

Dbrain

Whitepaper

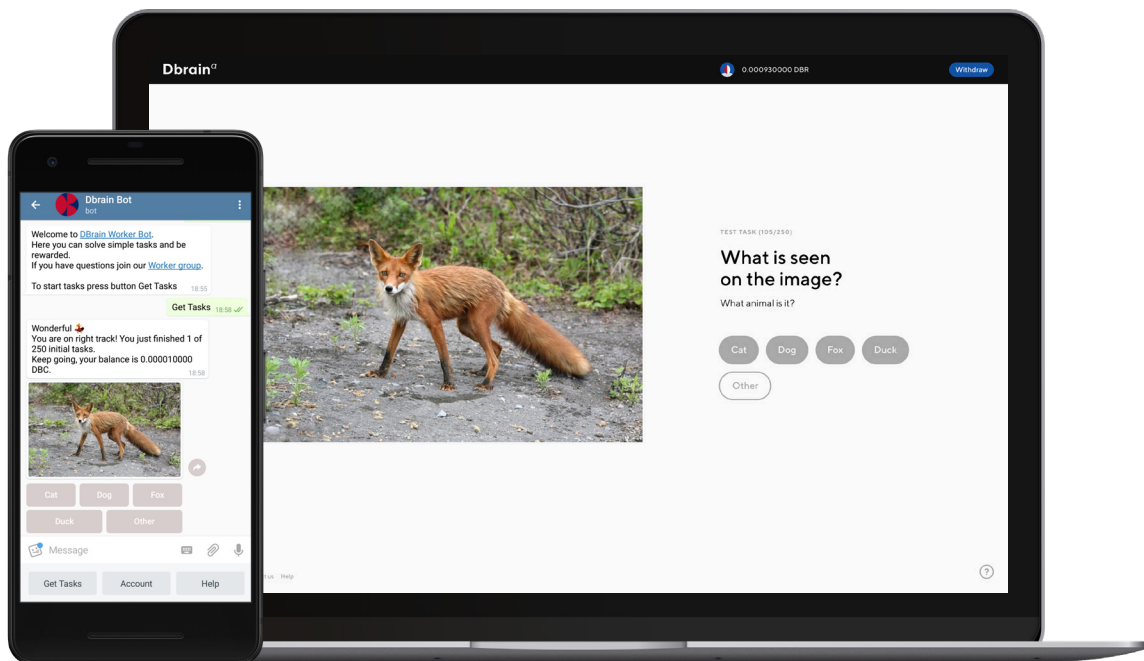
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The blockchain platform to label data
and to build AI apps

dbrain.io

Introduction

Artificial Intelligence (AI) appears to be the next big thing. AI is all about data. Datasets used for machine learning are still labeled by hand, which requires a big effort. This creates a lot of friction: labeling quality is not guaranteed, and the initial source data is not secured. Dbrain is designed to work together in secure, seamless, integrated processes for buying, designing, and building AI apps, from start to finish.



Dbrain Telegram bot and web application

Dbrain is an open blockchain platform that links crowdworkers and data scientists enabling them to transform raw data into real-world AI solutions. Crowdworkers do simple tasks of data labeling and validation, and are paid instantly in cryptocurrency for their work. Data scientists use the resulting datasets to train Neural Networks (NN) and build AI apps. Businesses use existing AI solutions or specify new ones to serve their particular needs. Dbrain automates AI production and data workflow by providing efficient tools to all parties, including a web application, a Telegram bot, and a mobile app.

Blockchain technology helps us meet many of AI's current challenges. Using the blockchain, we can confidently manage high-quality data labeling, security concerns, intellectual property rights, and international micropayments. Using existing commercial computation infrastructure allows us to build an affordable, scalable toolkit for developing and deploying AI apps.

We use blockchain protocols and an in-house cryptocurrency to power the AI production cycle. The SPOCK protocol validates data label quality, ensuring the most accurate datasets possible. The PICARD protocol ensures the security of confidential data and automatically manages relations and fair revenue distribution between stakeholders. Dbraincoin (DBR) is an ERC-20 cryptocurrency to exchange for work, datasets, and AI app usage.

Anyone with a connected device can join Dbrain and get a role in building Industry 4.0. Our platform connects exploding demand for hand-labeled AI data with the abundant supply of global crowdworkers. In particular, we reach intend to 2 billion people with no access to the banking system from low-wage countries, offering them cryptocurrency income in exchange for them performing data labeling and validation tasks. By integrating this global workforce into its platform, Dbrain aims to provide a secure, unified infrastructure to supercharge businesses through accessible, high-quality AI products.

Right now, AI only available in relation to the best resourced and most powerful operations. Dbrain aims to makes AI affordable to more customers. We want to enable more developers to build AI. We are also aiming to make AI profitable for more workers. We democratize AI.

Join us to make AI happen!

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1. Challenges

Blockchain technology helps us meet many of AI's current challenges. Using existing commercial computation infrastructure allows us to build an affordable, scalable toolkit for developing, integrating, and deploying AI apps.

Currently, the most important practical challenges for widespread AI adoption are a shortage of high-quality datasets, unreliable data security and unreliable data quality, and the lack of a common framework shared by all parties interested in AI production.

1.1. High-quality datasets

Large, high-quality datasets contribute more than 80% to AI application success, making these data even more important for machine learning than algorithms. Datasets are still labeled by hand and require a lot of human effort. Regardless of size, poorly labeled datasets can nullify Neural Network (NN) model function and impede AI progress in general. Leveraging the labor of online crowdworkers is the most effective solution for creating large datasets. However, existing data-labeling tools and platforms fail to ensure quality and fail to meet the current demand for AI datasets.

Dbrain strives to guarantee quality of datasets without any work duplication. To align the incentives for crowdworkers, validators, AI developers, and data owners, Dbrain implements the **Subjective Proof of Crowdwork Protocol (SPOCK)**, which validates data quality automatically and guarantees real-time, fair, transparent billing to workers and data owners.

