

BANK
of memories



WHITE PAPER



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Introduction

Our idea is to focus people and humanity on the most important things in their life: on themselves and their families. We consider this the fundamental basis for the formation of a healthy psyche. It is crucial to lay the foundations and values from early childhood. Bank of Memories is a way to focus a person from an early age on the most important aspects of their life, namely information that directly relates only to them, their family and relatives. Bank of Memories is smart storage, which teaches to take care of heritage. Heritage is not only photos and videos; it is also health and environment, everything that goes to future generations from the past. Our task is to teach people to store and create, not destroy. This is what Memories Bank is.

Couple of words about how we came to the idea of creating **Global Bank of Memories** in general and **Bank of Memories** in particular. The idea came from the understanding that every person accumulates a lot of valuable information throughout people's life: emotional, financial, medical, scientific. The need for its preservation, analysis, transmission to future generations pushed us to a decisive step.

What motivated us?

We solved our own problem (specifically for ourselves and our loved ones) of storing memories, colorful moments, important notes about us and our relatives and found ways to preserve and transmit valuable memories to the future.

We have made it possible not only to store, transmit, accumulate, analyze past experience but also to create a convenient form of a family archive. In the future, this will allow us to relive moments from the past, feeling those emotions. Also, thanks to our platform, you will be able to build forecasts, plans, and use an experience you or your relatives have already gained.

The memories are given to people, so that they can improve themselves and become better, using the experience and knowledge of previous generations. Since the first presentation of the Bank of Memories we have been looking for several answers to our questions:

"How many videos do you have with your mom?"

"Where are they stored?"

"How to pass them by inheritance?"

We found a way to create our own information storage system: secure, affordable, convenient, and independent.

Moore's law says that every year the power of computing doubles, and this, in turn, doubles the possibilities of forgers and thieves ("Moore's criminals" [1]), not to mention spammers, stealers of personal information, phishers, spies, zombie farmers, hackers, cyber intimidators, ransomware (they take data hostage and use special software to demand a ransom) and so on.

We are pleased to present to you the decentralized information storage system Global Bank of Memories and the product designed on the basis of this system - the decentralized mobile application Bank of Memories.

Global Bank of Memories is an ecosystem, where the main participants are DApp keepers, users and developers. A decentralized data warehouse focused on DApp, an open API, and the ability to create your own coin, which does not require a commission.

Bank of Memories is a mobile service designed on the basis of Global Bank of Memories with a set of unique functions such as:

- personal storage
- messages to the future
- family tree
- electronic testament
- digital monument
- family voice

Keeper is an object in the system that, having connected to the network, stores part of information people upload and receives rewards according to the smart contract.

DApps (decentralized applications) - decentralized server-client applications that work on decentralized systems like Ethereum or Ethereum Classic. The unique value of decentralized systems is that in such systems each node of the system (computer) performs calculations, in contrast to centralized and distributed systems.

Market Overview

The modern storage market is adapting to changing business requirements. Systems are constantly evolving, with not only an increase in volumes and productivity but also a paradigm shift in access to information. Recently, a new round of evolution in the field of data storage has begun, which was primarily associated with the development of the **big data** business, **cloud computing**, and **on-demand infrastructure**.

The state of the data storage market

Bank of Memories is a cloud storage service and Software as a Service (SaaS) based on a subscription model. Global Bank of Memories is Platform as a Service (PaaS) with an open API, decentralized platform.

The data storage market today is growing exponentially, so it is very promising for the growth of existing products and the emergence of new ones.

According to **GARTNER's** forecast, the market for cloud-based services will reach **\$ 302.5 billion in 2021**. The global market for public cloud services will grow **by 17% in 2020 to \$ 266.4 billion**. **In 2019**, the volume of this market is estimated at **\$ 227.8 billion**.

Software as a Service (SaaS) is one of the fastest-growing segments of the cloud services market with an average annual growth rate of 30%. By 2021, the SaaS segment is projected to reach \$ 83.5 billion. Software as a Service (SaaS) will remain the largest market segment, which is projected to grow to \$ 116 billion in 2020 due to the continued expansion of subscription-based software practices.

Platform as a Service (PaaS). Within the platform-as-a-service category, the fastest-growing segment is the DBMS-as-a-service (dbPasS) platform — this subsegment is expected to reach nearly \$ 27.3 billion in revenue by 2021. Hyper scalable cloud service providers are expanding their services to include dbPasS.

Table 1. Forecast of the global market for public cloud services (billion dollars).

