PRIVI PROTOCOL
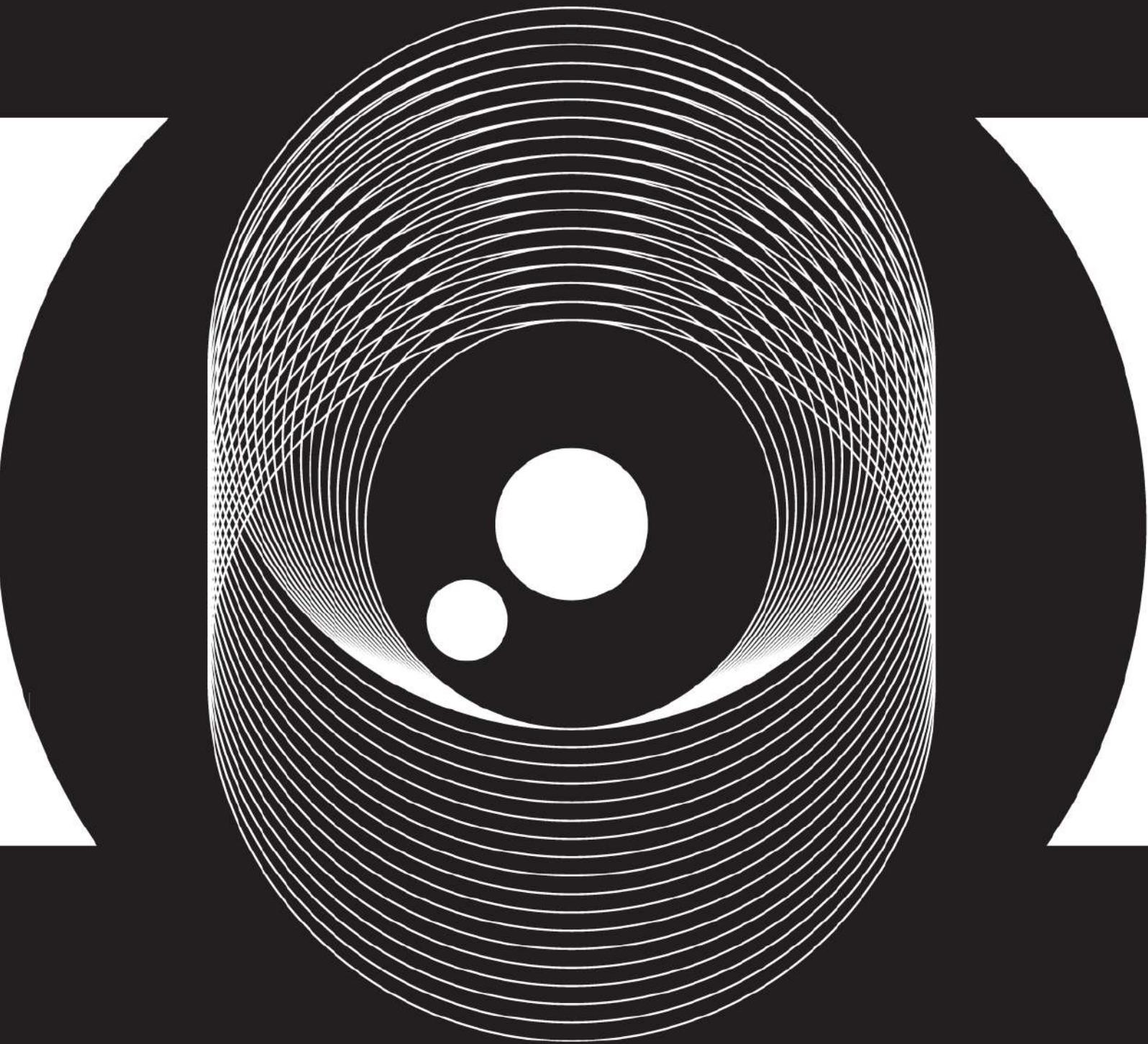