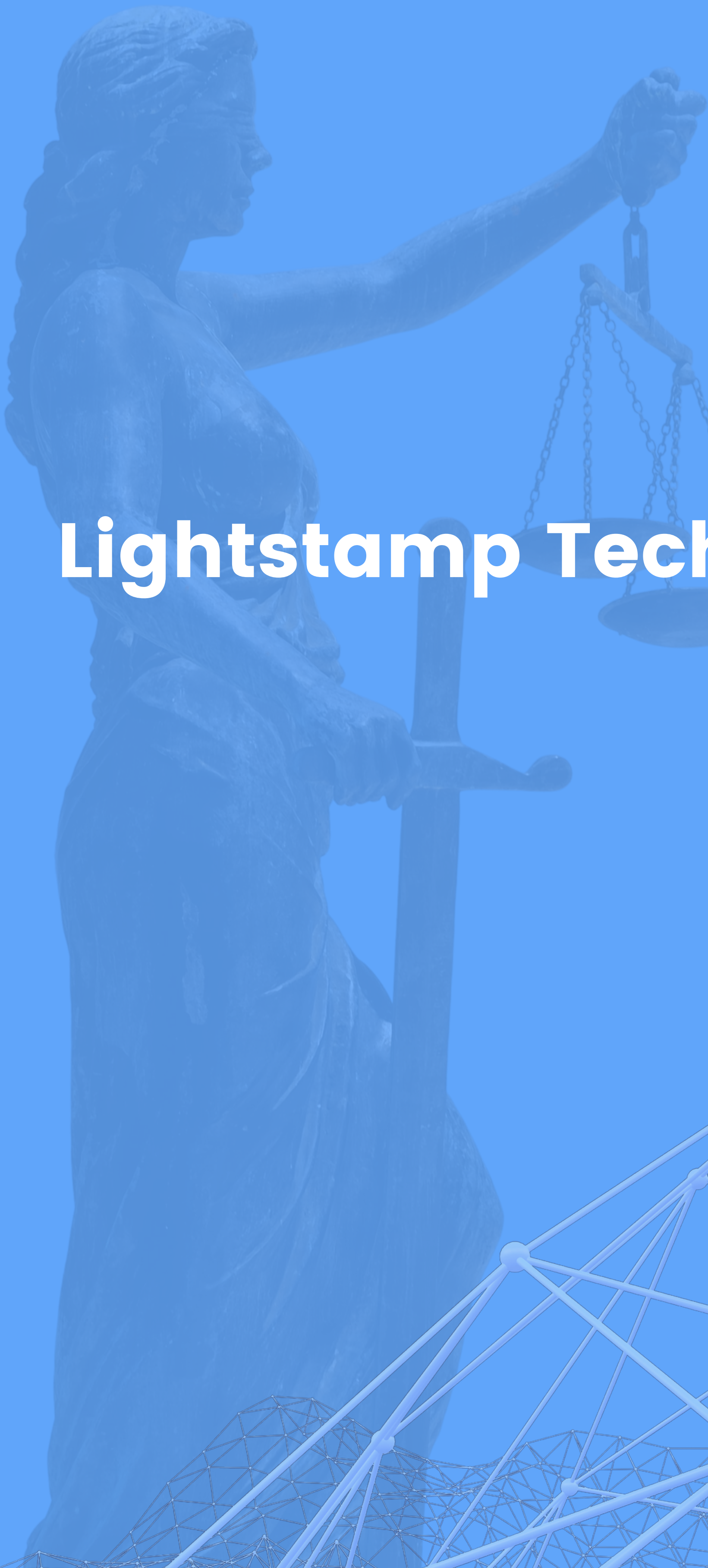
Lightstamp Technology
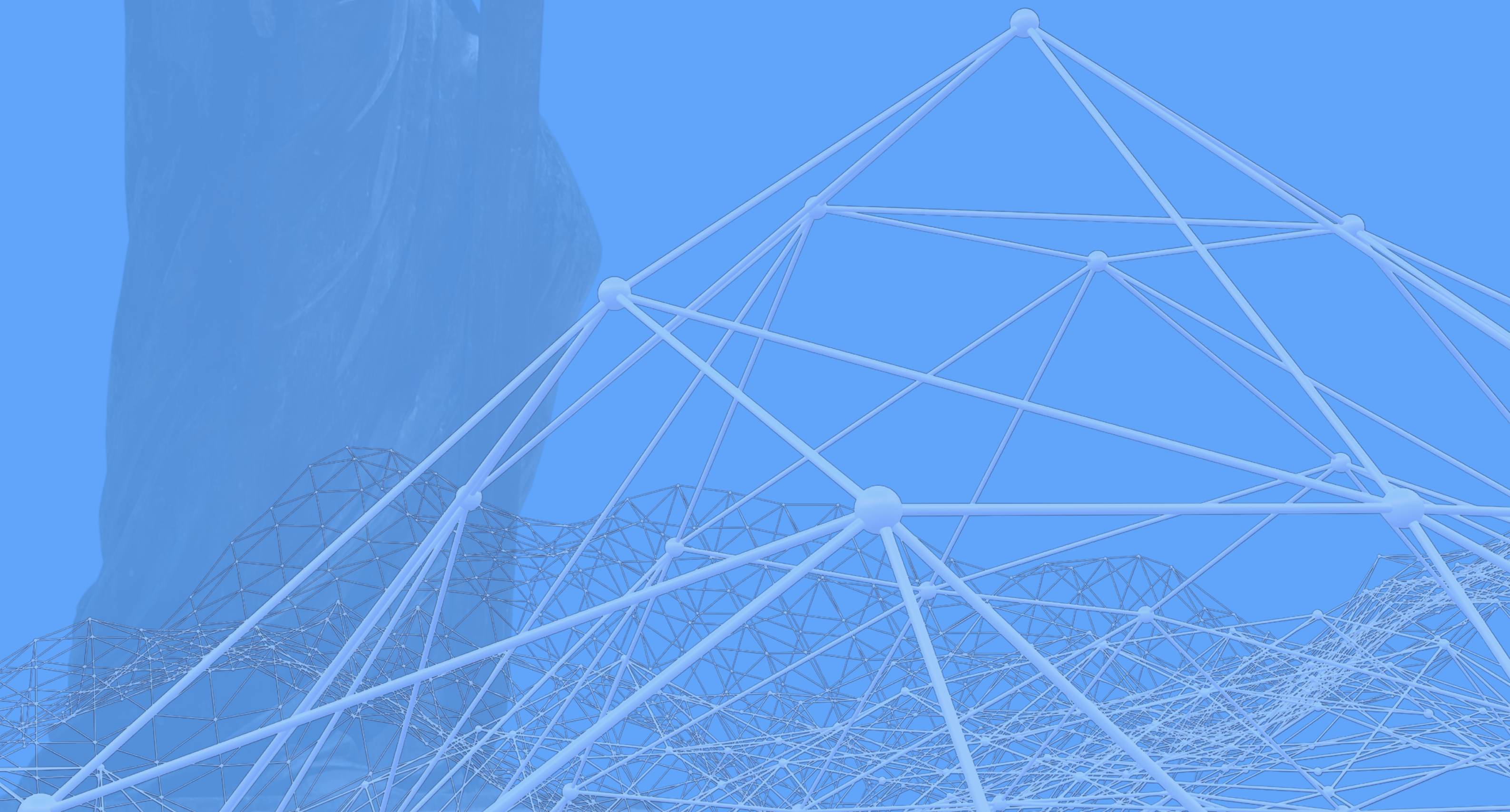
Lightstamp Technology

During the initial stages of SilentNotary's development, a major objective was to be able to determine the time range of a specific event. Using the hardware capabilities of smartphones, a solution was found, and Lightstamp™ technology was created to help determine the time period of an event recorded with a smartphone camera.

Lightstamp technology provides the following solutions:

1. Counteracts forgery, tampering and/or falsification of recorded videos;

2. Records the time interval of an event (both the start and end times of a video); and Provides evidence of a video-shooting event having taken place.

National patent app. #2017144897 "METHOD OF PROVIDING THE RELIABILITY OF EVIDENCE AND THE DEVICE FOR ITS IMPLEMENTATION AND THE METHOD OF USING THIS DEVICE", Intellectual Property priority date is 21.12.2017, registered by RosPatent.

Next steps include completing The World Intellectual Property Organization's ("WIPO") Patent Cooperation Treaty ("PCT"). This allows nationals and residents in a PCT contracting state to seek patent protection for an invention or utility model (depending if the contracting state has utility model option) simultaneously in the 152 PCT contracting states by filing just one (1) application instead of filing in each country where the protection is being sought.

More information about LightStamp Technology will be provided soon.