1.2. Security and trust

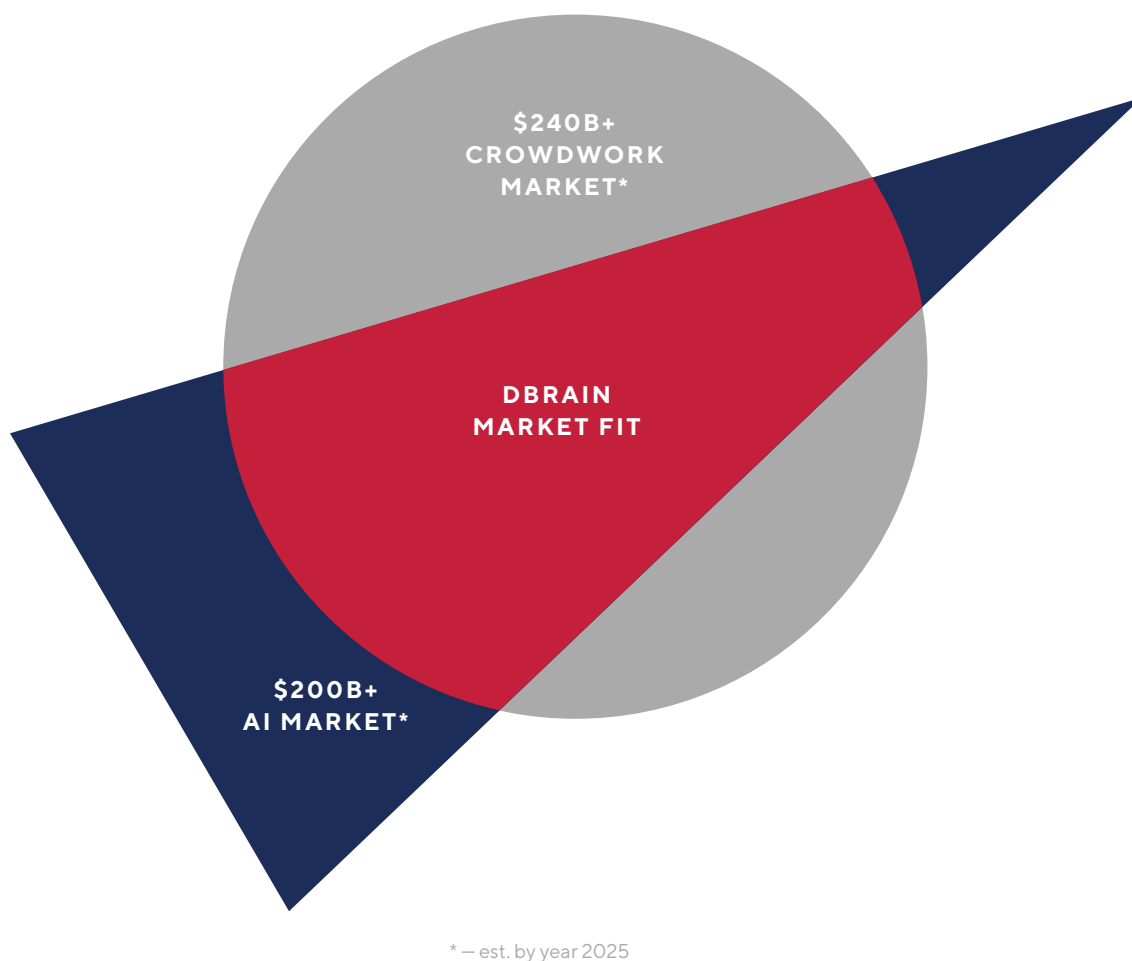
Sharing sensitive data with third parties, and even in-house developers, poses certain security risks. AI developers can replicate third-party software within a very short time when given access to someone else's data. Labeled data, rather than software, are the defensible barrier for many businesses. Data owners lose revenue when datasets are leaked to third parties.

Dbrain protects data owners' interests and seeks to prevent leaks at all stages of AI app development. No matter who uploads data on the platform, the **Protocol for Indirect Controlled Access to Repository Data (PICARD)** protects datasets and AI apps hosted on the platform. It also allows data scientists to train AI models using datasets without downloading them, and to sell AI solutions to business clients later on. The protocol seeks to guarantee security and trust in the Dbrain community with regards to data access control and reward distribution.

1.3. Abundant crowdwork supply

In the 10 largest developing countries, the total number of internet users is close to 2 billion; with nearly 50% technology penetration, the online population is growing rapidly. The number of internet users in these countries is greater than in all other countries combined. At the same time, the World Bank estimates that there are around 2 billion people who have no access to the banking system. Clearly, internet connectivity reaches the developing world much faster than the banking system, and many people connected to the internet are still excluded from the global financial system. Cross-border payments via banks are expensive, slow, and location dependent. Cryptocurrencies can solve this problem by reaching any person connected to the internet.

The supply of online crowdwork is abundant globally. The World Bank estimates that in 2013 the minimum total supply of crowdwork was \$239B, while the market demand in 2016 was \$4.8B, or 50 times less than the work supply. Only demand limits the market growth.



Global job automation trends and widespread internet penetration in emerging markets accelerate the transformation of the classic employment model into an online work model, which is divided into small, well-defined tasks, most of which do not require any special expertise. Many people in developing countries are willing and able to perform simple jobs for less than employers from the developed world currently pay to their workers. However, compared to local wages, workers could still earn significantly more by working at crowdsourced tasks online. The only missing link to connect the two parties in this win-win game is an efficient channel for employment, payment, and job validation.

Dbrain is the channel for AI data labeling tasks. We see this situation as a blue ocean opportunity that allows us to build and control a substantial part of that market instead of fighting for a market share. Our platform aims to satisfy the exploding demand for human-labeled data and human-in-the-loop APIs. Our goal is to provide a better income for people who need it most and improve their quality of life, while managing to reduce data labeling costs for our customers.

1.4. Last-mile infrastructure

Even the most sophisticated AI platform is useless without access to end users. To use AI solutions in the real world, businesses need to find AI developers, the scarcest resource on the market. Developers need access to scalable and affordable AI computation infrastructure to train and deploy their AI Apps. They also need access to raw data and crowdworkers for data labeling and model output validation. Labelers need simple, accessible interfaces, and micropayment channels to be paid for their work.

An efficient infrastructure for AI development lowers barriers for all stakeholders. Labelers and businesses benefit the most. Telegram messenger solves the problem of access for labelers. Labeling tasks vary by level of difficulty. For simple tasks, we offer the Dbrain Telegram Bot, and literally anyone with a connected device can use it to label data and earn Dbraincoins (DBR) in return.

The Dbrain platform allows users to deploy and share AI solutions. Anyone can use AI models via convenient on-demand APIs without incurring development and infrastructure costs.

2. Platform

Dbrain is an open blockchain platform for turning raw data into real-world AI solutions. We make AI accessible to businesses and allow anyone to earn money for their effort.