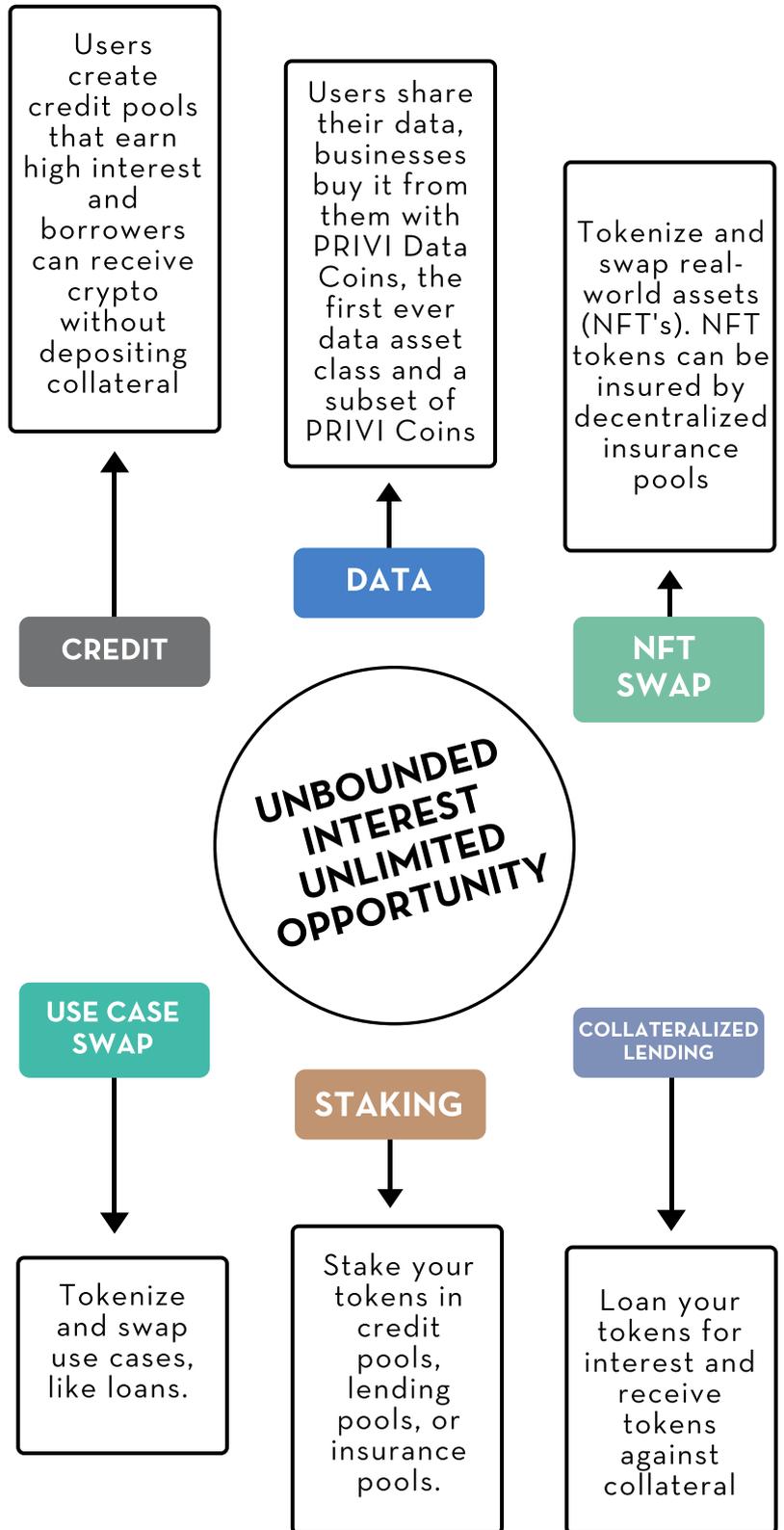
EXECUTIVE SUMMARY