Secure Mode
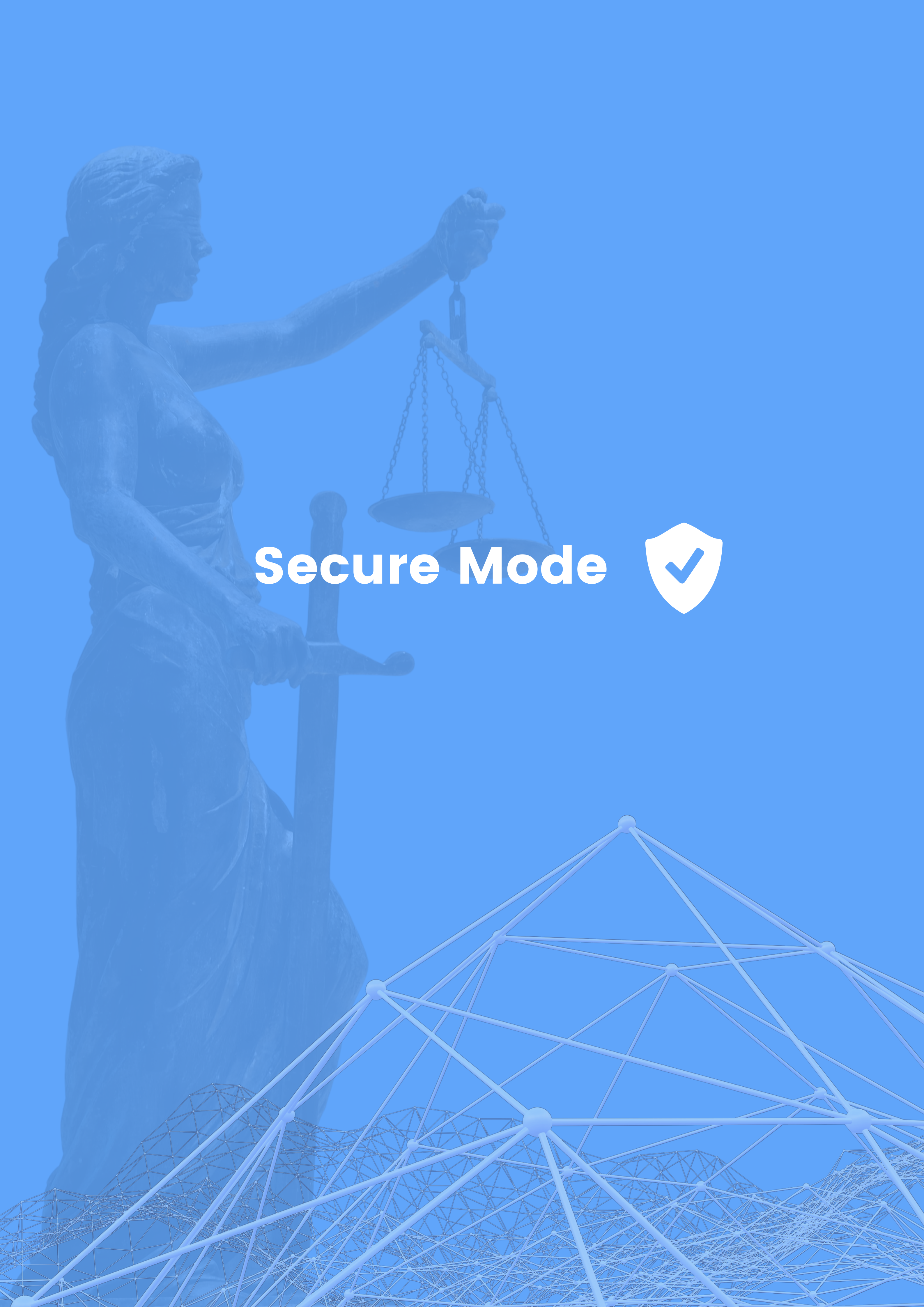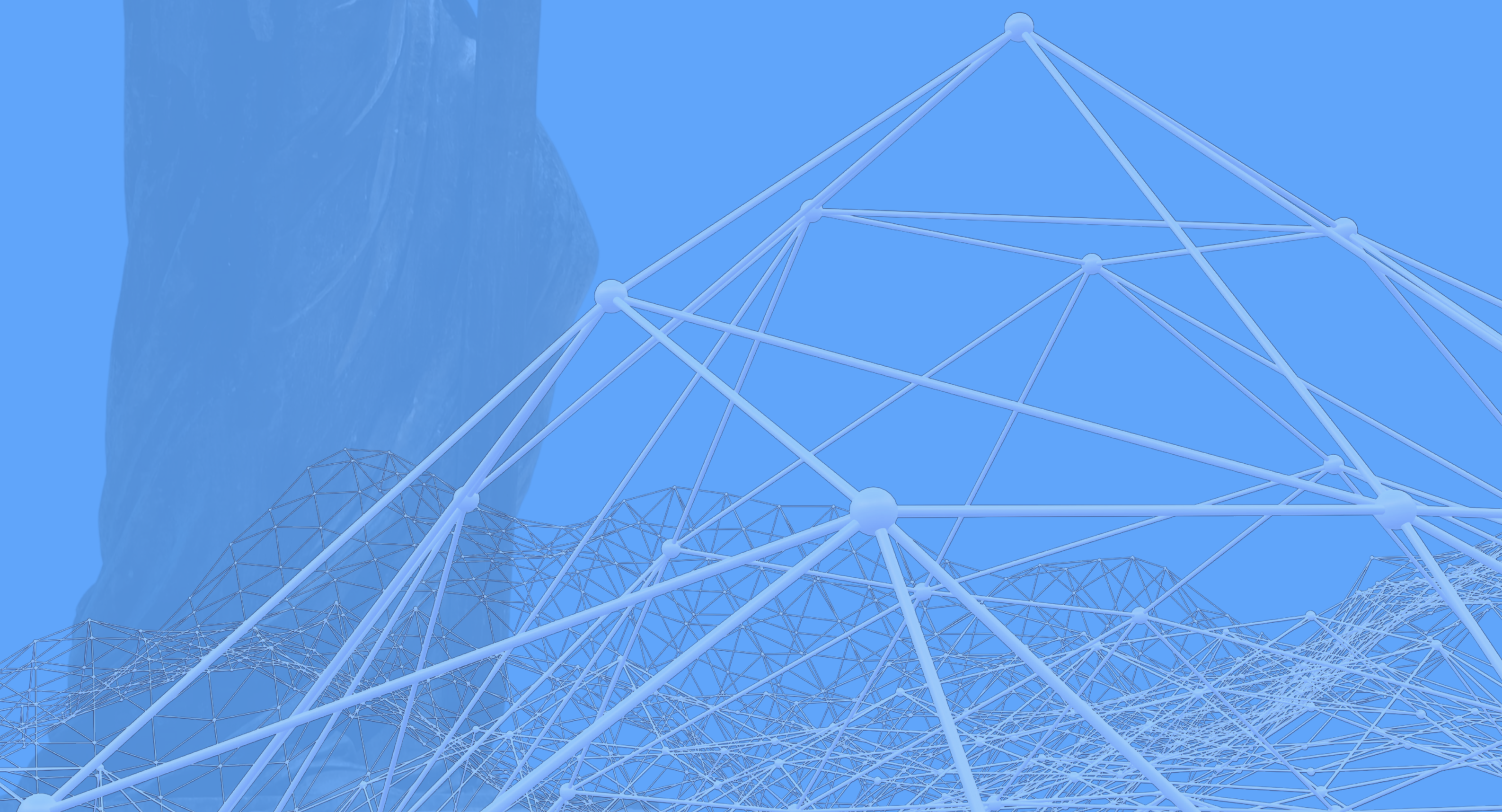
Secure Mode

We received numerous requests from customers to develop a technology that is able to certify extremely confidential information. Instead of using particularly robust cryptographic technologies, a simpler solution was found - an enhanced security mode.