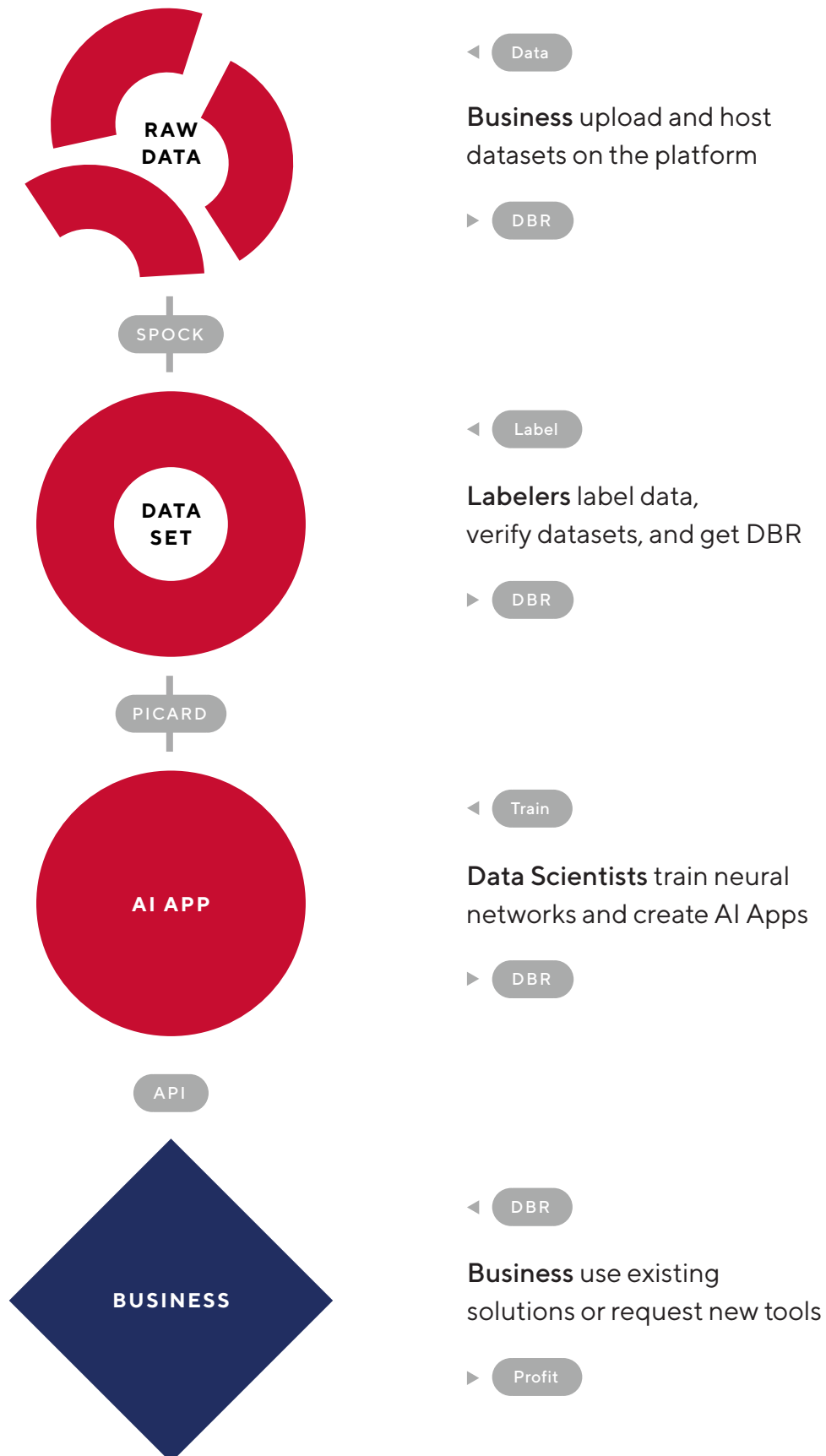
The platform automates most of the data preparation and human-in-the-loop workflow. It provides crowdworkers with a user-friendly labeling and validation tool based on a unique web application and Telegram bot. Blockchain protocols and internal cryptocurrency ensure transparency and fair revenue distribution among all stakeholders.

2.1. AI production line

Dbrain levels the playing field for all participants on the AI market.

For crowdworkers, we provide an opportunity to earn money for training and supervising AI networks and receive a fair share of future AI revenues via smart contracts. For AI developers, we lower barriers significantly for creating commercially viable AI products and provide scalable and elastic access to accumulated datasets, unique data providers, business clients, and a distributed pool of workers who create new and process existing data. We aim to enable data providers to monetize their existing datasets and live data streams. For businesses, we offer a wide range of turnkey AI solutions, integration, and customization for particular needs.

AI production line



2.2. Blockchain and crypto

The Dbrain platform works on the Ethereum network and relies on its smart contracts. We're building a scalable permissioned blockchain anchored to the Ethereum network via state channels. Our solution can process thousands of transactions per second which all involved parties can verify independently. We implement two blockchain protocols for decentralized access to our platform and an in-house cryptocurrency.

2.3. SPOCK protocol

To align the incentives of crowdworkers, validators, AI developers and data-set owners, Dbrain implements the **Subjective Proof of Crowdwork Protocol** (SPOCK), which automatically verifies data quality and aims to guarantee real-time, fair and transparent billing to workers and task requesters.

All work tasks performed on the Dbrain platform require multiple validations by other random labelers. Validators either do the same work for the simplest tasks such as image classification, or confirm the correctness of complex tasks. When the majority of validators agree on the task result quality, then the original worker receives a payment and a higher rating. Workers get a lower rating and no payment for rejected tasks.

Validators who approve a bad result, if present, are punished with a significantly reduced rating. Such a system does not discourage conscientious validators from being suspicious, because when they are right, they receive a higher rating. However, it does strongly discourage validators from accepting wrong results.

With validators motivated to accept good results and even more motivated to reject bad results, the best strategy for workers is to do their best and deliver correct results, while the best strategy for validators is to accept the correct results. Such behavior is a Nash equilibrium in this contrived game and payoff matrix.

We have several requirements for our rating and task validation system to be able to process task completion and validation in real time:

- **Online calculations.** We need to evaluate work results as they arrive using only data stored publicly in our Ethereum smart contracts and in our permissioned blockchain that is accessible to relevant task requesters and workers.
- **Transparency.** All rating changes and billing events should be visible to task requesters and workers online.
- **Reproducibility.** Calculations must be simple enough that an involved party can reproduce them independently.
- **Aligned incentives.** The system should motivate workers to behave diligently and conscientiously by providing a good reward and punishment balance.

2.4. PICARD protocol

The **Protocol for indirect controlled access to repository data** (PICARD) protects datasets and AI applications hosted on the Dbrain platform and allows data scientists to train AI models using the datasets without downloading them, and to sell AI solutions to business clients later. The protocol allows data scientists to work on a contract basis as well as to contribute to community owned datasets and public kernels. It also allows participation in Kaggle-like competitions on openly listed challenges.

To ensure the safety of datasets and intellectual property ownership rights, we enforce strict access control during model training and deployment. During training, we charge only for compute time, but do not allow any external access during calculations. To protect from dataset leaks via this channel, we also do not allow developers who do not own the dataset to download trained models without additional validation or permission from the owner (e.g., one can simply copy raw input data as a model output). Dataset and model owners must approve indirect usage of their intellectual property in derived work and may ask for a future revenue share or direct payments for it.