CRYPTO TODAY HAS LITTLE REAL-WORLD USE FOR THE END USER.

PRIVI CHANGES THAT.

PRIVIS FULL VALUE TOKEN ECONOMY CONNECTS THE VIRTUAL, WITH THE REAL WORLD, CREATING TRANSACTION TYPES THAT BENEFIT ALL USERS ALL OVER THE WORLD

CREDIT

Users create credit pools that earn high interest and borrowers can receive crypto without depositing collateral

DATA

Users share their data, businesses buy it from them with PRIVI Data Coins, the first ever data asset class and a subset of PRIVI Coins

NFT SWAP

Tokenize and swap real-world assets (NFT's). NFT tokens can be insured by decentralized insurance pools

UNBOUNDED INTEREST UNLIMITED OPPORTUNITY

USE CASE SWAP

Tokenize and swap use cases, like loans.

STAKING

Stake your tokens in credit pools, lending pools, or insurance pools.

COLLATERALIZED LENDING

Loan your tokens for interest and receive tokens against collateral

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CREDIT

PROBLEM

Credit is widely used, yet it's highly costly, the average U.S. consumer has 3 credit cards and an average annual credit card debt of $1,250. What's more, credit is highly unfair, 162% of black citizens get denied for credit vs. white citizens. DeFi, or Decentralized Finance, has many "lending" solutions but they are a far cry from what we consider credit. DeFi Lending requires users to lock up their crypto, or other assets, in return for money. As of September 2020, nearly $3.92 billion worth of collateral is locked up. That is not how the real world operates. Do you lock up $10,000, to get a $4,000 credit line? What if there was a transparent system that operated how the real world views credit, without the unfair costs and practices used by centralized financial systems?

SOLUTION

The Privi Protocol obviates the need for borrowers to deposit collateral, and creates a credit ecosystem by making money available to those who have none, or little of it. The system operates amongst a network of borrowers, lenders and providers:

Borrowers
- Apply with their PRIVI DIGITAL ID
- Pay interest to credit pools
- Pay into an incentive pool
- Charged a premium when paying with PRIVI Credit

Credit Pools
- Users create credit pools
- Can dictate which kind of users they give credit too based on PRIVI Digital ID and what their timeline is
- Pools earn high interest
- Share risk of default with the network

Providers
- Could be merchants, and are also not required
- If they participate, they sell items for a higher price
- Can take part of the "Credit-risk" which is deposited into incentive pool

As a direct consequence: the incentive pool accumulates as the network of borrowers, lenders and merchants grows, this increases the distribution of default risk, rendering the loss to credit pools minuscule as the network grows.

IF THE CREDIT IS SUCCESSFUL

Borrowers
- Are encouraged to pay back the credit early by being rewarded a % of the incentive pool
- A positive reflection in the users PRIVI Digital ID, leading to better credit conditions in the future

Credit Pools
- Receive contractual interest that they set in the groups thesis
- Receive a % of the incentive pool

Providers
- Sell items for a higher price
- Receive a % of the credit risk they assumed

IF THE BORROWER DEFAULTS

Borrowers
- Unlikely to ever be able to participate in PRIVI again as this will directly reflect on their PRIVI Digital ID

Credit Pools
- Pools receive majority accumulation of incentive pool

Providers
- Assume credit risk they decided to take, rendering the loss minimal to credit pools

USE CASE SWAP

PROBLEM

Swapping today, with DeFi systems like Uniswap, generally operate only between crypto-to-crypto, or currency-to-currency. As such, this vision is limited, as there are only a finite amount of currency pairs that exist in the world, which means the event is not dependent on the activity that is performed, as the currency pair remains the same in any market. When doing something common, such as this, the potential is limited.

SOLUTION

Say you want a loan for something, be it a house or car, or maybe even a business loan. It could be anything that gives a return in the future. With PRIVI's Use Case Swap, as opposed to currency pairs, <u>the swap instead is attached to use cases</u>, e.g. loans, where users buy into future returns and are given tokens that can be exchanged or cashed in.

Here is how the process works:

- **Users create loan offers with a target funding amount, add collateral and set how much interest is to be paid**

- **The funding amount and collateral can be in different currencies. For example you can request a loan in bitcoin, and add collateral in USDT**

- **An equivalent amount of tokens, whose performance is attached to the loan, are created and available for purchase**

- Users or pools can buy this loan, or parts of it, and are distributed an equivalent amount of tokens in return

- **Token holders are then distributed the regular scheduled interest**

- The value of these tokens are linked to the performance of the loan. If the interest is paid on time, the value of the tokens increase. If the interest payments are paid late, the value decreases

- **These tokens can be exchanged at any time for other similar tokens, or exchanged for other currencies**

- Once the loan is liquidated, all token holders are distributed principle amounts and the tokens are then burned

Throughout this process, money is never locked. At any point in time you get your money's worth, as opposed to your money being locked for months, if not years. These tokens can be exchanged for other similar tokens, perhaps to diversify risk, or exchanged for common currencies like bitcoin or USDT. This creates the potential for unlimited interest. The tokens are not only attached to the performance of a use case, but can be continually exchanged to earn even more interest elsewhere.