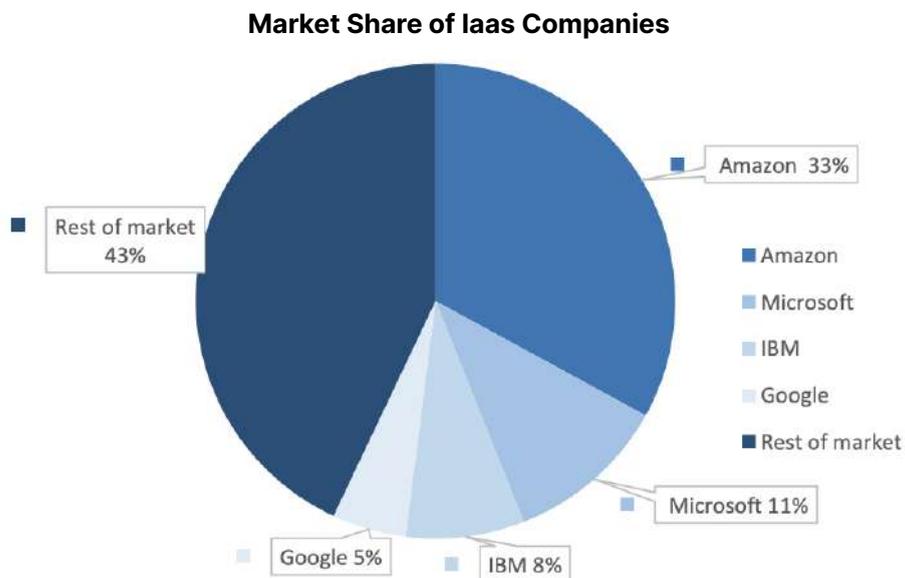
Year	2017	2018	2019	2020	2021
Cloud Business Process Services (BPaaS)	42.6	46.4	50.1	54.1	58.4
Cloud Application Infrastructure Services (PaaS)	11.9	15.0	18.8	22.7	27.3
Applied Cloud Services = Cloud Applications (SaaS)	60.2	73.6	87.2	101.9	117.1
Cloud Administration and Security Services	8.7	10.5	12.3	14.1	16.1
Cloud System Infrastructure Services (IaaS)	30.0	40.8	52.9	67.4	83.5
Total market volume	153.5	186.4	221.1	260.2	302.5

* Source: Gartner Press Office (April 2019)

The main factor of market growth is the desire of companies to optimize costs and the growth of IT solutions based on cloud technologies for small and medium businesses (SMEs). The **top 4 players** on the IaaS market occupy about **57% of the market**. The market leader for IaaS is **Amazon Web Services with a 33% share**.

Infrastructure-as-a-Service (IaaS) is a segment of the cloud services market with an average annual growth rate of 30%. By **2021**, the IaaS segment will reach **\$ 83.5 billion**. This growth is due to the demands of modern applications and workloads that require modern infrastructure.

With the popularization of blockchain technology, DApps are becoming increasingly interesting among software developers. Now there is a boom in blockchain projects. Some blockchain projects are so powerful that they serve as application writing platforms. Applications will be automatically decentralized, resistant to censorship and blocking. Amazon 33% Microsoft 11% Google 5% IBM 8% Rest of market 43% Market Share of IaaS Companies Amazon Microsoft IBM Google Rest of market 7 To date, about 1,124 DApps have been announced on the Ethereum platform. Services offering decentralized cloud storage are growing in popularity.



The blockchain-based IaaS segment is expected to make up about 15% of the market by 2022. In the current cloud storage market, the top 4 players (Amazon, Microsoft, IBM, Google) occupy 57% of the total market. Considering that we are building a decentralized cloud storage and data delivery platform, as well as striving for leadership positions, we set a target market share to be achieved by **2025** for IaaS, DApp, and PaaS together at **3%** in the best-case scenario and **1%** in the worst-case scenario.

The financial calculation was carried out taking into account statistical indicators and market characteristics, as well as analytical comparisons, namely:

- Market size of DSS and DApp, the quality of the competitive environment
- Promotion channels
- An analytical survey of more than 1000 respondents, the purpose of which was to confirm the hypotheses put forward in China, Ukraine, Russia.

In order to facilitate White Paper, statistical and analytical data were submitted to the project's news resource <https://bmcoin.io/news/>. Also, you have the opportunity to familiarize yourself with the information on our YouTube channel. <https://www.youtube.com/c/BankofMemories>

Description of the Global Bank of Memories

Global Bank of Memories (GMB) is a decentralized data warehouse focused on working with DApp with an open API and the ability to create your own coins that do not require a commission. This is an ecosystem that allows you to store and encrypt information using Blockchain technology, where keepers, users, and developers of DApp participate.

GBM provides cloud services based on distributed client tier equipment, PCs, and servers. This is a collection of independent storages around the world, which are based on users' computers that provide part of the hard drive memory for storing files (Scheme 1).