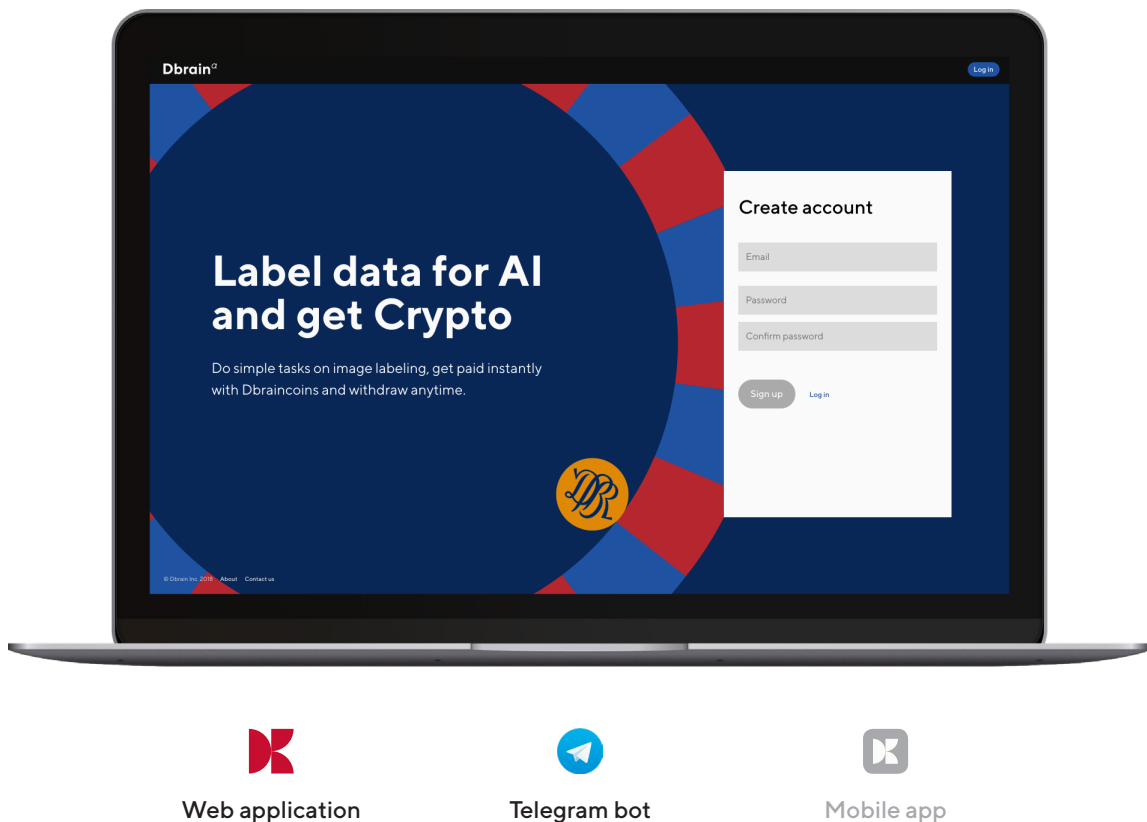
We log every access to the data and model APIs as a transaction in our private blockchain. The entire access history is available to dataset and model owners. The owners can completely restrict access to their data. However, a much more interesting scenario is indirect controlled access to datasets and models. Any developer can build a new better model or mix an existing one with some secret sauce and sell the results as a new API on the platform. Owners can set a public price on their data and models and list them publicly on the Dbrain platform. Alternatively, the owners of existing data and models and new developers can agree on revenue sharing from the resulting product. Our very granular access control records history into immutable ledgers audited by third parties, guaranteeing fair and precise distribution of revenues from AI Apps.

2.5. Dbraincoin (DBR)

Dbraincoin (DBR) is implemented as a standard ERC20 token. The total number of Dbraincoins in existence is fixed. We use our coins as an internal currency that participants use to pay and receive for work, data and AI application usage on the platform.

2.6. Product

The Dbrain web application integrated with Ethereum (DApp) allows every Internet user to perform tasks, earn Crypto and withdraw it with a single click. Telegram bot for simple data labeling and task validation gives us access to crowdworker audience with the least imaginable friction. Our upcoming mobile app will provide user interface for complex tasks on smartphones and tablets and allow to collect custom data from crowdworkers.

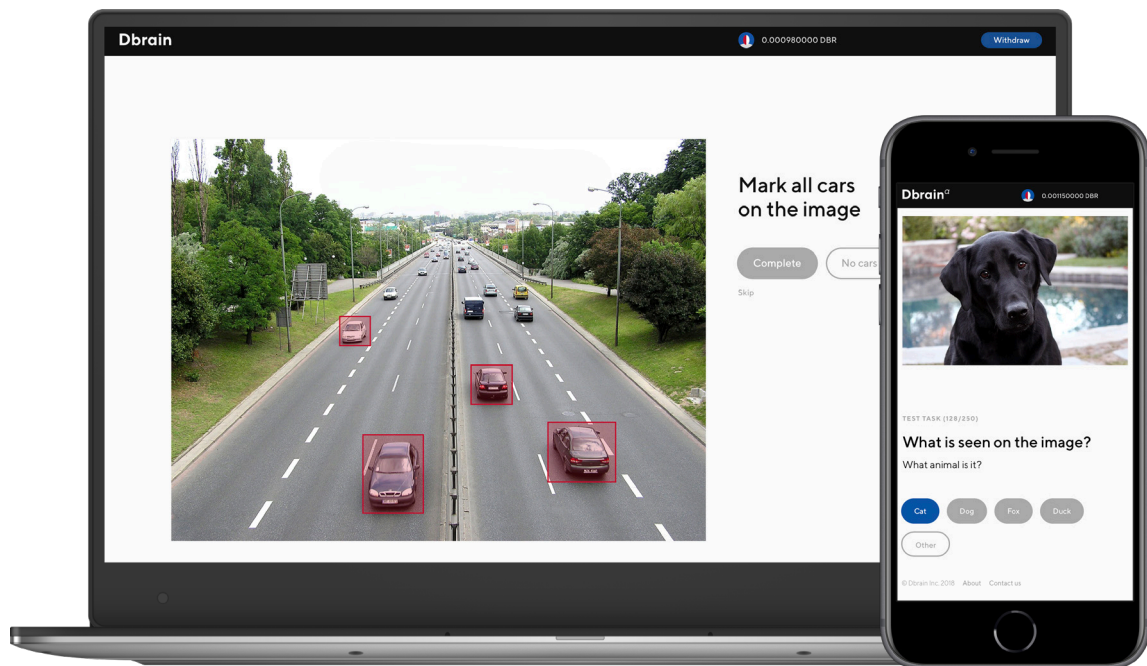


We will release our UI framework publicly, so developers and businesses can create tasks and adjust them to their particular needs at their discretion. The web app is integrated with Ethereum and allows any user to withdraw or deposit funds instantly and verify transactions from our private blockchain.

Later in 2018, we will release our data science computation tool and present it to the public as a Jupyter notebook with all modern ML libraries and tools and a connection to our data.

2.7. Web application

The Dbrain web application integrated with Ethereum (DApp) provides an intuitive tool for data labeling and validation tasks for crowdworkers. The complex user interface allows crowdworkers to perform advanced tasks, such as image labeling for classification and regression, object annotation with bounding boxes and segmentation masks.