IT'S TIME TO LEAVE CURRENCY PAIRS BEHIND

To learn more, take a look at the Whitepaper.

NFT SWAP

PROBLEM

Non-fungible assets are normal stuff, like homes, cars, movies or shoes. Opposed to fungible assets, like currencies, which have been highly tokenized, tokenizing non-fungible assets (called "NFTs", Non-Fungible Tokens) has yet to take off in the crypto market. Popular NFT projects like CryptoKitties, and NFT projects in real estate, have either failed or in CryptoKitties case, couldn't outlast their bubble. It could be argued that this is for two reasons: the market couldn't sustain liquidity, or in the case of the real estate projects, the connection between the real-world and virtual world was too distant a concept. To succeed in tokenizing normal stuff, like cars or homes, shoes or movies, the solution must exist in (1) a highly liquid market, and (2) a market that assuages the connection between the virtual world, and the real world through trust.

SOLUTION

Say you have a piece a property that you want to tokenize, it may be an apartment that you rent out, or a piece of agricultural land. Either way, the property owner is looking to raise funds, and tokenizes 25% of his/her land and makes the NFT tokens available for purchase.

Here is how the process works:

- **Land owner creates a Non-Fungible Token (NFT) that is tied to their real world appreciating asset.**

- **These tokens are named by the land owner with a description of the token and it's attributes, and provides a justification for the initial price of the tokens**

- **These tokens are based off common currencies available in the PRIVI ecosystem, in the future more common cryptocurrencies, like bitcoin and USDT, will be included**

- Owners of these NFTs make these tokens available for purchase

- **Users can buy these tokens, which are expected to appreciate in value**

- A collection of users who own these tokens of this real-world asset vote on consensus as to what should be done with the asset, e.g. rent out the apartment, or make a decision on what to grow from the farm land

- **These <u>NFT's can be insured by decentralized insurance pools</u> (see below) in return for scheduled percentage points from the NFT token holders**

- These NFT tokens can be swapped, i.e. exchanged and transacted with NFTs, future asset tokens, or currencies, or used to buy services in the apps on built alongside the PRIVI Protocol, <u>which makes the market highly liquid</u>

DECENTRALIZED INSURANCE POOLS:

A decentralized pool of underwriters ("Insurance Pools") can get together to insure NFTs. The insurance pools can be a mix of companies, agencies, or individuals. Different NFT's could mean different insurance pool members, i.e. the members of an insurance pool for houses will be different than art pieces, or movies.

These insurance pools build a thesis: we only insure a certain NFT, of which the members have PRIVI Digital ID above X%, we require weekly/monthly returns, we insure items for minimum of 2 years and they require initiation fees of 1%. The insurance works on a consensus governing model and can apply to insure NFTs, vice versa.

These insurance pools can buy these NFT tokens. Which are un-divisible tokens. So let's say you have 100 people in an insurance pool. One company owns 30% of the pool, then the rest consist of individuals. This insurance pool insures an NFT, call it a house that provides 1% a week, the company gets 30% of the 1%, and the remaining 70% of the insurance pool gets 70% of the 1% every week. <u>The money in the insurance pool is locked throughout the process, which stimulates investments into NFTs, and the insurance pool members earn high interest.</u>

DATA

A DECENTRALIZED DATA EXCHANGE WHERE CONSUMERS CAN CONTROL AND MONETIZE FROM THEIR DATA AND EARN THE WORLDS FIRST EVER DATA ASSET CLASS

PROBLEM

Data is one of the most valuable assets in the world, yet the people who produce the data - the consumer - earn $0 a year from it. Big Tech (Facebook, Google, Amazon, Microsoft and Apple) instead is the predominant benefactor of your data, whose collective market value is around $5.9 trillion, larger than the economy of Japan. It is said that the average U.S. user can make $444 per year from their data. Financial incentives run the world. Any solution to the worlds data problem is to realign the financial incentives. Where users, knowing that they can earn money from their data, start switching to systems that allow them to do so.