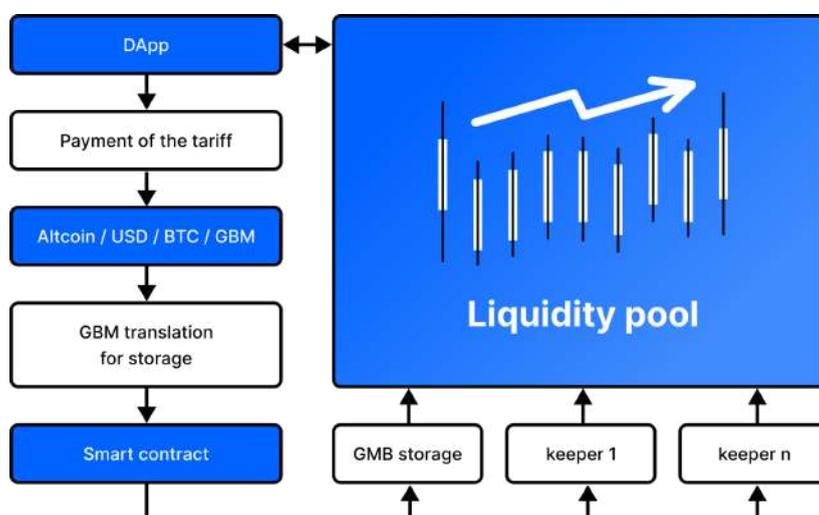
GBM will provide all the familiar features of cloud storage. The infrastructure is suitable for any applications and websites.

The Bank of Memories mobile application will be one of the first services running on the GBM platform, at the same time filling the project base and popularizing the platform.

The system allows you to pay remuneration to network members. GBM is one of the **equal network members and is directly interested in increasing the volume** of stored data and developing the ecosystem, as well as creating new DApps.

GBM Features

- By keeping one copy, GBM guarantees the safety of data that customers upload to the network
- An open API for DApp developers with the ability to create individual coins
- Security of the system is ensured by the creation of 3 copies
- Everyone can become a keeper of information and earn money on data storage



As mentioned before, Technical requirements for information storage are as follows:

- Stable internet
- 1 TB free disk space
- The project coin has been fixed on the balance sheet (1 Terabyte = \$ 25 GBM coins)

Terms of cooperation

To participate in the storage network of user data within the Global Bank of Memories service, it is necessary to install a User Node (Client Node), which will provide control over the fulfillment of the conditions to participate, monitoring the use and provision of resources, as well as the interaction of the participant and the service.

The User Node is a lightweight microservice that connects to other nodes of the system, exchanging service information, and informs the Global Bank of Memories service on the status of the participant who stores information.

The user node can work on all popular desktop platforms such as:

- Windows
- MacOS
- Linux

Attractiveness for Global Bank of Memories customers:

- Ability to create business information networks
- Fee for actually acquired GB
- Ability to pay in coins
- Ability to create your own DApp with an independent coin
- Ability to promote their services based on DSS GBM
- Own decentralized exchange
- Ability to lease empty disk space
- Ability to work with any type of currency inside the platform

Technical description of the Global Bank of Memories platform

Stellar is an open source protocol designed for foreign exchange transactions. Features of Stellar are based on such principles:

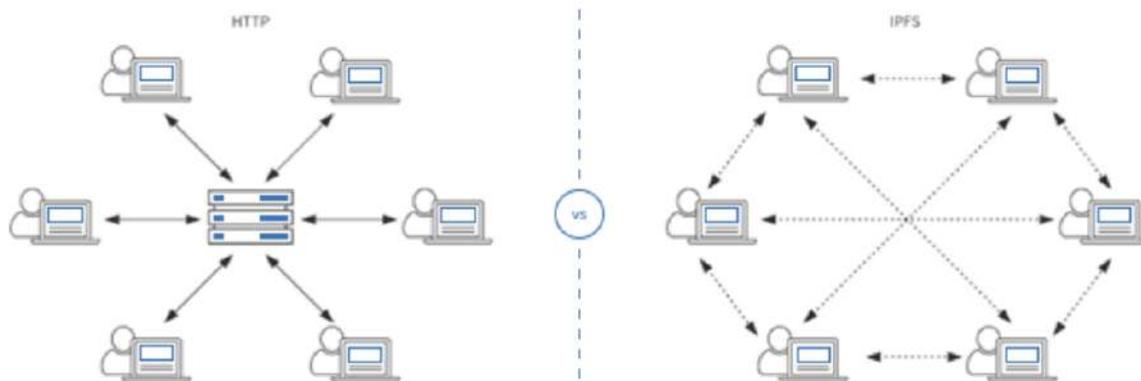
- Decentralization
- Distribution
- Consensus
- Protocol of trust
- Multicurrency

The principle of operation of the Stellar decentralized network is the parallel operation of the peer nodes of the system when distributing capacity resources between all network servers that are not tied to the original source. This eliminates the dependence of the platform on any object, and also eliminates third-party interference in the operation of the system. The autonomous operation of each Stellar node eliminates malfunctions, even if one of them fails.