Desktop and mobile version of the web application

Label data for AI and get Crypto

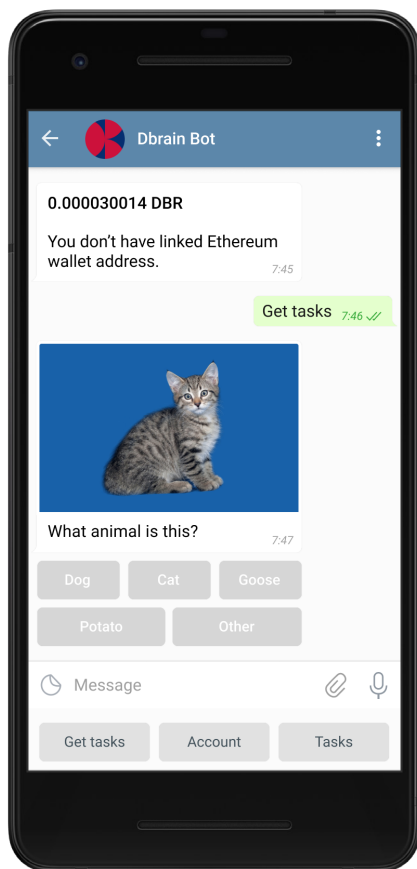
Do simple image labeling and data validation tasks,
get paid instantly with Dbraincoins (DBR)
and withdraw your earnings anytime.

[Sign up for Alpha](#)

Toolkit for data scientists and businesses to develop and
deploy AI Apps will be out by Q3 2018.

2.8. Telegram bot

The Telegram Bot is ideal for simple image labeling and validation tasks. Anyone with the internet connected device can label data and get paid instantly with Dbraincoins. Smartphones are more accessible and widespread in developing countries than laptops, while internet penetration is high, which gives us an edge in accessing workers in those regions.



Easy way to label data

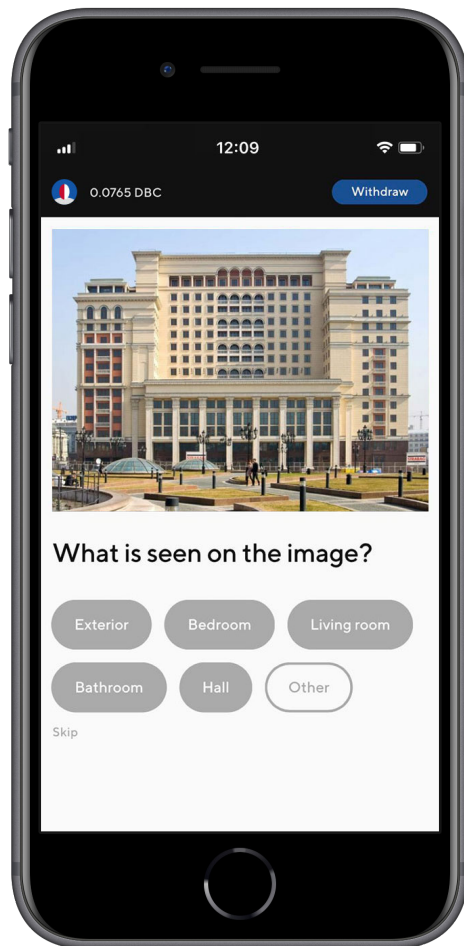
With the Telegram bot, we reach millions of unbanked people to give them an income stream in Crypto.

[Try Telegram bot](#)

The Dbrain team is among the best at building AI chatbot applications. We have applied our previous experience building the Icon8 chatbot to the data labeling problem and created a new Dbrain Bot on the Telegram platform.

2.9. Mobile application

Mobile apps are a great tool to create new data — video, audio, photos, acceleration, GPS coordinates and touch input. Our app will allow any platform user to become a data provider and earn additional Dbraincoins.



Coming soon

App Store

Google Play

2.10. Competitive advantages

There are a few large existing crowdwork platforms that are mostly used for AI-related tasks (e.g., Amazon Mechanical Turk, Yandex.Toloka). However, they fail to meet most of AI developers' needs. Developers need to find raw data and upload tasks or validate data themselves. Then developers need access to AI compute infrastructure in order to train models and build AI Apps. Finally, developers need to deploy AI Apps somewhere to make them available to business clients. The Dbrain platform covers all stages of the AI production cycle and offers a comprehensive solution.

	Dbrain	AMT	Crowdflower	Gems	Kaggle
Upload data	●	●	●	●	●
Label data	●	●	●	●	●
Validation	●	●	●	●	●
Payments in Crypto	●	●	●	●	●
Instant payments	●	●	●	●	●
Chatbot integration	●	●	●	●	●
Low cost	●	●	●	●	●
Custom AI model training	●	●	●	●	●
Data security	●	●	●	●	●
Revenue distribution	●	●	●	●	●
AI marketplace	●	●	●	●	●
APIs for businesses	●	●	●	●	●
Global reach	●	●	●	●	●

AI is by far the major case for online crowdwork that could be formalized with a decentralized protocol at scale. Our crowdwork solution as part of our AI platform adds much more value to all AI users, and allows for human work integration with AI Apps.

3. Use cases

The Dbrain platform provides a scalable and accessible infrastructure to super-charge businesses with high quality AI, integrated via a convenient API. We offer a wide range of turnkey and custom AI solutions, integration, and customization for our clients' particular needs. Static image recognition, video surveillance and action detection, medical data processing, and content analysis of text streams, which currently lack working solutions would benefit from business-ready AI solutions. These areas account for almost half of the future AI market; they are our target.

3.1. Image recognition

Image recognition (including classification and tagging) is one of the most commonly applied AI use cases today. Image recognition is an area that is developing rapidly and that will have a major impact on the consumer, automotive, advertising, healthcare, defense, media, and entertainment industries. People communicate in images, and images are essential for product discovery nowadays. Businesses spend billions every year on repetitive graphic design tasks.



The Dbrain team launched a successful AI application for content creation in e-commerce in 2016. We reduced the cost of processing one image from 10-100 US cents to a fraction of a penny by using a deep learning network, thus saving millions of dollars for one of the biggest e-commerce marketplaces. While the system involves human supervisors, AI does most of the work. We see an opportunity to reduce costs further and scale up to multiple new applications by moving to a decentralized platform.