SOLUTION

The solution is to create a system where both consumers AND businesses are financially incentivized to participate.

1. USERS OPT-IN TO SHARE THEIR DATA WHILE USING PRIVI ECOSYSTEM APPS
2. DATA IS ENCRYPTED AND SECURELY STORED
3. STATE-OF-THE-ART AI ALGORITHMS GENERATE DATA INSIGHTS
4. BUSINESSES PURCHASE DATA INSIGHTS
5. BUSINESSES TARGET THESE USERS WITH PROMOTIONS

The currency for this system is the PRIVI Data Token. Which are rewarded to users by businesses. This token can be exchanged and is the worlds first ever data asset class.

1 CONSUMERS OPT-IN TO SHARE THEIR DATA

Users have the option to enable or disable data collection in apps built alongside the PRIVI Protocol.
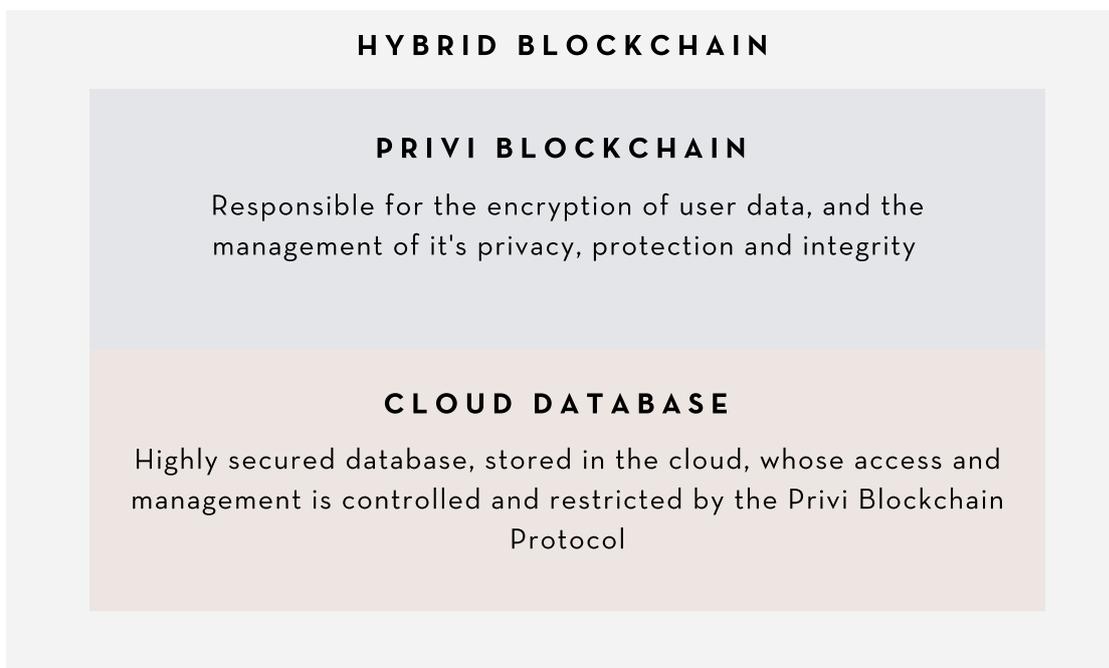
Users can customize which businesses their data is to be shared with in privacy management settings of applicatoins.
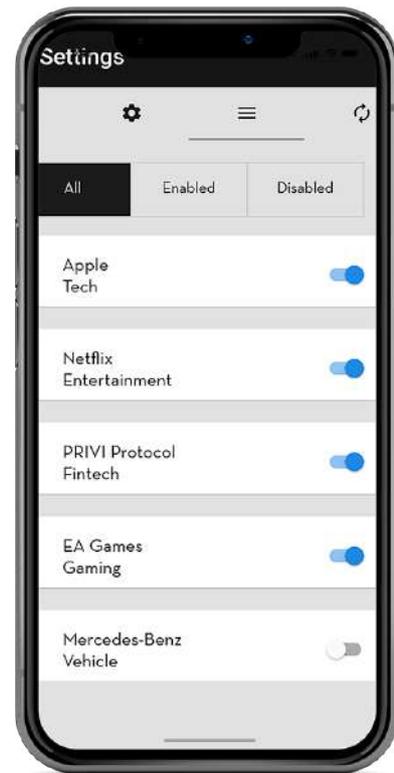
Proof of Concept:
Privacy management settings