Our enhanced security mode is great for use with any particularly sensitive data. Hash will be calculated on the client side, and as such, will be transferred to the system without transferring / storing data on the NotaryVault. For certification, the system doesn't need the original data, rather, a digital fingerprint (hash) is enough. This enhanced security mode will only be made available to users of mobile applications, and when integrating corporate systems through API.
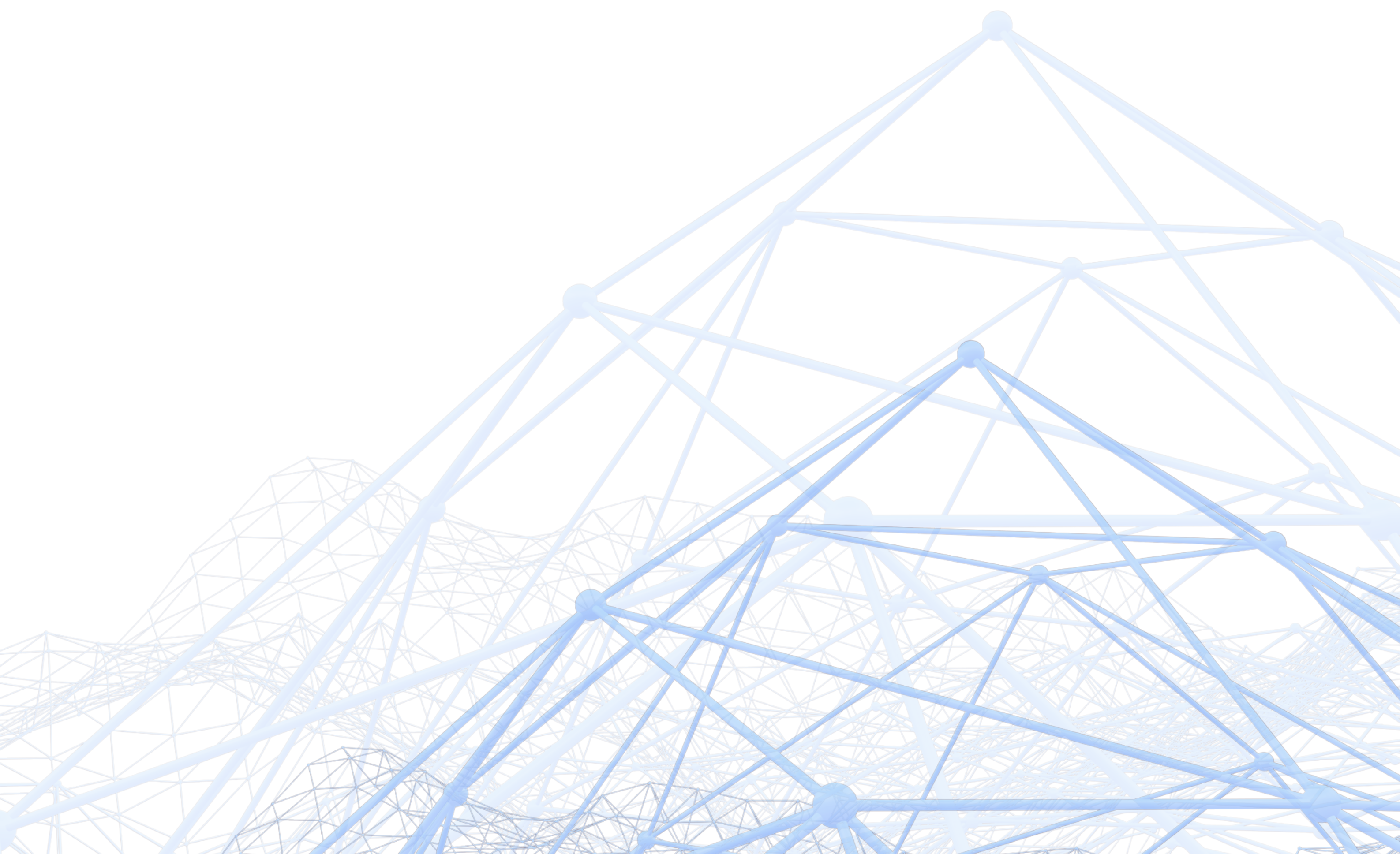
Technical Description
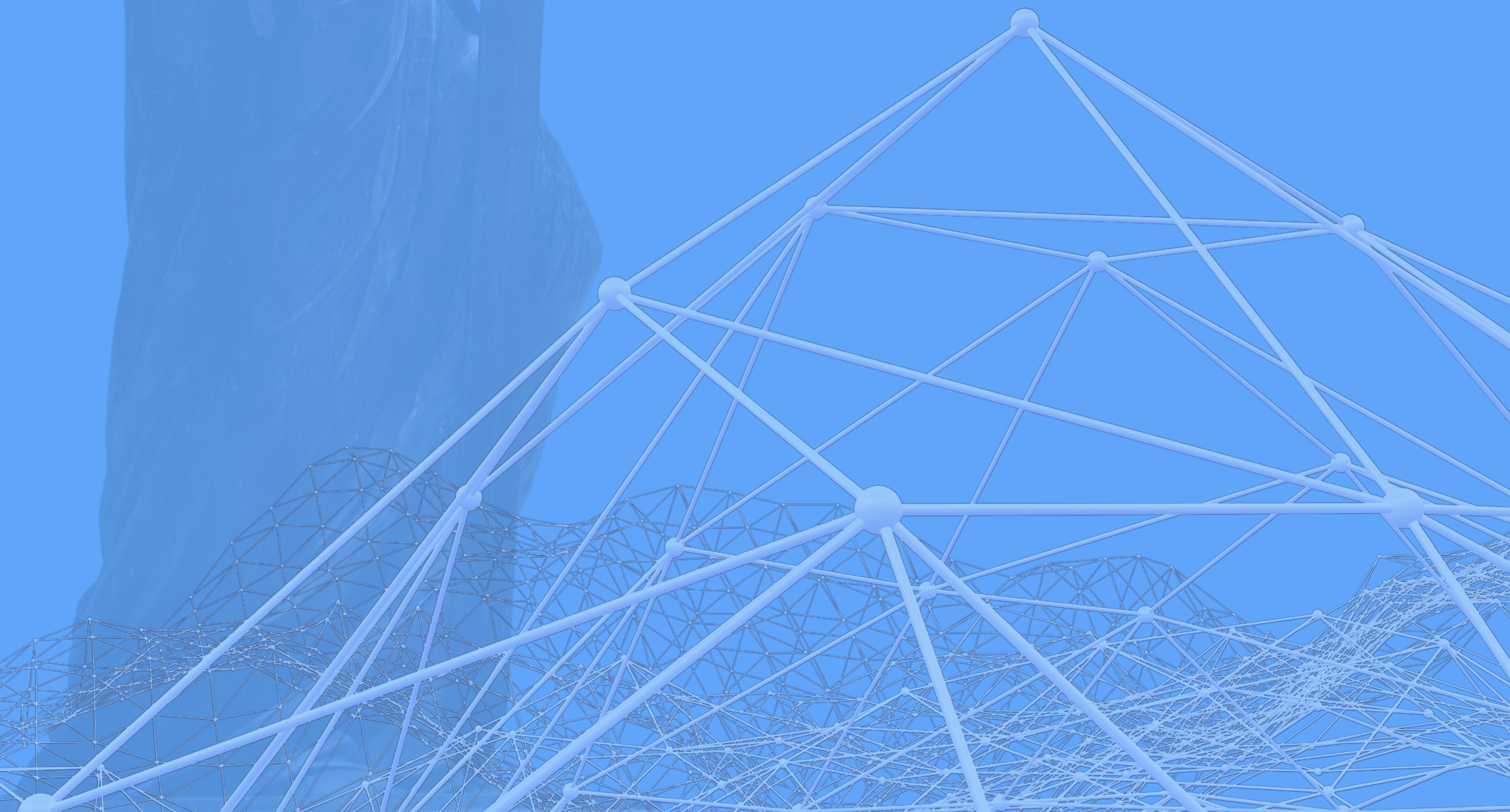
Technical Description of the Product

In accordance with all user interactions, an archive is formed, including the date of the event, details of the document, and the document itself.

Email

Chatbox

Web

Block ID

ID

Block

TxHash 0156

Hash a89df

Smart Contract

Hash a89df

Cloud

Link to file

Hash a89df

TxHash 0156

SilentNotary
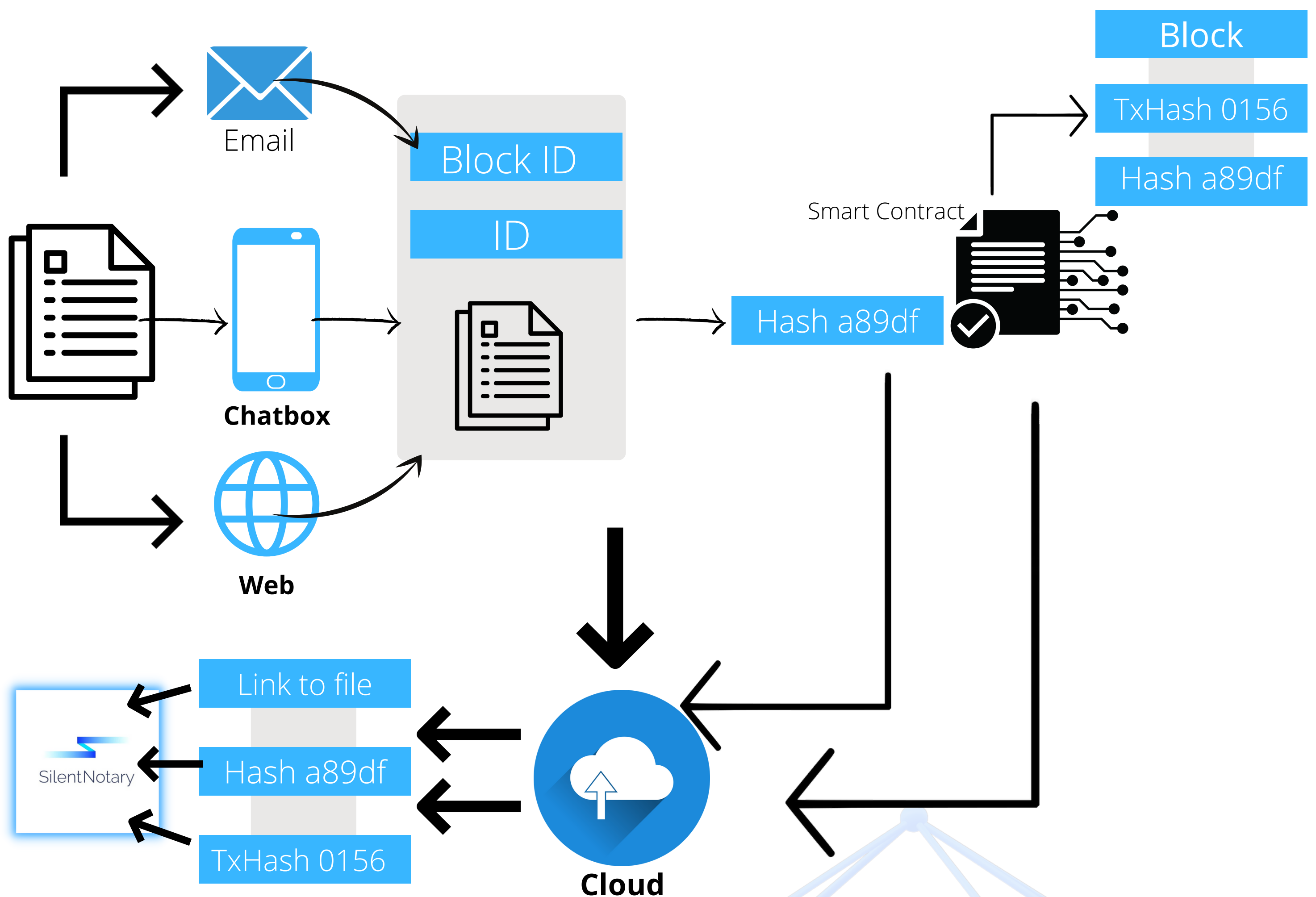
Next, the hash of this archive is calculated by the algorithm SHA-256, with the help of a Smart Contract written on the distributed ledger (blockchain or grapgchain).

The archive itself is saved in cloud storage.

The user receives a hash, which is the result of computing the hash function on the user's archive.

The TxHash of the transaction in the distributed ledger platform, and a link to the document in the user'spersonal account, are then made available to them.

Legal Issues

SilentNotary uses blockchain (graphchain) as a service. When it comes to dealing with a complex technical system, we need to use technical expertise to prove the authenticity of the evidence at-hand.

- Develop a methodology for experts in different countries.
- Explain how to use created evidences in a court.
- Collect and generalize judicial practices.
- Garner the trust and commitment of lawyers and experts alike to use SilentNotary's technology.
- Create a marketplace for decentralized legal services.
- These are the prime functions that will support SilentNotary's strong legal foundation.