Benefits of Stellar

- Ability to create a large number of micropayments
- Loyal commissions for concluding transactions and conducting operations on the network
- Compatibility of the platform with other products on the financial market
- Ability to work with any type of currency inside the platform
- Real time operation
- Use of cryptographic encryption to increase security
- Automation of coin exchange procedures
- Ability to build third party applications and plugins based on Bank of Memories's protocol

Thus, the use of the Stellar-based blockchain system as a basis will ensure the required speed, security and reliability. Creating a fork of the system and building a network on its basis will allow you to configure processes and economics in accordance with the needs of the project.



Inter Planetary File System is a set of protocols and technologies that ensure the functioning of a global distributed file system, built on the principle of P2P hosting. In such a network, all nodes are equal and can act as both consumers and content providers. Information is searched using a distributed hash table (DHT), and content is addressed using hash sums of files.

IPFS is a peer-to-peer distributed file system that connects all computing devices to a single file system. IPFS provides a content-addressable block storage model with content-addressable hyperlinks and high throughput. IPFS combines a distributed hash table, a decentralized exchange of blocks, and the namespace itself is certified. However, IPFS has no points of failure, and hosts are not required to trust each other.

A local file can be added to the IPFS file system, making it available to the world. Files are identified by their multi hashes, which simplifies caching. They are distributed through a protocol based on the **BitTorrent protocol**.

The main advantage is that content on the network is harder to attack, it is cryptographically verified, protected from falsification. In case of blocking one gate, you can use any other, IPFS does not need a DNS system, it works through Tor, IPFS services do not rely on certificate authorities and therefore there is no threat of certificate falsification - the content is confirmed cryptographically, like blockchain. Content between nodes can be transferred on any media and stored on any number of nodes, while remaining available regardless of the bandwidth of these nodes.

For its mining, you need not to calculate the blocks, but to provide hosting sites in IPFS, which is consistent with the ideas of the Global Bank of Memories service and corresponds to the service architecture.

1. GBM is one of three keepers of information. GBM also receives a reward on an equal basis with the other two keepers for keeping information. The profit from storage after payment of operating expenses will go to the ecosystem development fund to attract new participants, remuneration of keepers, as well as the development of decentralized applications.

2. The rating system of the keepers. Depending on the moment of connection to the system, keepers can rely on older information stored, which, due to the predicted rate growth of , will be more beneficial for storage, as it is paid by debiting a GBM coin from a smart contract.

3. GBM, being the core for new applications development.

Work incentives and minimum working conditions:

1. Network connection time: 24/7.
2. The amount of information storage: 1TB.
3. Data transfer rate: 50 MB.
4. Stability: working hours without interruptions and duration of interruptions.

Rating - an indicator of the reliability and stability of the keeper, affects the amount of payment for storage, distribution of bonuses, as well as the possibility of obtaining an older copy (expensive information).

It is calculated by the formula this way:

$$R = (((t * Qx / Qq * S / Q) * 100\%,$$

where:

t – time being online

Q - 33 Petabytes (the first phase of the project is 5 years)

Qq - total amount of stored information

Qx – total amount of information stored by a keeper

S - internet speed

The minimum rating indicator at which the system recognizes the custodian is 4.16%. The maximum is 100%.

Remuneration for storage is distributed for a specific file at the time of saving at the current rate against the dollar for the convenience of calculations. Coins are credited to the smart contract and paid once a day.

Principles of System Operation

The created content is divided into 3 parts, after which the information is encrypted. The encrypted information is divided into 9 parts and distributed to a decentralized system of storage.

The principle of information distribution is built in such a way that each keeper can receive a maximum of 50% of the information in the same file. The whole copy is kept at alpha storage of the region in which the client lives (GMB storage).

These conditions are mandatory for countries that have strict laws on the storage of personal information about their citizens.

Keeper is an object in the system that, after downloading the software, connected to the Global Banks of Memories system, showed \$ 25 on the balance using system's coin (rate at the day of connection to GBM) and connected 1 TB of free space, claims to receive information for storage and remuneration in the GMB system.

Alpha storage is located in the territory of the user's country and gets the right to store a 100% copy of information about customers in his region. Payment for storage is made according to the tariff of the GBM system in GBM coins according to the exchange rate at the time of information storage.

GBM DSS Services Example

Keeper A has 1 TB of free hard disk space at their disposal. They connect to the system, fulfill all the conditions of the depository network on a balance of \$ 25 in system coins. The storage is filling. 1 TB per month will bring him an average of \$ 15 in system coins. Costs of coins and rewards are deducted from old smart contracts, thereby providing additional profit.

Table 2. Calculation of costs and profitability for storage (4 TB example in DSS GBM)

Name	Cost per month, \$	Cost 12 months, \$
Utilities	\$2	\$25
Internet	\$8	\$96
Deposit for 4TB	\$100	\$100
New Hard Disk	\$107	\$107
Total	\$227	\$328

GAINS

Name	Gain per month, \$ G	Gain in 12 months, \$
Payment for storage	\$73,33	\$880

Keepers are able to earn from \$552 from their storage annually.