2 DATA STORAGE AND ENCRYPTION

USER DATA THAT IS COLLECTED IS STORED IN A HYBRID BLOCKCHAIN

HYBRID BLOCKCHAIN

PRIVI BLOCKCHAIN

Responsible for the encryption of user data, and the management of it's privacy, protection and integrity

CLOUD DATABASE

Highly secured database, stored in the cloud, whose access and management is controlled and restricted by the Privi Blockchain Protocol

For more information on how PRIVI keeps your data secure with blockchain, see our Technical Whitepaper.

3 DATA INSIGHT GENERATION

Data that is shared by users through apps built alongside the PRIVI Protocol are extracted for insights by state-of-the art AI/Machine learning algorithms. Which are continuously trained for insight optimization. AI recommendation engines provide advertisers with suggestions on targeting users with a higher likelihood to convert. Several data inputs are used, e.g. user responsiveness to promotions, similarities between similar ad campaigns from similar businesses, etc., to compute the probability of a given data insight/user to be successfully targeted.

privi web extension

PRIVI Web Extension is a service of the protocol, and can be installed by consumers on their web browsers in order to extract their browsing data, making it available for businesses to buy. THIS IS ALREADY BUILT.

The browser comes with several trained AI algorithms to optimize the extraction of meaningful browser data, these are:

- An AI Image Recognition (IR) algorithm that has been trained with large e-commerce data sets to automatically process, categorize and tag products by generating predictions on the images that appear during the users navigation on the browser. See a short clip on the technology in action, here
- An AI driven scraper algorithm trained to extract meaningful information from users web queries like travel dates, destinations and origins. See a short clip on the technology in action, here
- A Natural Language Processing (NLP) AI algorithm trained to process text appearing on websites to produce user interest in products

4 DATA MONETIZATION

Businesses log on to an online advertising portal where businesses filter and purchase data insights based on their targeting parameters. In the portal, they buy <u>PRIVI Data Coins</u> to target users, and customize and manage ad campaigns. There are three types of PRIVI Data Coin rewards users receive from companies.

1 DATA REWARDS

This is a reward that is always given to the user when their data insights are sold. The protocol ensures the data insights are sold with a fair pricing valuation technique that is distributed between the user and ecosystem solution. The protocol guarantees the user receives the majority of the sale price. If a company wants to target a user 10x, they have to send the user 10 data rewards.

2 PROMOTION REWARDS

Businesses, in addition to buying data insights, send PRIVI Data Coin promotions to users, e.g. a user buys a $1,000 laptop on the PRIVI Protocol with a 8% cashback offer, the business transfers $80 worth of PRIVI Data Coins to the user.