3.2. Video surveillance

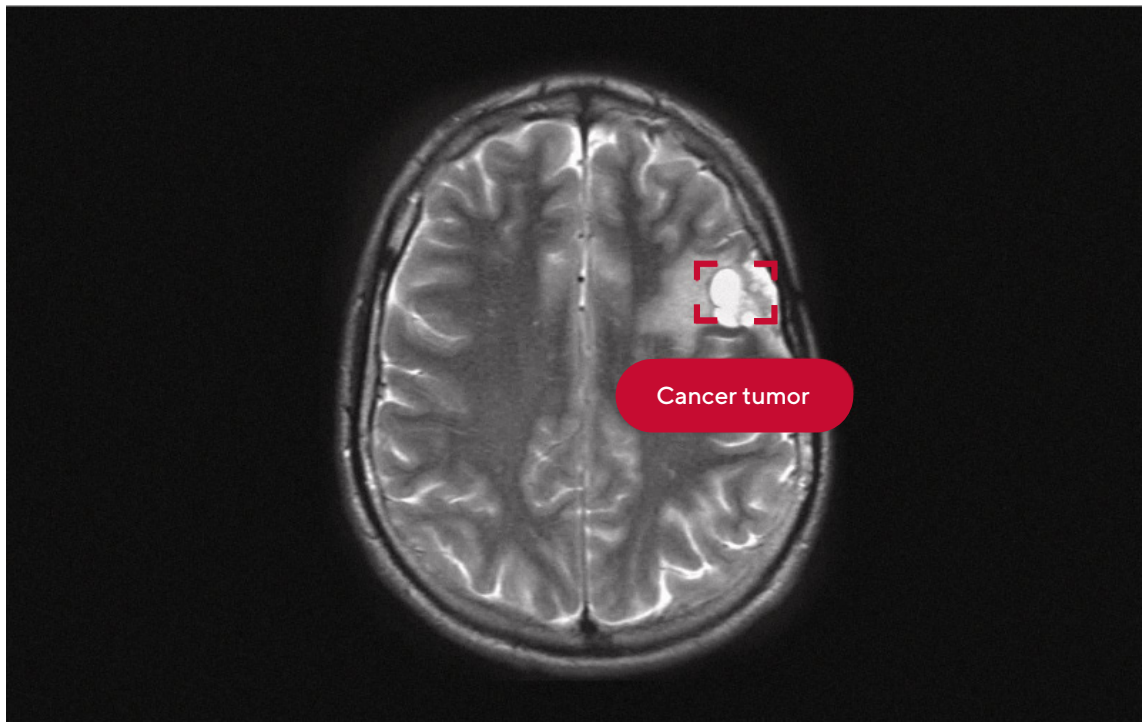
Many clients are interested in AI solutions for video surveillance. Governments, retail shops, production companies and private security companies can use this technology. Computer vision-based systems focus on object recognition and action detection in video streams. Surveillance camera companies often rely on AI to detect dangerous or criminal behavior automatically. This industry employs several hundred thousand workers, who perform routine monitoring work that AI could automate to a large extent, thus saving billions of dollars.



Labeled data are essential for implementing AI surveillance. Many AI developers can create AI algorithms for effective surveillance systems using our platform. Surveillance companies will be able to upload videos from surveillance cameras onto the Dbrain platform. Crowdfworkers will detect and tag unusual videos and send them to the neural network. After that, the trained model will become better at detecting emergencies, fights, robberies, and similar activities.

3.3. Medical data processing

AI is rapidly changing the healthcare analytics market . AI developers can create systems that predict and detect serious diseases at early stages much better than doctors do today. AI developers need high quality and large datasets of patient data like radiology scans and clinical records about illnesses and treatments.



One of the most important AI use cases is cancer detection. Deep learning models can assist pathologists in this task. A pathologist's report serves as a basis for diagnosing many diseases. Despite the fact that pathologists study for many years in order to improve their cancer prediction skills, even today AI can detect cancer with higher accuracy than doctors can. Like in all AI models, more and better data are needed in order to improve its performance.

Pathologists do not have a platform for data exchange on cancer detection and on many other illnesses. Dbrain will create a protocol for exchanging data between all parties concerned in different countries, with different legal restrictions.

Pathologists, patients and medical organizations can leverage the Dbrain protocol and contribute their datasets to AI models without sacrificing patients' privacy. They will help to create an AI detection algorithm that can complement pathologists' workflow naturally. Such a platform could help predict cancer at early stages, thus saving millions of cancer patients' lives.

3.4. Natural language processing

NLP is an AI application that recognizes not only formal content of texts, but also their sentiment and meaning. AI can also detect messages that signal dangerous situations, for example, a terrorist threat or suicide intention. Telegram is one of the leading messengers worldwide. It has more than 100 million active users and delivers over 15 billion messages daily. Telegram has recently been blocked in Indonesia by the government, which said that the messenger is “full of radical and terrorist propaganda”. The developers of Telegram do not provide access to users’ messages to any governments or officials. Therefore, AI in combination with a human feedback loop is the only possible solution for content moderation.

Another use case for AI in NLP is chatbots that streamline consumer experience in online services. Such chatbots could replace people for simple queries, and could be of great assistance to people with complex queries. Dbrain aims to give access to distributed workers who will perform text analysis, train AI models and validate ambiguous AI results in near real-time.

3.5. You name it

We offer a wide range of turnkey and custom AI solutions, integration, and customization for our clients’ particular needs. Become one!

[Request AI App](#)

4. Revenue model

Dbrain receives revenue in the form of commission from any transaction from client's side that takes place on the platform. These transactions include payments for data labeling, AI apps development and API calls to AI Apps placed on the platform. The level of commission is flat: 10%. The only exception is API calls to AI Apps that were developed by Dbrain own data science team. In this case Dbrain owns 100% of AI App rights and thus receives 100% of commission.

Payments for data labeling and AI apps development are made at once. While payments for API calls for AI apps are subscription ones. Dbrain revenue split between those two types of payments is 50/50.

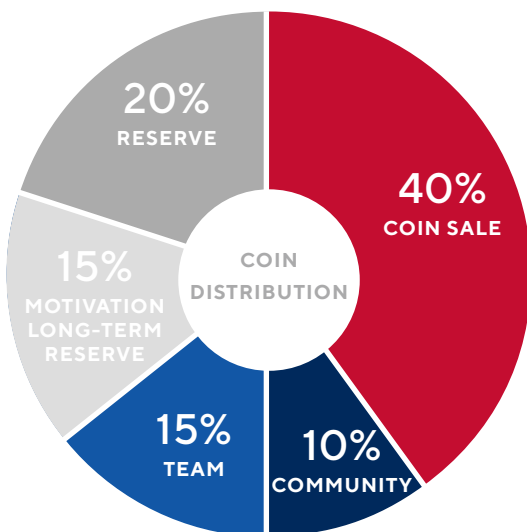


Commission comparison

Our AI platform will save our clients much more than the commission we charge, because they do not have to set up any infrastructure for data labeling, AI development, training, and deployment.

5. Coin distribution

We are looking to distribute DBR coins within a pool of professionals, who are willing to support Dbrain with tangible added value. Up to 40% of DBR are offered to the market with a hard cap of \$20m, 10% of DBR are offered to community, 20% are for the team, and 30% are kept in reserve. The private sale is ongoing, with a discount of up to 20% offered to AI and blockchain industry partners, institutional purchasers, and corporate clients.



Total number of coins:

40,000,000 DBR

Coin price:

2.00 USD

Funds raised:

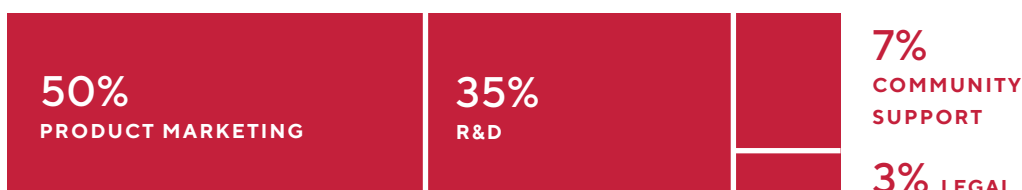
2,500,000 USD

Number of coins offered to the market:

16,000,000 (40%)

5.1. Coin sale

ALLOCATION OF FUNDS RAISED



Preference is given to clients and project partners within communities which are aiming to establish and maintain long-term relationships with the Dbrain team.