All calculations were carried out as preliminary and are not 100% accurate, some figures are individual for different countries. An example was calculated based on prices for utilities and internet in Ukraine. The main content provider at the project launch stage will be users of DApps Bank of Memories.

Mobile Dap

Each person, when leaving this world, carries with them a lot of valuable and important information.

The key function of the service is to accumulate and store particularly valuable information from the moment of birth and till the end of the life. Subsequently, access to this information is possible for relatives. Distribution of accumulated information among descendants is carried out according to an electronic will (testament).

The ability to pass on information to a person outside a family tree is possible by sending the message to the future to the recipient outside the network.

The information stored in the Bank of Memories is of particular value to each user of the service (life experience, medical and financial data, family archives, emotional content), and can also be inherited and sent to the future.

1 GB for \$0,99 is a filter for filtering out unnecessary information.

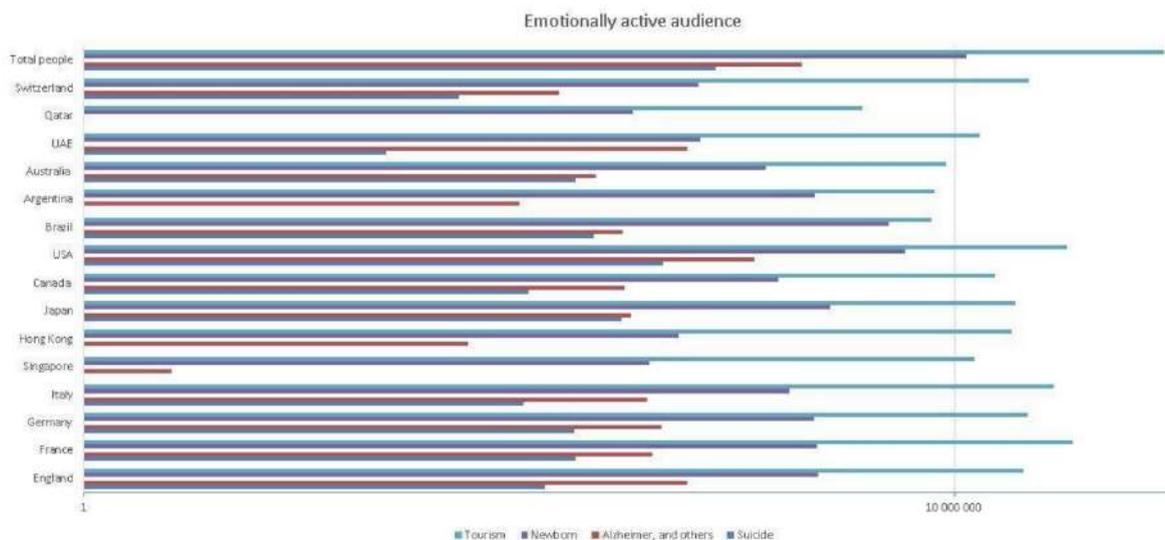
Bank of Memories enables the integration of AI (artificial intelligence), providing everyone with an individual adviser, based on information of their genus. The symbiosis of advanced IT technologies and Blockchain will allow people to create a digital avatar of their personality, digital immortality (Digital Monument – movie about their life using AR), genetic passport and electronic testament (Digital Testament).

Target Audience: Emotionally active people

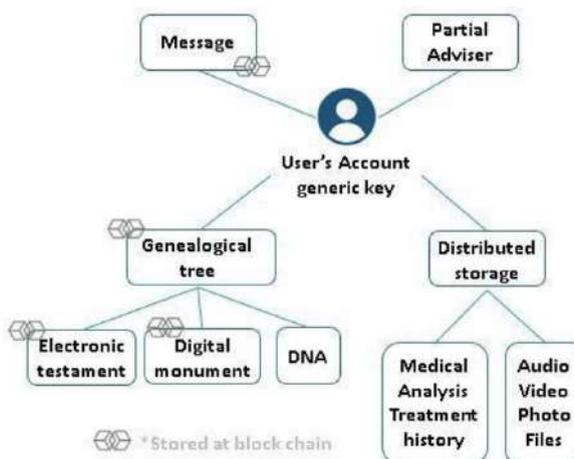
- People with children: young mothers, grandparents, their relatives (creating birth cells and recording information for them!)
- Relatives of those who passed away: children who have lost parents, parents who have lost children, (service creates digital monuments – movies about their life, with the ability to create 17 a digital avatar!). The average cost of creating a monument is from \$ 500
- Impressed people. Impressed by concerts, seminars, trainings, tourism. For these emotions, we created messages to the future about moments they experienced. People are able to fix emotions and sending to the future. Then it is possible to feel this emotion again.
- Elderly people (save their experience, the importance of being heard by children)
- People in love.