Step by Step (Basic)

- The principal legal schemes of SilentNotary's end product
- Event
- Recording Device
- Digital File
- Hash
- Smart Contract
- Record in Blockchain
- Evidence

Event → Device → Digital file → TX Hash → Smart Contract → Evidence
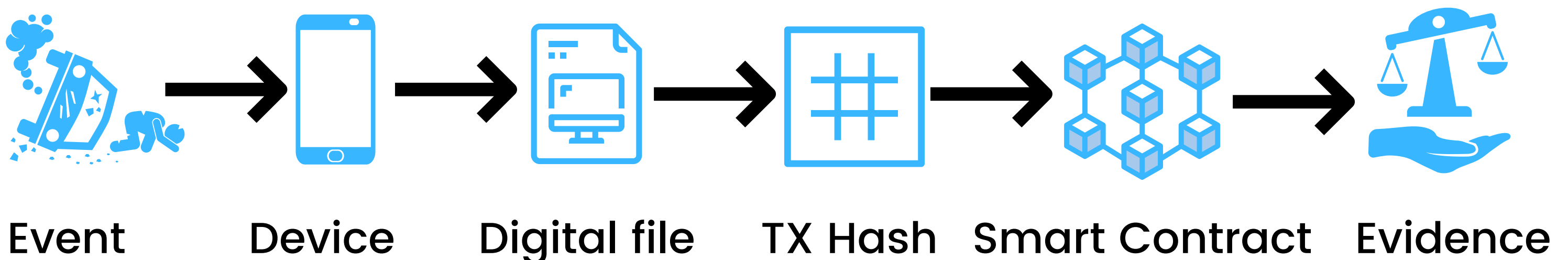
Step by Step (Technical)

1. The event is recorded as a digital file utilizing the user's device.

2. The digital fingerprint (hash of the file) is calculated.

3. The hash is sent to a smart contract, which records it in the distributed ledger.

4. The record in the ledger – the hash of the file – and the file itself, can be used as evidence in court.

5. An application can be made to help technical experts determine whether certain files have been altered at a specified point in time (at the time of recording in the distributed ledger).

For this, technical experts should know that:

- It is not possible to create a file that is different from the one presented with the same hash.

- It is not possible to change the presented record in the distributed ledger.

- The timestamp of the presented record corresponds with the actual recording time.

Event → Device → Digital file → TX Hash → Smart Contract → Evidence
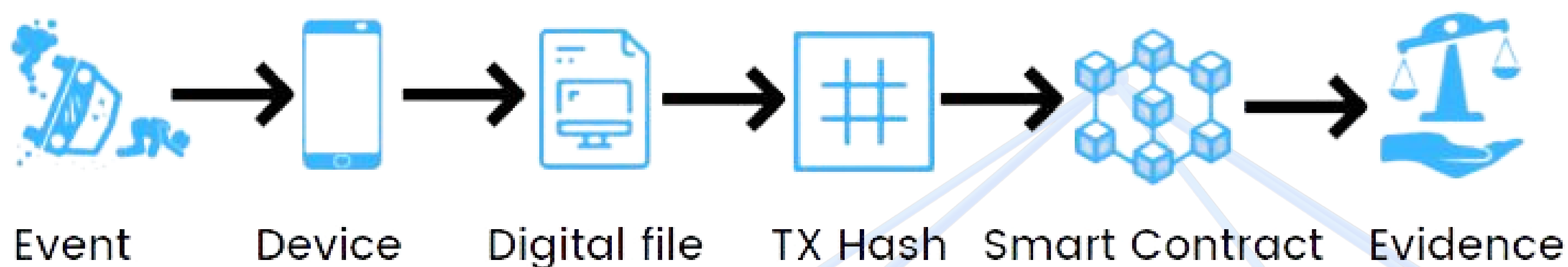
Multi-Platform Concept

Multi-Platform Concept

We currently use a distributed ledger as a service to store pieces of evidence, thereby making them immutable and timestamped.

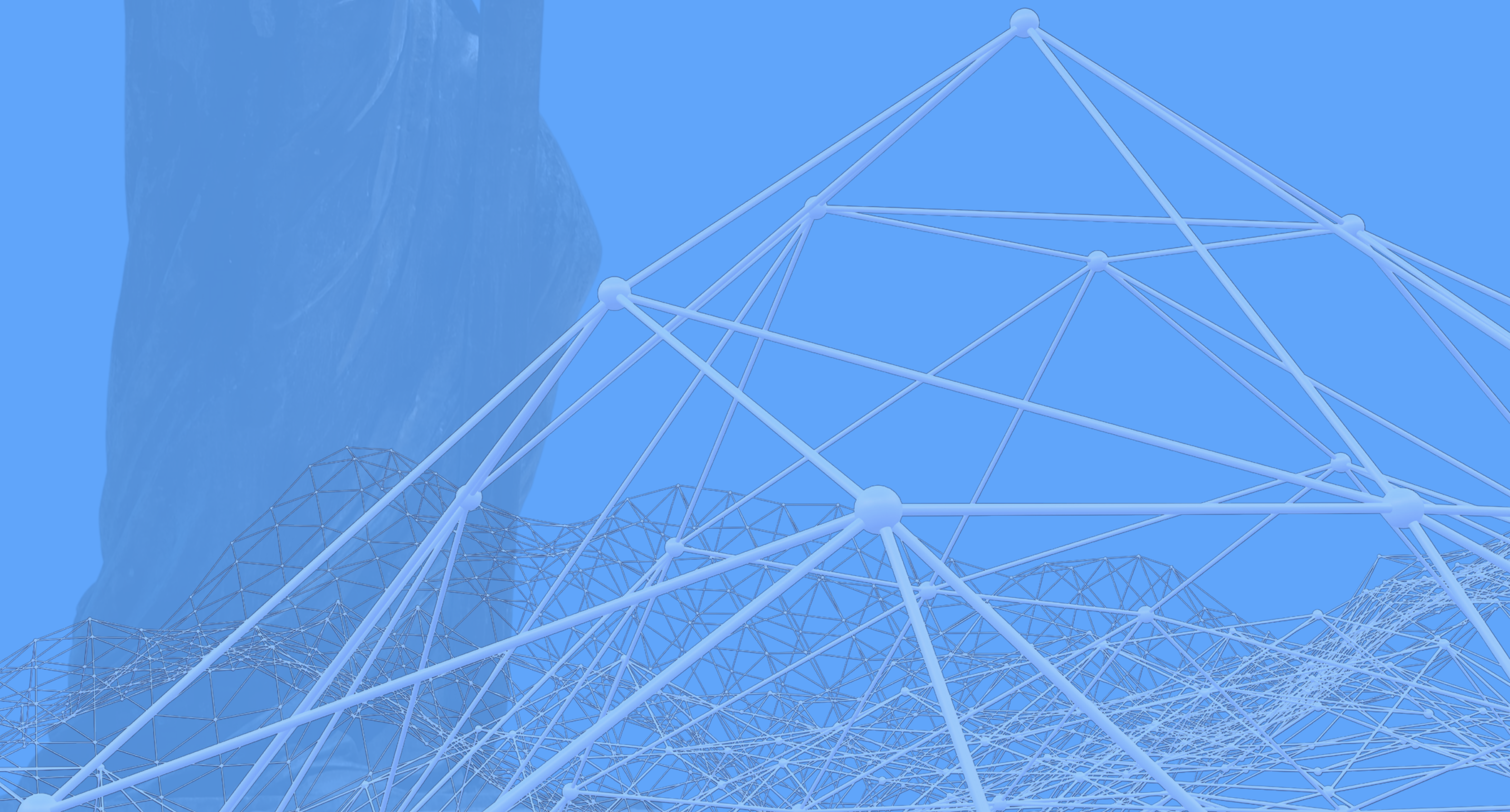It should be noted that distributed ledger technology is rapidly evolving, and with that, SilentNotary has obtained access to a wide variety of platforms with different features. Some of these features are more proven / stable, and as such, are more expensive. Other features are in early stages of development, and as such, have shown promising signs of being both faster and cheaper. The SilentNotary team is open to utilizing different platforms, and as such, will be providing customers with a choice of which platform they would like to use. This way, SilentNotary's customers can obtain a custom experience to meet their specific needs.

For example, it is now very expensive, and almost impossible, to use Ethereum to certify data flows from IoT devices. For SilentNotary, the solution is simple. We can utilize the DAG-based, UBIX.Network integrated blockchains.
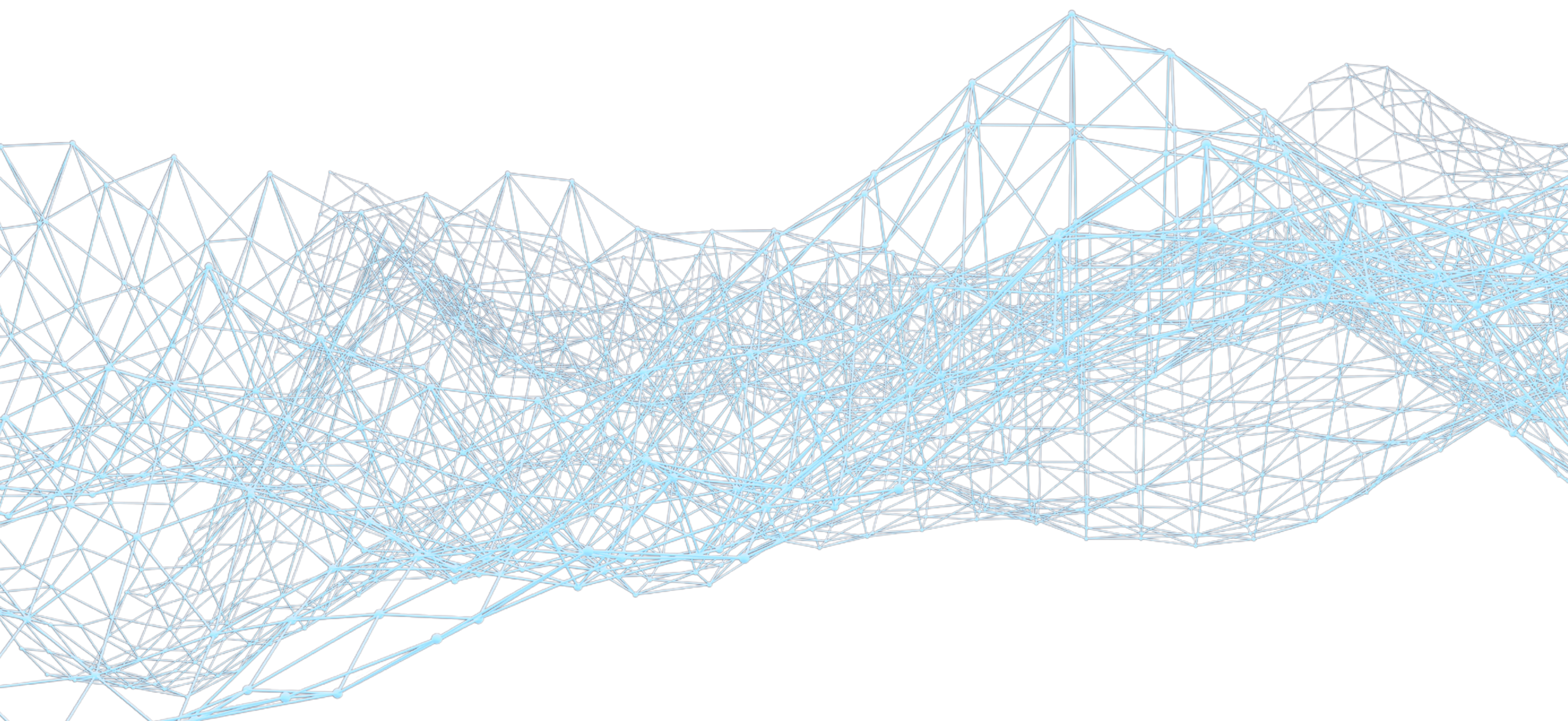
Principal Schemes of the Multi-Platform Concept

SilentNotary users can choose the platform used to store evidence.