3 TRACKING REWARDS

Tracking rewards can also be sent to users by a business. These are PRIVI Data Coins with unique properties that relay mirrors of data to the business on where these PRIVI Data Coin rewards are being sent by the user to help the business better understand customer buying behavior. Users have the option to decline such rewards.
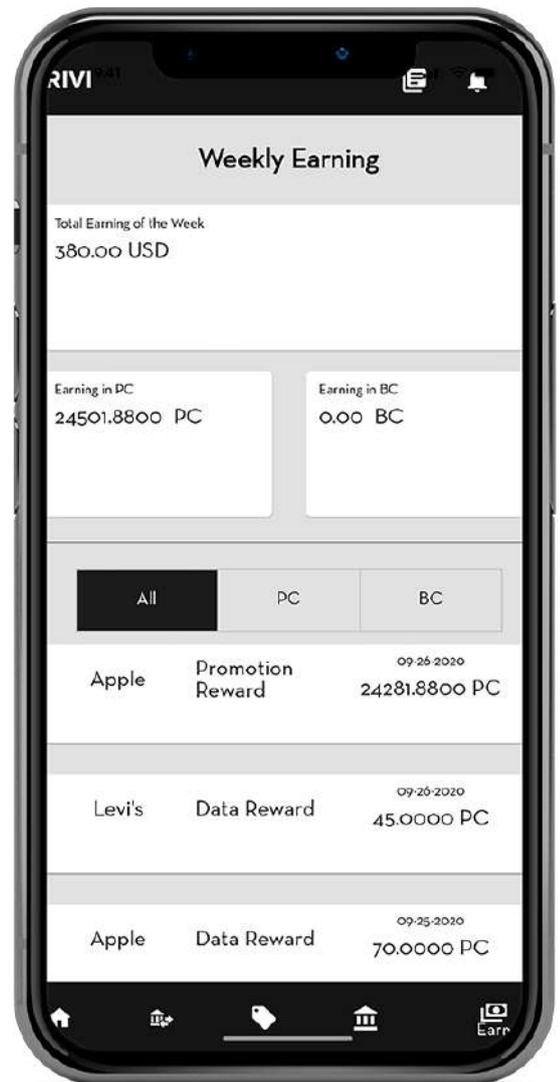
Proof of Concept:
Earnings section of Privi Wallet

5 USER TARGETING

The last stage comprises the marketing promotions businesses launch to targeted users. This stage closes the iteration of the system loop in which users are targeted by different means and the interactions are tracked and recorded, starting a new cycle with an improved version of the protocol, which collects more data, increases the AI performance, thus increasing business demand and improving user services. Businesses are allowed to send only one promotion to each user whose data was purchased. Once the promotion is sent, the user data is deactivated from the businesses online portal. If they wish to target the user again, another data insight purchase will have to be made.

## NEXT-GENERATION DATA & ADVERTISING

1
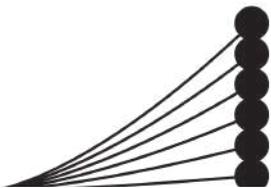
Unused PRIVI Data Coins can be sold by the business on an exchange. Increasing the demand on the data asset class and opening the door for advertisers to realize potential revenue streams.

2

PRIVI Data Coins are the worlds first ever data asset class. Once users publish their data, sell it and are given these coins in return, they then own a data coin whose price is dependent on the demand of the coin itself, and with data becoming larger than its ever been - this asset hopefully only rises.

3
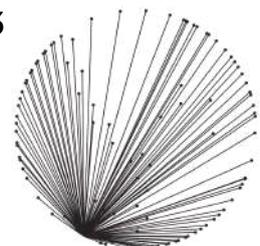
Businesses can track where certain PRIVI Data Coins are being spent by their customers, helping them better understand customer behavior to improve customer retention.

LENDING, STAKING & DIGITAL ID

PRIVI LENDING POOLS
- This feature allows users to collateralize their digital asset in an opposing coin, in order to receive the contrary coin, i.e. if a user wants PRIVI Coins, users collateralize and lock a certain amount of Base Coins, an internal stable coin pegged to the USD.
- The required amount of collateral necessary to receive a loan is determined by the collateral coverage ratio (CCR) which is based on the users Digital ID and current marketing conditions.
- Lending pools receive scheduled daily interest and if the collateral falls below a certain threshold, the loan will be liquidated.

PRIVI STAKING
- The protocol provides the community with the possibility of staking their coins to earn interest on it.
- If the coins are staked, they are dynamically distributed into Lending Pools, Insurance Pools and Credit Pools in a low-risk manner
- Interest amounts are received daily or frequently, the interest that is paid is supported by a dynamic pricing engine;
  - Used for pricing data insights and determining the interest rate of the coins offered in the credit, lending and insurance features. The pricing algorithm includes price experimentation in such a way that learning and instant optimization are balanced, creating optimally priced interest rates and data insights. To learn more, see our Technical Whitepaper.