We also welcome individual contributors with background in AI and willing to contribute to the business strategy, blockchain technology and willing to contribute to tokenomics and product partnerships and corporate businesses to contribute to developing new client relationships.

Discount	Contributor background
up to 10%	Individual contributors (from 50,000 to 200,000 USD)
up to 15%	Individual contributors, purchasers pools (over 200,000 USD)
up to 20%	Clients, strategic partners, institutional purchasers

During the lock-up period, DBR cannot be transferred from purchasers to third parties. However, locked-up coins can be spent on the Dbrain platform, for example, to purchase crowdwork or to fund the preparation of community data sets.

Volume	Lock-up timing
25%	Unlocked after emission
50%	Unlocked in 3 months
75%	Unlocked in 6 months
100%	Unlocked in 9 months

Team coins and coins allocated to the reserve are locked-up for one year (+3 months from the moment the contributor coins are completely released). Standard coin release terms are applied in one year (25% of total coin amount released from lockup each quarter).

5.2. Purchase and lock-up terms

From the legal perspective the sale takes place in the form of SAFT (Simple Agreement for Future Tokens). A buyer of SAFT will receive the rights for DBR equal to the nominal of SAFT upon the issuance. All individual contributors are required to fill in the questionnaire and pass a KYC procedure in order to purchase DBR.

5.3. Sale schedule

Each stage supports the respective stage of product development. Funds raised within the Private sale stage will be primarily allocated to business development and community building.

Seed

Completed

The Seed round is set to check the validity of business insight and business plan, and to raise funds for initial product development.

Date: January 1 – February 1, 2018

Funds raised: 2,500,000 USD

Private sale

Ongoing

Starting from April 15 we are distributing 11,600,000 DBR at a price range 1.6 – 2 USD each. The minimum purchase amount equals \$50,000 and the maximum, \$2,000,000 USD. The private sale is set to establish a balanced pool of professionals around the platform who can add value to the project.

Date: from April 15

Hard cap: 17,500,000 USD

Discount: up to 20%

Airdrop

Soon after private sale we'll start gradually distributing DBRs within data scientists community to support the early stages of platform development and provide liquidity for services exchange within the platform.

Airdrop: 2,000,000 DBR

Audience: data science community

Start date: TBD

6. Team

6.1. Founders



Dmitry Matskevich
Chief Executive Officer

Serial entrepreneur, data geek.
Founded 2 leading Big Data
companies. Sold Flocktory, a B2B
AI startup, for \$20M in 2017.



Alexey Hahunov
Chief Technical Officer

Founder of Connectome and
R-SEPT. 3+ years in managing
R&D teams in IT and AI.



Dima Dewinn
Chief Design Officer

Designer, founder and CEO of
Thngs. 12+ years in visual storytelling
and product development.



6.2. Advisors

Yobie Benjamin

Co-founder of token.io, ex-CTO of the Citibank. VC and innovator, member of the US Federal Reserve Bank Faster Payments Task Force.



Eleanor 'Nell' Watson

Co-founder of Ethnicsnet, lecturer of AI and Robotics Faculty Singularity University, cognitive scientist and director of AI-Robotics at AIMY Robotics. 2017 Foresight Fellow for Machine Ethics, member of FBCS, FIAP, FRSA, FRSS, FLS.



Vadim Fedchin

MSc in Law and Finance, Oxford University. Member of the Open Data Institute (UK), VC investor with a focus on AI.



Ed Gurinovich

Founder of Carprice and Carmon-ey, CEO and Founder of Mytime (blockchain platform to convert time into cryptocurrency), VC investor in Artificial Intelligence.



Dean Patrick

Founder and managing partner of G2H2 Capital, solidity developer, Stanford University graduate with a degree in computer science.



Mikhail Larionov

CTO BitGuild, ex-Facebook Lead Developer of Messenger Platform, ex-Disney Interactive lead. Developer of blockchain protocols. Technical expert.



Theodosios Mourouzis

Research Fellow at the UCL Centre for Blockchain Technologies (UCL CBT) and Programme Director of the MSc in Business Intelligence and Data Analytics at the Cyprus International Institute of Management (CIIM). Blockchain researcher and ai investor.



Renat Khasanshyn

Co-Founder, Insurance Products & Revenue at Etherisc, Ex-Venture Partner at Runa Capital and CEO of Altoros. Led inception of the insurance practice at Altoros together with its key customers Allianz, Allstate and Liberty Mutual, focusing on canonical use cases of blockchain.



Matthew Graham

Founder and CEO at Sino Global Capital. Bridging technology with China investors and partners with years of investment management experience.



Simone Giacomelli

Head of Business Development, Blockchain Lead at Singularity.net. Founder at Vulpem Ventures Tech. Research Fellow at Institute for Data Driven Design.



Gino Yu

Associate Professor, Director of Digital Entertainment and Game Development at Hong Kong Polytechnic University. Dr. Yu also founded the Hong Kong Digital Entertainment Association, and Asia Consciousness Festival. He also curates TEDxHong-Kong.



David Chen

Co-founder of Angel Vest Group, lecturer at Peking University. Harvard Business School graduate, ex-Independent M&A Assignments, ex-Hina Group, ex-AMD.



6.3. Core team

Victor Baybekov

Chief Analyst, Blockchain Developer

Yury Alexandrov

Architect, Blockchain Developer

Igor Rekun

Head of Machine Learning

Dmitry Ulianov

Lead Data Scientist

Artur Kuzin

Lead Data Scientist

Andrey Kiselev

Senior Data Scientist

Sergey Kolesnikov

Data Scientist

Aleksandr Belskikh

Data Scientist

Miras Amir

Data Scientist

Vsevolod Poletaev

Data Scientist

Alexander Lyzhov

Junior Data Scientist

Sergey Kananykhin

Head of Product

Maria Regnetta

Head of Operations, USA

Emily Liu

Business development in Asia

Gil Rosen

Business development in US

Gleb Korneev, Ph.D.

Chief Partnership Officer

Aleksey Tsishevski

Chief Financial Officer

Michael Ovsyanikov

Head of Sales

Natalia Shashkova

Chief Marketing Officer

Gleb Sinev

Project Manager

Vasiliy Lukyanov

Manager

Elija Glazunov

Partner

Ivan Aleksandrov

IR Manager

Ksenia Chabanenko

Head of Communications

Daniil Danilkin
Senior Backend Developer

Yulia Ilina
PR Manager

Nikita Evdokimov
Backend Developer

Lena Mintz
PR manager

Dmitry Dubsky
Lead Frontend Developer

Andy Khachaturov
Social Media Manager

Natasha Dzera
Frontend Developer

Anna Lebedeva
Editor

David Kuryakin
Full-Stack Developer

Danila Makarov
Designer

6.4. Partnerships



Participant of Nvidia Inception Program, includes a custom set of ongoing benefits such as an opportunity for cooperation with major AI companies and support of Nvidia during critical stages of product development, prototyping and deployment.