SilentNotary is an open system and provides for the use of varying platforms.

The basic requirements for a decentralized distributed ledger include unchanged records and time synchronization between all nodes.
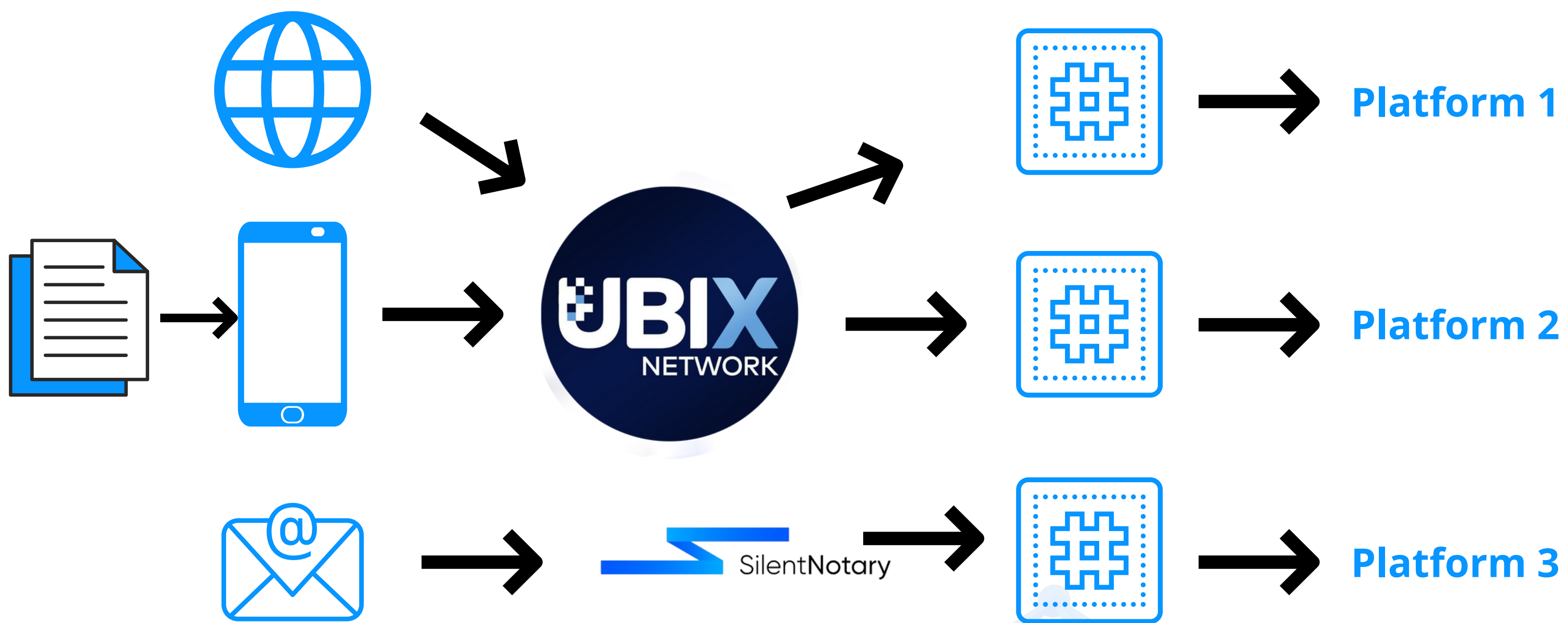
UBSN = PAYMENT   **UBX** = TX FEE

Currently, UBIX.Network is the main platform for data recording.
Since UBIX.Network is actually a set of user-created integrated blockchains, a special SilentNotary integrated blockchain with ConsiliumID = 4 was created for the SilentNotary project.

This solution opens the door to a wide variety of opportunities for the legal interpretation of transactions, and allows us to build applied solutions in various fields.

System Developments
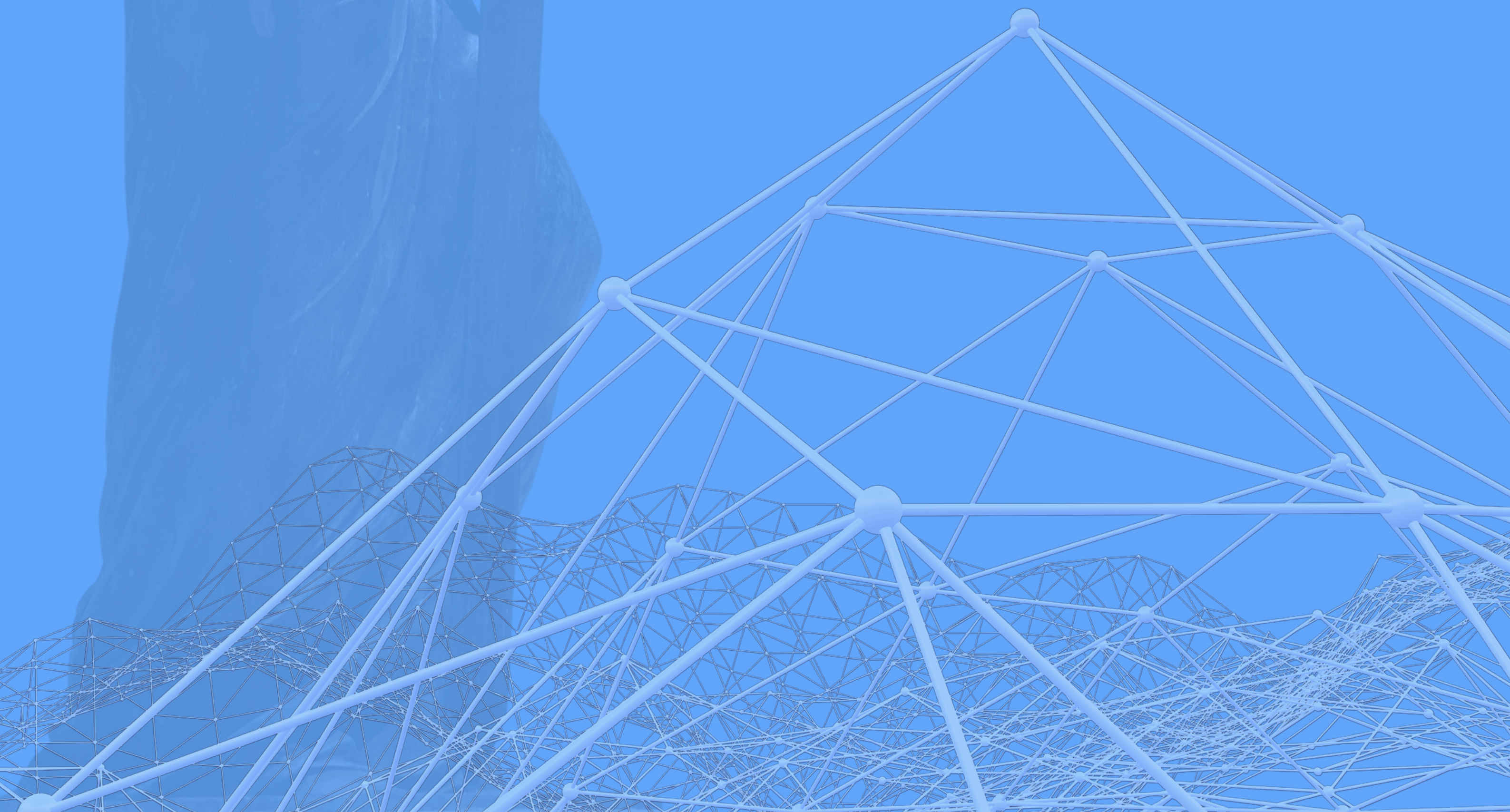
Current System Developments

The main problems surrounding the development of the system are the indefinite legal status of the record in the public stable blockchain, and low customer awareness about the new product at-hand.

The following list of planned developments will further help transform the inner-workings of the overall system:

1. To develop legal opinions, perform technical and legal expertise, create instructions and ways of using the system, and legal support in case-based litigations with leading legal companies;

2. To promote use of the blockchain notaries in everyday life, develop recommendations, and collect and generalize judicial practices;

3. To finish the development of user interfaces (integration with WeChat, KakaoTalk, LINE and Skype, launch Product and SilentNotary Foundation sites) and move servers onto its own hardware;

4. To create an ecosystem around the main application. This ecosystem would consist of service provider organizations, end users, and decentralized applications;

5. To include public notaries in the ecosystem to organize a remote notarization for the existence of online and electronic documents to cover the maximum range of needs for notary services. For this, the SilentNotary team is planning to create a distributed ledger of notaries and organize interactions within the ecosystem. The world distributed ledger of public notaries will allow users to verify - remotely - the existence of electronic documents in a classical way, but with a more convenient user interface; and to advertise and promote services that use the SilentNotary Smart Contract.

These activities are all financed by the sales of the system tokens.