From the graph below, we see that every country has more than 10 mil tourists and many emotionally active people live there, who will definitely tend to use our service due to its convenience, attractive price and unique features.

Here the ideal function would be a digital monument (monument) to promote our service on organic traffic. Digital monument can be created not only for people inside the family tree, but also for famous, memorable places, historical and cultural sights. Thus, having separated into a different business, we already have a source of small profit, portfolio and downloads of the application by tourists. We do not invest in marketing, but we create added value in the form of digital monuments for a huge number of sights. Among millions of tourists visiting famous places, at least a few million can become interested in our service.



Structure of the core



The main task is to preserve memories offering different opportunities to save valuable data.

- Prevent of the loss of valuable content that is usually lost in a "digital junk"
- Send emotional messages to the future
- Integrate artificial intelligence (AI) as a personal adviser
- Build a family tree
- Create a digital monument
- Leave an electronic will (testament)
- Store, transfer and inherit family archives: digital, financial and medical information
- Creating a generic master key as a universal identifier in a digital will
- Relatives verify new users

Description of App Functionality

1. Storage of memories

Each user gets an opportunity to save information about his life: record the state of health or appearance, save business information, memories about events, people or circumstances.

2. Message to the future

Messages are the most “charged” content that will be delivered to the specified user or sender, unexpectedly or time notification. It can be such content as congratulations, recognition, revelation, forgiveness, secret, request, memories or self-motivation. This is the content that user does not want to send now, but would definitely like to remind himself or someone else in the future.

Blockchain is an excellent solution to identify a unique user in the system, and cryptography allows for the security and confidentiality of data transfer.

3. Family tree

The family tree looks like Blockchain in structure, where each unique block created in the chain resembles a member of the genus. The cryptoblock contains the “hash” of the previous one and the history of all transactions in the chain. Similarly, each member of the genus is a descendant of the previous member of the genus, forming a sequential chain.

Blockchain is necessary for all operational transactions within the service in an automatic mode.

The technology works according to the following principle

- Each user defines the members of his family tree and saves the connections in the blockchain. The user sends a request / invitation to the person whom he wants to identify as a member of his family tree, indicating the degree of relationship. The person to whom the message is addressed has three options: reject, accept and accept with correction.
- If the identification is confirmed in the family tree, the corresponding cell is filled in (recorded in the blockchain). Each participant goes through an identification procedure (KYC) for the purity and veracity of the data stored on the blockchain.
- Further, according to the principle of distribution, other family members are invited to the family tree. An important condition for subsequent inclusion in the family tree is the need for confirmation by already active family members. A personal cell (human profile) allows you to accumulate information about the genus. The cell is available in various

forms to authorized members of this kind. Emergency access to the cell is carried out using generic keys, which 20 enable relatives authorized in the electronic will or by voting on the family keys to gain access to the cell.

Through communication of our service with archives, the client will be able to build a deeper family tree.

4. Electronic will (electronic testament)

Transmission to certain people and after certain conditions (request for opening a cell in cases of death, loss of memory, passwords) of digital information (photos, videos, text, crypto keys, cryptocurrency, etc.) in the form of an electronic will. Information is provided to the heirs according to the electronic will. In the absence of a will, access to the cell is opened by voting of members of the genus with generic keys.

Storage of biometric and medical personal data with the possibility to extract this data by members of the family tree with the consent of a certain number of participants (making collegial decisions in digital format). The goal is to extract information in case of emergency. It will be possible to access and analyze this information by future generations and to study the medical data of the genus.

5. Digital Monument

This is a unique content about the person using Augmented Reality. Digital Monument is a video about the life of a relative or family member who passed away. This video can be associated with picture hanging on the wall. When scanning the picture, the video will appear.

6. Generic voice

Integration into the AI service (artificial intelligence) to analyze downloaded information and solve tasks, relying on all the information stored in the family tree.

7. Storage of medical and genetic information

Bank of Memories helps to organize, access and analyze digital information related to a person's medical data.

Medical tests and a person's life history are reflected in his/her medical records. Ease of access and the impossibility to substitute this data will help to find the right diagnosis. The system of a onetime access key to data will allow consultations with several doctors 21 at the same time, regardless of the geographical location. For example, you, being in Denmark, can open your data for a doctor from another country and vice versa.

Decryption of DNA with an analysis will solve a lot of problems.

Molecular genetic testing shows the risks of diseases of a particular person, the individual characteristics of the body, the structural changes of the skin, reactions to drugs and potential aging.

In case the user wants to save the results of the genetic test, up to the complete recording of the DNA code, Bank of Memories will save all genetic information.

This way not only, a human genetic passport is created, but also a passport of a genus. This document will help to predict the development of future generations.