[nvidia.com](https://www.nvidia.com)

Chronobank

Dbrain will help Chronobank, a decentralized initiative to disrupt the short-term recruitment industry, create a fair and intelligent system to evaluate employees in the labor market.

chronobank.io



Participant of Microsoft BizSpark, a global program that helps startups succeed by giving them free access to Microsoft Azure cloud services, software, and support.

bizspark.microsoft.com



SONM, developer of a global decentralised fog computing platform, is starting a joint project with Dbrain, a blockchain platform for collectively building AI apps. The aim of the venture is to examine the possibility of transferring Dbrain's technical infrastructure from the Amazon Web Services cloud to SONM's supercomputer.

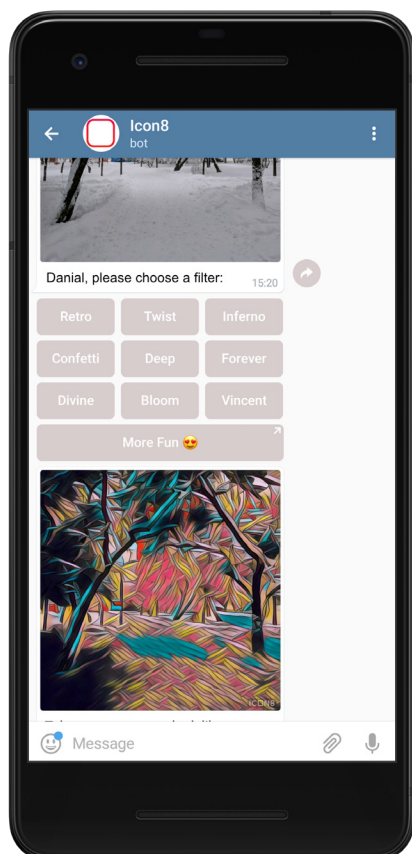
sonm.com

6.5. Background

The Dbrain team is made up of industry-renowned professionals and has already launched several AI products that we will be expanding on the Dbrain platform. The team's background includes development of Icon8, a top-ranked chatbot and e-commerce tool, and Connectome solutions for activity recognition and industrial quality control.

6.6. Icon8

The Dbrain team created the Icon8 AI chatbot, which was #1 on Telegram, #3 globally on Facebook, and ranked as the #1 bot in 2016 by VentureBeat. The bot applies an artistic style to any submitted picture and returns the result almost immediately. The bot received a grant personally from Telegram CEO Pavel Durov for cloud infrastructure financing. VentureBeat included Dmitry Matskevich within the list of 100 people to watch in the chatbot space, right next to Pavel Durov.



TC

Telegram names winners of its “fast and useful” bot competition

[Read on Techcrunch](#)

VB

These were the top 5 bots to try in 2016

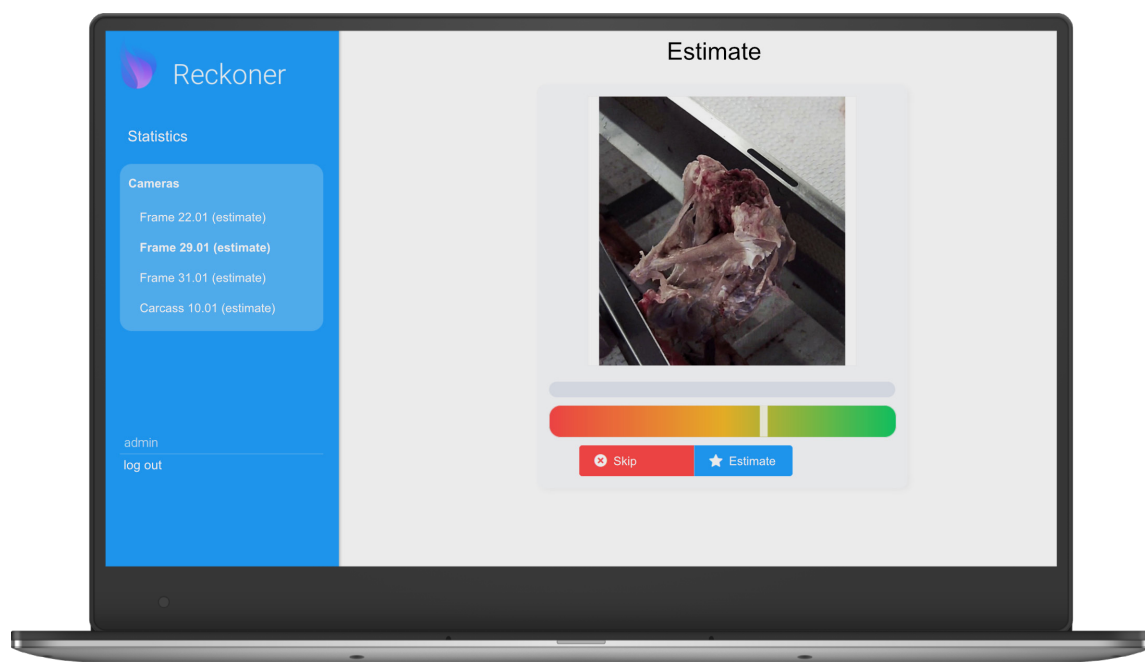
[Read on Venture Beat](#)

The Icon8 chatbot was mentioned as one of the best examples of good user experience in a book by Slack director Amir Shevat.

The Dbrain team launched a successful AI application for content creation in e-commerce in 2016. We reduced the cost of processing one image from 10-100 US cents to a fraction of a penny by using a deep learning network, thus saving millions of dollars for one of the biggest e-commerce marketplaces. We see the opportunity for further cost reduction and scaling up to multiple new applications by moving to a decentralized platform.

6.7. Connectome

Connectome.ai developed solutions for visual inspection of the quality of goods on conveyor lines, and real time detection and analysis of staff actions and behavior from video surveillance images. These solutions are already employed at one of the largest agriculture holdings and a leading turkey meat producer in Europe; they reduce human factors in manufacturing and increase profits. Application of the AI products from Connectome helped increase turkey production by 1.5% (90 tons monthly) and reduce the time that staff spends on non-productive activities.



Connectome Reckoner product for data estimation

7. Roadmap

Q3 2017

Proof of concept and research phase to define the need for a collective AI development tool

Assembling the team

Q4

Product development and MVP testing on the first business clients

Private seed round for \$2.5m

Q1 2018

Public Alpha version of web application and Telegram bot to label and to validate data for crowdworkers (SPOCK)

DBR private pre-sale

Q2

Public Beta for training neural networks on labeled data, mobile app for data labeling

Dbraincoin (DBR) issue

Q3

Launch of the fully-running block-chain platform for building AI Apps with API integration for businesses, mobile app for data labeling

Partnership program for attracting business clients, active sales phase

Q4

Scaling platform to meet new markets with a focus on ever-growing AI community and client base

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