Legal Structure
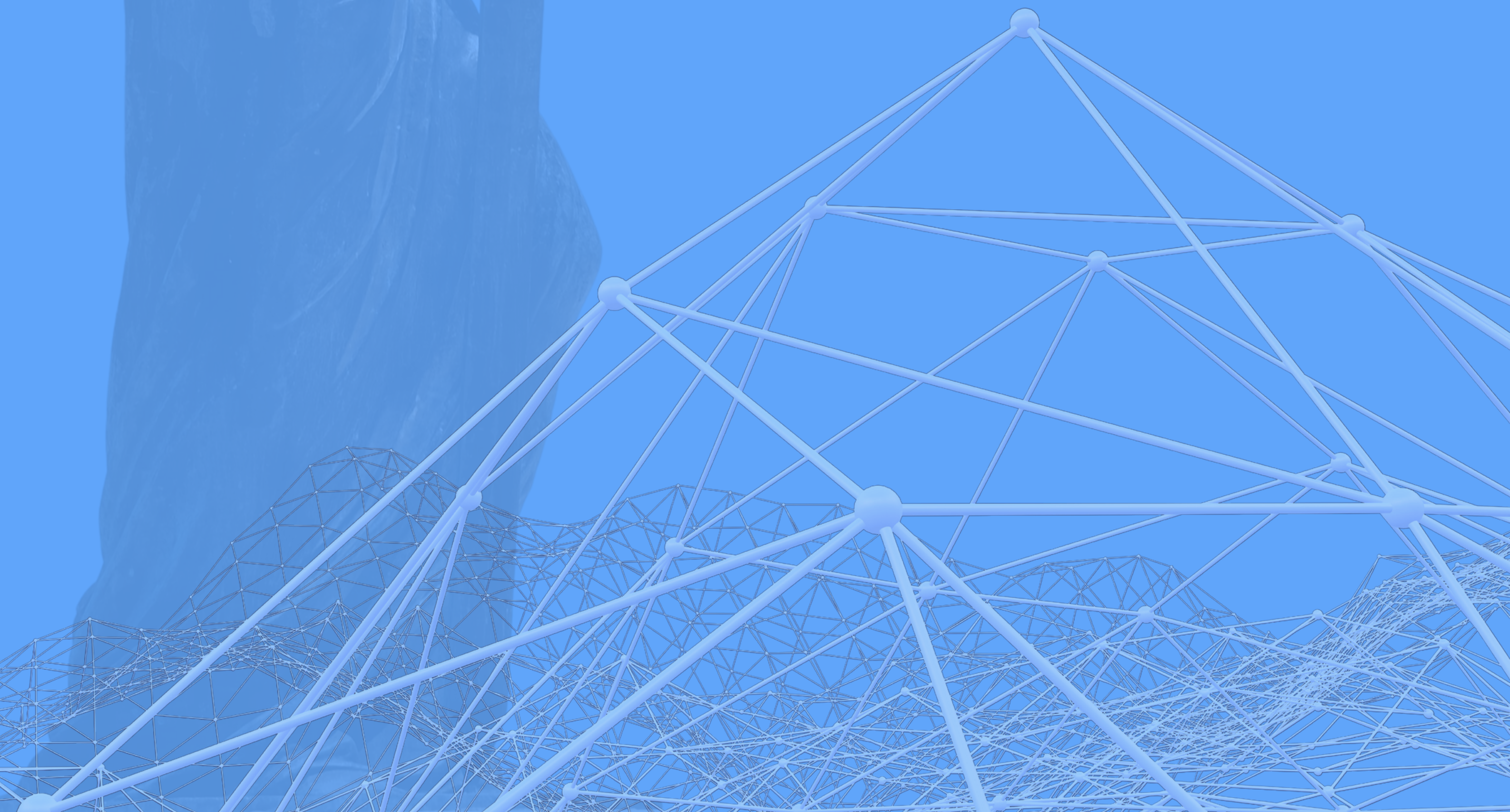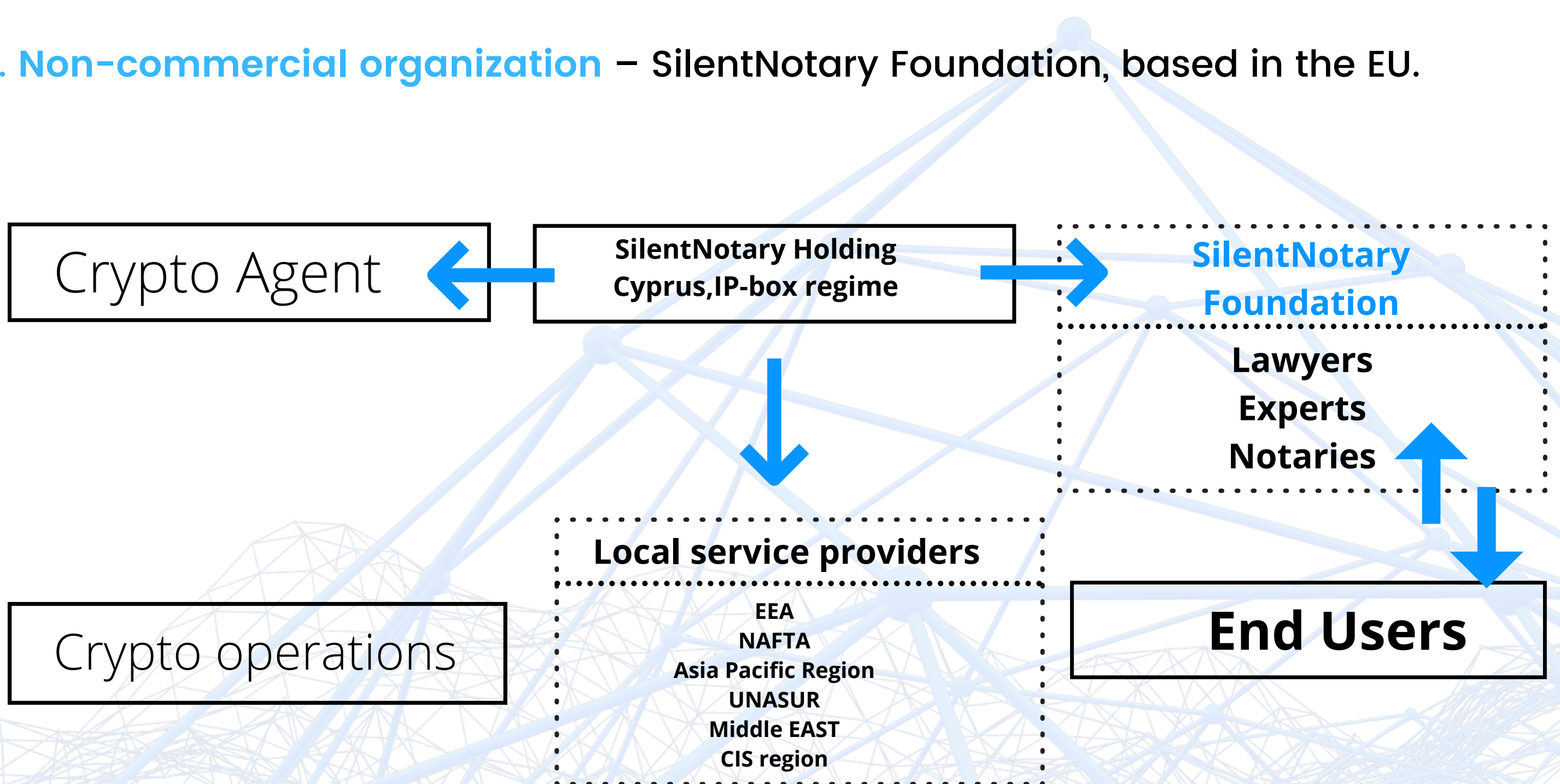
Legal Structure of the Project

The project consists of 3 different parts (providing varying functions):

1. Classic IT-holding – Providing services to end users.Develops software, provides certification services, receives revenue in fiat currencies,and acquires SilentNotary tokens for smart contract usethrough a cryptocurrencyagent. Jurisdiction of the holding company is in Cyprus using the local IP-box regime. Some subsidiaries have already been established - and some are planned in thefuture - to work in specific markets:

a. EEA (European Economic Area) – we plan to use our holding Cyprus company as a service provider on the EEA market.
b. NAFTA (North American Free Trade Agreement) region – USA based
service provider;
c. Asia-Pacific region – Singapore or Hong Kong based service provider;
d. UNASUR – local service provider;
e. Middle East – UAE based local service provider;
f. CIS region – Russia based local service provider (already created for test sales)
– SilentNotary Ltd., REG #1165030052307, www.silentnotary.ru.

2. Crypto-agent – SPV – a specialized company established for operating with cryptocurrency assets. The goal is to organize token sales and token circulation. Due to the uncertain legal status of cryptocurrency assets, these transactions are separated from the core business, and instead, placed in a neutral jurisdiction. Company already created: SigAny limited #1 Mapp street, Belize, REG #164,617.

3. Non-commercial organization – SilentNotary Foundation, based in the EU.

Crypto Agent	←	SilentNotary Holding Cyprus,IP-box regime	→	**SilentNotary Foundation**
		↓		**Lawyers Experts Notaries**
Crypto operations		**Local service providers** EEA NAFTA Asia Pacific Region UNASUR Middle EAST CIS region		**End Users**
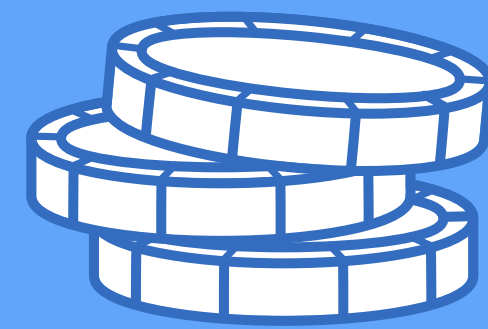
UBSN Tokens

UBSN Tokens

The system tokens (hereinafter referred as "UBSN" or "tokens") are issued in a limited number of 186 462 812 051 tokens (emission address:

 Ux356481c8a73506100478f17c1fb2af551d33d2f0) at the UBIX.Network platform and are used to organize interactions among ecosystem participants, and function as a payment for notarizations for SilentNotary's services. Payment for the services upon commissioning will be made either by fiat money, or by UBSN tokens using a smart contract. The service is currently free of charge.