Marketing and promotion

The work on project promotion and the formation of a community will be divided into four main segments by process and participants involved.

1. Developers of DApps.
2. Storage service providers.
3. Users of the Bank of Memories mobile service.
4. Corporate clients (creation of decentralized archives for business).

Developers get the opportunity to:

- Create on the basis of DSS GBM their applications with an individual coin
- Advertise applications in the project database
- Receive rewards for the best solutions designed on the basis of DSS GBM
- Novice developers will have the opportunity to free training at the DSS GBM support centers

Storage Providers:

- Remuneration for storage
- Additional bonuses for rating (long-term and high-quality provision of services)

Mobile service users:

- They can get coins for free by logging in to the system or recommending Bank of Memories to their friends and relatives using their referral links (1 coin for every 10 new users)
- An active relative can earn when creating a family tree

Corporate clients:

- Creation of individual repositories for corporate clients with their DApps to use the database 23
- Storage of medical information
- Lectures and messages from previous and current TOP management

Core promotional elements

- A powerful marketing campaign based on mobile marketing
- Promotion in social media (SMM). Considering the audience and the capabilities of social media, the analysis showed that the dissemination of information and the popularization of any product occurs fast if advertising tools are configured correctly.
- Creation of media content
- Creation of viral videos explaining the importance and value of our resource (Youtube, Youku, Vimeo, etc.)
- Creating a sales funnel for business partners
- Word of mouth, recommendations to join the network. It is assumed that each member of the family tree will invite at least two new participants: 1 parent and 1 child or (brother-sister), possibly a wife or husband
- Loyalty program, members are able to receive additional coins on the balance when passing initial verification. Person can use these coins only for services

Favorable Factors on the Market

- The key factor in the project success is that there is no other resource which would solve such problems conveniently and safely
- The project is viral, a person needs to accept a request to become a new user and to activate the "family tree" services or a message to the future
- Use of the most effective advertising channels, incl. social networks (monthly Facebook audience is 2 billion, Youtube - 1.5 billion, Instagram - 0.7 billion, Qzone - 0.65 billion)
- Content creation. The total growth of global content is 100% every 2 years
- An electronic testament will be an opportunity for relatives to inherit digital information (including financial and medical information). This information will be stored in a family tree after the death of the account holder
- Reliable solutions in the field of personal data protection are in demand on the market (for example, in 2017, a similar ICC 24 FileCoin project raised \$ 257 million for implementation)
- Messages to yourself and to others will positively model the future. It will be interesting to all age categories and will affect the maximum number of users. As many studies have shown (Lusardi and Mitchell 2011, Moorman, Hauser, Carr 2009, Marshall, McGarry and Skinner 2010), positive modeling of the future helps people build a positive attitude toward life, become more successful in their careers, accelerate personal growth, and strengthen family relationships

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- The service allows you to send not only emotions to the future, but also financial rewards in cryptocurrency
 - The ability to kind valuable information about the ancestors
 - Creation of a “digital monument” as a service that has no analogue in the world market
 - Bank of Memories loyalty program is based on blockchain, it has more complex mechanics, implying a wider use of GBM coins and user involvement.

For a project, a coin is both a way to accumulate funds for development and a marketing tool to attract customers. For users, a coin is a convenient way to pay for applications and updates as part of this service. For entrepreneurs (for example, application developers) - this is a tool to pay for advertising services to Global Bank of Memories.

With the growing demand for cryptocurrency, the development of the project and its ecosystem, the value of coins is growing.

Roadmap

Date	Activity
August 2017	Idea was born
September 2017	Participation in CryptoBazar Accelerator in Moscow, Russia. Selected #2 among 60 other projects. Only idea.
Autumn 2017	Participated in the CryptoBazar DUBAI 2017
May-July 2018	We started looking for team members. Selection of technical specialists presentation of an idea at forums and conferences. Definition of a correct project development strategy. Building interactions with relevant universities and blockchain communities in CIS region.
July 2018	Presentation of the project at the international level, Asian region. Global Silk Road and Astana Finance Days AIFC Digital Conferences.
April 2019	Co-Founders joined the project for technical and business development.
July 2019	Miratech competition winners.
July 2019	Set up a legal entity in Ukraine to start work officially.
October 2019	Visiting Vienna, Austria for a blockchain event, meeting the Habsburg Family.
October 2019	Win #3 place at Start-Up Battle Kyiv
November 2019	Funded by the EU Horizon 2020 Won the BlockIS challenge funded by the European Commission and was invited to FinTechIn in Vilnius, Lithuania.
December 2019	First B2B customer paid for digital monuments Traction that time 5000 downloads, 270 pre-paid the service.
March 2020	First pre-seed investor and co-founders funding - \$100k