For the convenience of circulation and tokens usage, UBSN (ERC-20) tokens have been issued at the Ethereum blockchain (token smart contract address: 0x86EFc496DcA70bcFD92D19194290e8457a375773).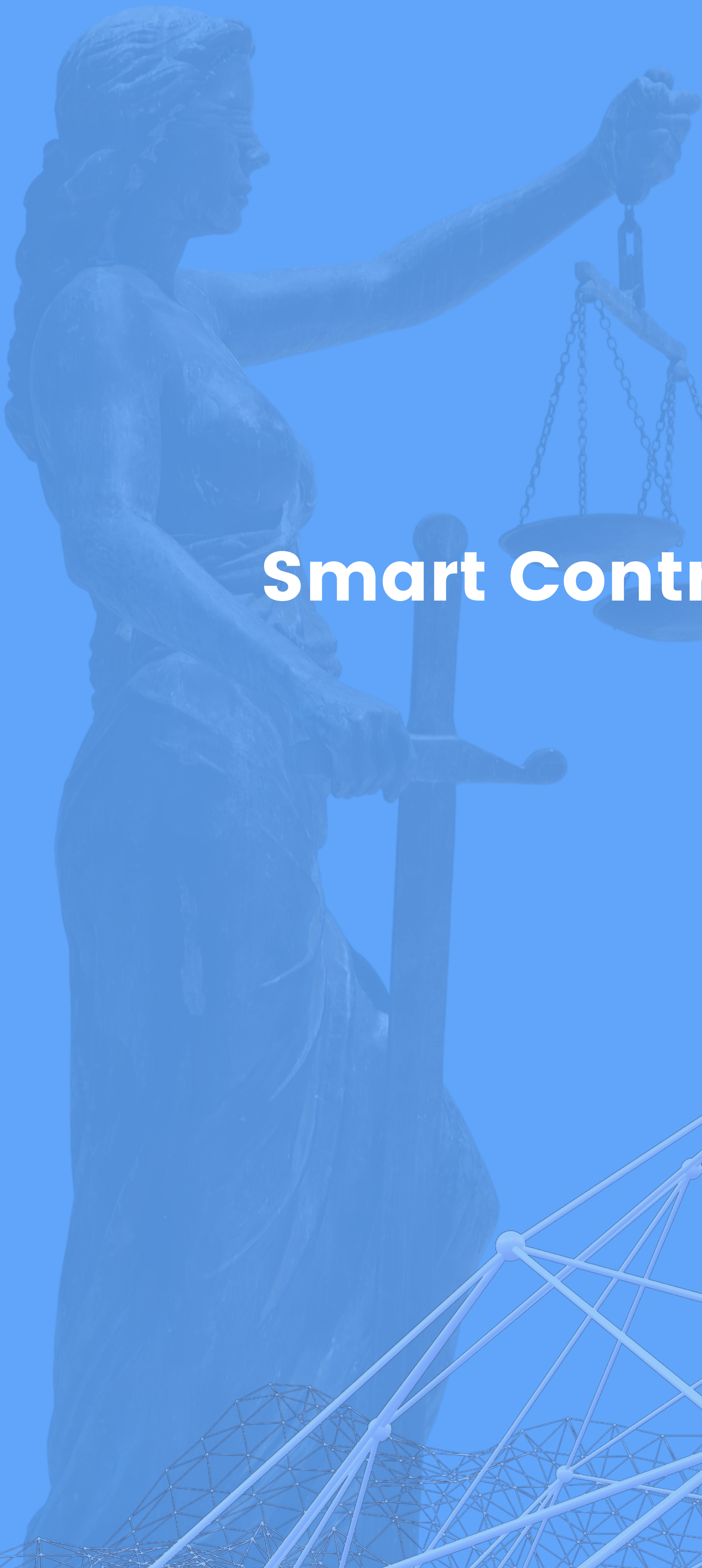 With the help of the CDR project ("Crypto Depositary Receipts" - service included with the UBIX ecosystem), direct and reverse conversions of UBSN tokens into UBSN tokens (ERC-20) can be carried out.

Since the service is aimed at rendering its facilities in the real economy, the cost of services shall be denominated in fiat currencies. However, calculations within crypto-economics are made in cryptocurrencies. Compared to cryptocurrencies, the cost of fiat currencies is manifested with high volatility.

The SilentNotary team proposed the following solution to resolve the issue of regulating the cost of services and linking it to the fiat currency: Control the SilentNotary contract execution costs by changing the basic cost for document certification (which serves the purpose of recording the market conditions and competitive environment). The cost of notarizations has been published at the SilentNotary.com.

To the ordinary users benefit, the SlientNotary team is planning to create its own, or support the creation of, independent service providers and commercial organizations that act as intermediaries between the end customer and the SilentNotary service. To render services, the providers must buy the UBSN tokens.

Smart Contract

SilentNotary/Service Provider

The service provider - i.e. a company rendering commercial services to end users - submits an offer (terms & conditions) to the user. The user then sends certified content to the provider and pays for the service in line with the rate (USD). To provid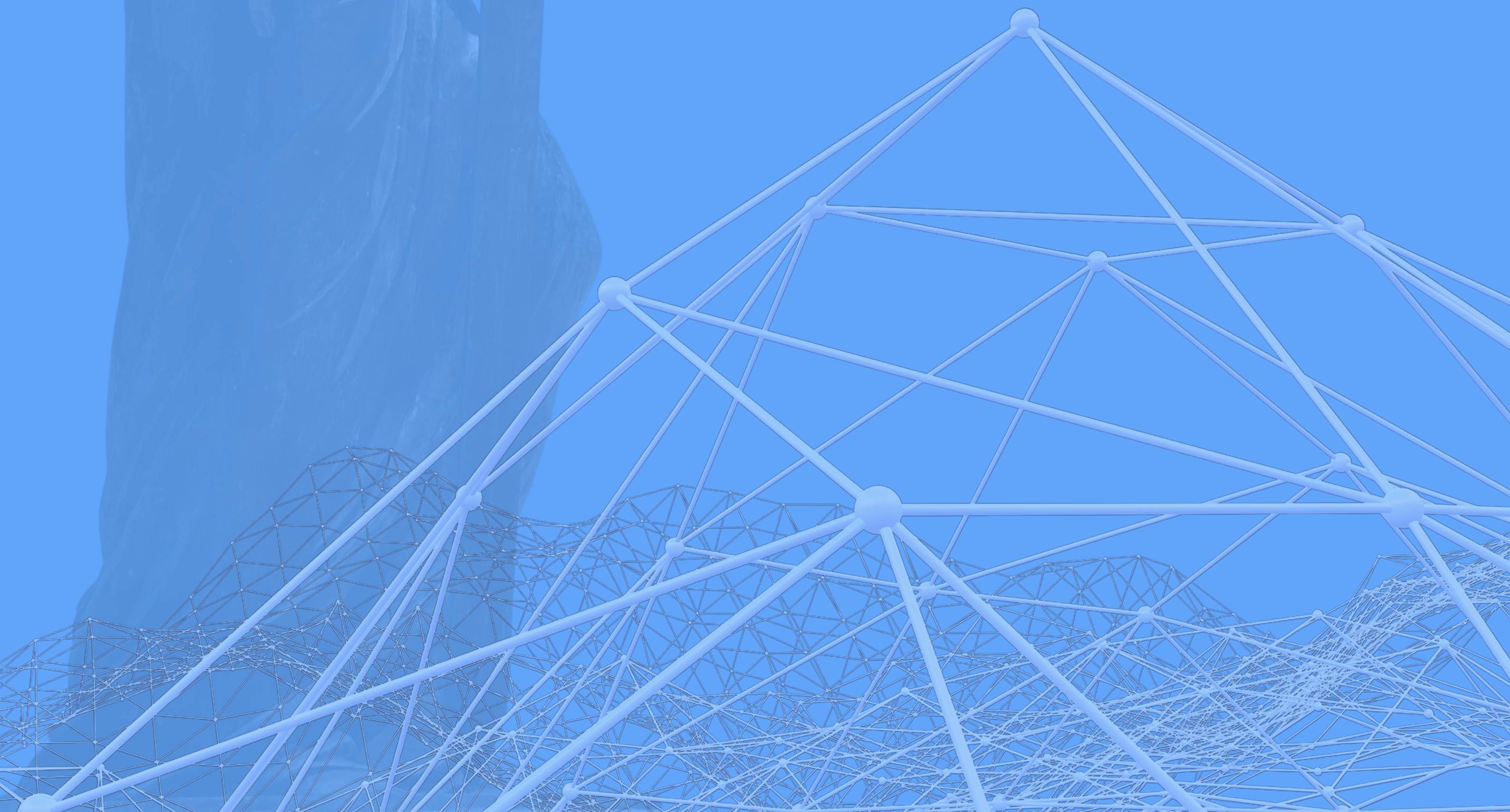e services to its customers, the service provider uses the main Smart Contract of SilentNotary under the terms of the license agreement.

To execute the main contract, the service provider needs to transfer a certain number of UBSN tokens to the SilentNotary smart contract. The user can use a cryptocurrency agent for processing cryptocurrency operations. As a result, the service provider will receive a link to a TxHash, which must then be sent to the user, all while the information itself is stored in the Vault and made available to the user in their own personal account.

The UBSN token is issued on the UBIX.Network platform (T10 UBIX standard). The main segment of transactions is planned to be carried out on the UBIX platform due to its low transaction costs. To use the Ethereum network, depositary receipts (ERC20 version of UBSN tokens) are issued, which can be obtained in exchange for UBIX standard tokens (T10). UBSN ERC20 tokens can be used to deploy records on the Ethereum network.

After a necessary number of tokens for the application are transferred, the tokens received by the Smart Contract will be deposited, and thus, withdrawn from circulation. In the future, developers may consider the possibility of putting the deposited tokens in circulation, purely for the purpose of the application's development, or its market promotion

The Future of SilentNotary

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We believe there are numerous industries that can obtain an immense benefit by utilizing SilentNotary technology. In particular, P2B, B2B, P2P credit systems, real estate management, insurance, evaluation of physical assets, and more.

We are openly seeking to collaborate with other individuals, teams and/or projects.
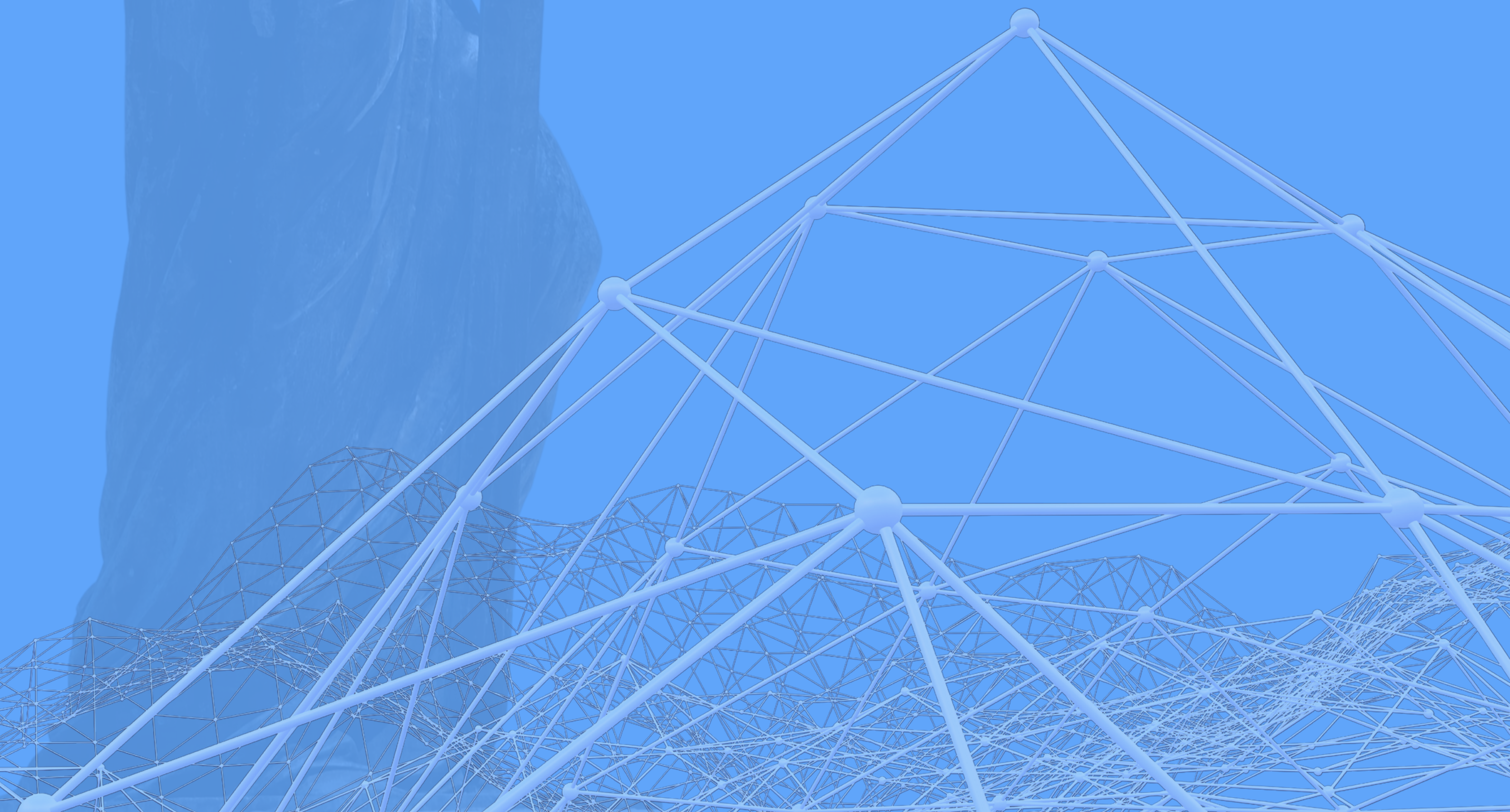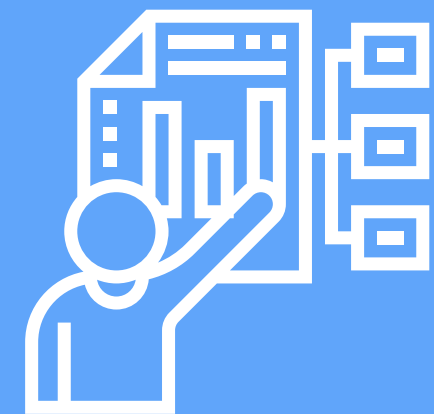
If your business requires evidence of certain events having taken place, documents having been created, and/or services having been rendered, the SilentNotary team can develop a custom interface, specified for your desired use.

Become part of the revolution and join us in our journey!
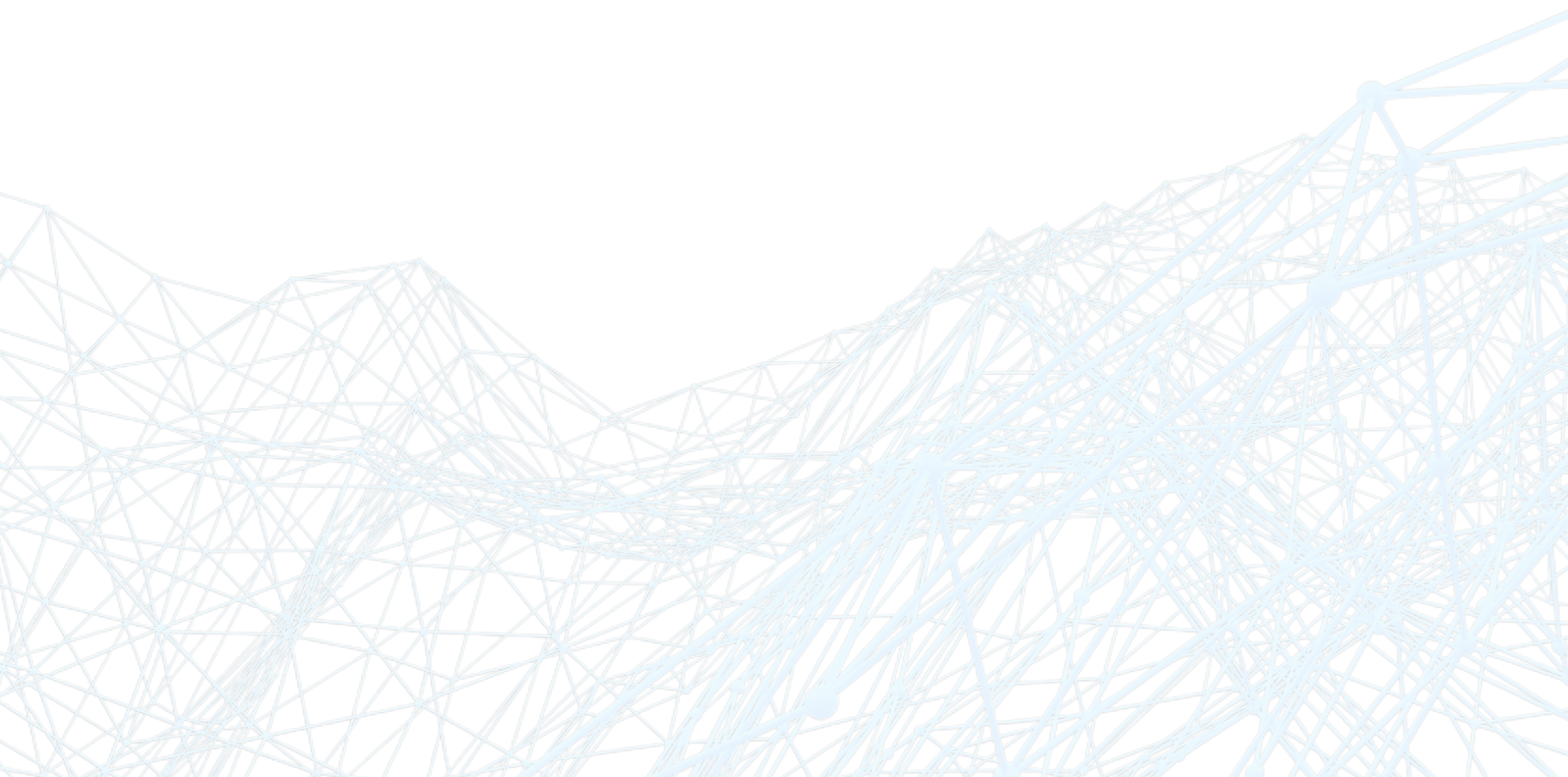
Conclusion

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The legal system is a procedure or process for interpreting and enforcing the law. It helps to provide order and means of dispute settlement, as well as to protect the rights of individuals.

Our society has come a long way, having evolved from primitive tribes - where the rule of force prevailed - to the modern complex system of legal norms, which guarantees certain rights to individuals. Our legal systems have continued to evolve with time, but are now falling far behind in terms of technological advancement.

The recently developed data storage technology on a public blockchain is ideal for recording facts. The legal system is already beginning to accept blockchain as a well-trusted method for data storage. As the reluctancy and hesitancy surrounding blockchain continues to vanish, we will begin to witness a technological revolution unlike anything we have seen before. In addition, over 80% of the global population owns a smartphone, and most of which use instant messaging in some form. This will help make our technology accessible to nearly everyone.

These features make SilentNotary an ideal solution for many of today's legal woes, and open up the door to endless possibilities.

Business practices will change, contracts will be signed in messenger apps, and normal business procedures will become faster. By recording the facts of a given 'event,' corruption and fraud can be prevented. SilentNotary will help create a more stable and safe world.

We have made substantial progress to-date, and will continue developing SilentNotary with an innovative mentality and zealous enthusiasm.

Yours sincerely,

The SilentNotary team

Please reach out to us at hello@silentnotary.com with any questions, comments, or proposals you may have.