Date	Activity
March 2021	Working MVP based on its own blockchain. We created our own beta version of the Global Bank of Memories decentralized storage.
May 2021	USAID. We won a tender as a technical partner. USAID ordered storage for 10 years.
May 2021	Secured \$200k funding out of \$500k, pre-seed round. Plan to close the round by July 2021.
June – September 2021	Listing at Exchange, sell only 0,7% of coins to attract attention and set the price for the coin. Reach 10 000 users.
July-October 2021	Use funds from pre-seed round to finalize App development Run independent hacker attack on our system Work on UX and marketing Grow community. Work should be done full time by the team.
November 2021	IEO, sell 6,3% of the whole supply Start keepers program - professional storage of additional copies (for professionals)
June 2021 – November 2022	Integration of digital tags into NFT Art. Grow community. Improve technology. Transfer of a digital monument and digital tag to public organizations and museums, get organic traffic.

Risks

Risks	Solution	Value (1 – low, 3 – high)
Decline in demand for cryptocurrencies	Based on the current market growth dynamics, this risk tends to zero. By forming several SEBs, we insure that the project will work regardless of whether this market grows further.	1
Inflation risk	Cryptocurrency has deflationary properties, which makes the risk of inflation minimal. Due to the expense point “Stabilization of the exchange rate”, in addition to the natural demand for our coins, we can artificially stimulate demand until it reaches the payback minimum.	1
Changes in government	The most significant risk, since most states have not expressed their positions on cryptocurrencies, we are not sure of their position regarding this. Although this trend is promising. In any case, we will individually focus on the position of each state, taking into account any changes in the legislation.	3
Military conflicts	Due to the fact that IT business does not have a designated geographic location, our goal is to create a decentralized management system that will allow us to quickly respond to any force majeure.	1
Technical Risk	For the development of human resources, we create a self-developing system for attracting technical specialists. Each leading specialist will be assigned promising employees who will receive experience from interaction with highly professional colleagues.	2
Conclusion	Based on the analysis of the above risks, we have formed a development strategy that does not tie us to a single market and allows us not only to quickly respond to any changes, but also quickly retrain to other directions.	1.6

Definitions

Keeper - an object in the system that, having completed a connection to the network, stores part of the system information and receives rewards according to the smart contract.

Remuneration (Reward) - payment for storage of information, paid in tokens according to the smart contract and rating.

Smart contract - the conditions under which information was accepted for storage in the system. Stable storage conditions cost 0.2 cents per copy in the equivalent of a coin at the date information was received.

Rating (Rating) - an indicator of the reliability and stability of the keeper, affects the amount of payment for storage, distribution of bonuses, as well as the possibility of obtaining an older copy (expensive information).

It is calculated by the formula:

$$R = ((t * Qx / Qq * S / Q) * 100\%,$$

where:

t - time spent in the network,

Q - 33 Petabytes (the first phase of the project is 5 years),

Qq - total amount of information stored,

Qx - amount of data keeper stores,

S - Internet speed.

The minimum rating indicator at which the system recognizes the keeper is 4.16%.

Maximum - 100%

Storage Bonuses - a reward that is paid once a month and is formed from unallocated coins.

It is calculated by the formula:

$$SB = Qg / Xx,$$

where:

Qg - the total volume of unallocated tokens,

Xx - the number of keepers with a rating above 90%.

Expensive (older) information - information that has been stored since when the exchange rate was much lower than the current one, and the terms of the smart contract are closed at the old rate (excess profit).

Cell (C) - a conditional limit of 1 GB in the Bank of Memories repository and is equal to \$ 0.99.

AIS - amount of information stored. GBM is a Global Bank of Memories project coin (electronic coin), a universal payment instrument and a guarantee for receiving services in the system.

Storage period (SP) for keepers - the period for which the cell is booked. The minimum period to be taken into account is 1 day. $SP = 1 = 365$ day.

Average market price (AMP) - the value of GBM obtained by determining the average price of a coin (according to indicators from at least 3 exchanges).

Storage Fee (SF) - The amount in GBM that is charged to the user by the service and is calculated using the formula:

$$SF = ((AIS / C) * 0.99) * SP / AMP,$$

where:

AIS - amount of information stored

C- cell, amount of GB.

Storage period (SP) for keepers

Average market price (AMP)

Account address in Bank of Memories is a unique identifier for a person in the family tree, an entry point for accessing family tree data.

BMCoin - trial coin and the first smart contract for Ethereum ERC-20 (pilot version).

Alpha version - a reflection of the platform features that will be implemented and planned.

Alpha test - initial testing phase.

Beta I (closed testing) - product (mobile application), not stable enough.

Beta II (open testing) - the product (mobile application) is stable.

Airdrop - part of a marketing strategy aimed at promoting the product.

Immortal - a computer game developed by Bank of Memories.

DNS - Decentralized Network Storage.

Identification - an action related to bilateral confirmation by DNS participants and writing to the blockchain.

Active relative - member of a family tree that has the most initial identification certificates in the family tree.

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