PRIVI DIGITAL ID
- If users decide to share their data, or interact with the financial portions of the protocol, a Digital ID begins to accumulate. At every stage, activity and interactions are verified, encrypted and stored on the hybrid blockchain, reflecting onto a users Digital ID
- Each ID is verified by two user identity documents
- Each ID comes with a unique key and acts as a universal log in to all PRIVI ecosystem solutions
- AI techniques on activity from the user are used to quantify the trustworthiness of users, and is composed of two indexes:
  - Trust Score: Trust scores take AI "quantified self" algorithmic approaches to rating a user. Tracking relevant activity, transaction history and balances held within or shared within solutions, as well as third party ratings like credit scores. The Trust score is quantified into a percentage and participants can view in-depth, the logic and positive or negative signals that are taken into account.
  - Endorsement Score: Endorsement scores allow your network to endorse you as a trustworthy individual, say as someone who is unlikely to default on repayments. The higher the trust score of the endorser, the more impact it will have on the users endorsement score

PRIVI COINS

THE "PARENT" COIN - PRIVI COIN
- This coin can be seem as the "parent" coin of the protocol
- Coin holders hold voting rights
- Can be exchanged externally and used for most all features of the protocol

PRIVI DATA COIN
- "Subsidiary" Coin of the protocol
- First ever data asset class will be able to exchanged externally
- Driven by consumer demand as more consumers share their data
- Driven by business demand as more businesses buy consumer data
- The U.S. Data market last year was worth nearly $74bn, so if there are $1bn PRIVI Data Coins each priced at $1, just for last years data market in the U.S. only, the PRIVI data coin could increase 74x. Obviously the coin will be available all over the world, and the data market is growing exponentially

PRIVI SWAP COINS
- Another "subsidiary" coin of the network however this one is only internal
- This coin, unlike PRIVI Data Coin, is redeemable - think NFT's or Use Case swaps - so they cannot be traded externally however they can be swapped for other currencies inside the system

PRIVI

ROADMAP

2019 MAY

- Core team fully assembled and vision developed

SEPTEMBER

- PRIVI Credit, Lending and Staking designed

2020 MARCH

- PRIVI Data, NFT and Use case Swap designed

MAY

- PRIVI Foundation assembled
- PRIVI Data - Web Browser Extension developed

AUGUST

- PRIVI Protocol 0.1 developed

SEPTEMBER

- Private Token Sale and IEO Initiated

ROAD AHEAD

- IEO + 1 month: IEO token holders to receive testnet access on invitation
- IEO +2 months: Digital ID service launches
- IEO +2 months: PRIVI Web Extension released to public
- IEO +3 months: ERC-20 token swap enabled to native Hyperledger token with main solutions
- IEO +4 months: token listing on additional exchanges
- IEO +6 months: On-chain governance voting mechanism in place
- IEO +9 months: PRIVI Swap, Credit and Lending live
- IEO +12 months: Secondary token sale event

TEAM

TECH CORE TECH TEAM

- The core tech team of 6 consists of PhDs and Masters degrees in AI, applied mathematics, quantitative finance, and data science
- 40+ years of experience in IT consulting, software development, banking infrastructure, blockchain architecture, AI techniques and Quantum Computation
- 20+ blockchain coin projects worked on between the team and one Masters in Blockchain technologies

EXECS CORE EXECUTIVE TEAM

- Developed core vision of data monetization
- 15+ years of experience in sales, partnerships and business development, as well as marketing, branding and public relations

ADVISORS

- Cal Evans: international technology lawyer specializing in ICO compliance and strategy, has been involved in over 30 ICO's
- Pascal van Kniff: Master of Ceremony at the EU Blockchain and and Next Generation Technology event, 10+ years of blockchain strategy and development experience
- Kirk Phillips: 7+ years of blockchain business process management experience, author of several articles of Bitcoin and a Certified Bitcoin Professional (CBP) from C4, the Cryptocurrency Certificate Consortium
- Carlos Garcia Pont: +30 years of executive education and management experience, PhD from MIT
- Jack Chang: +40 years of experience in entrepreneurship, finance and digital payments, patent holder of the ATM and has held advisor/executive roles at Citibank, Bank of America, VISA, Mastercard and American Express.
- Silja Thor: 15+ years of experience in entrepreneurship, startup coach and executive leadership equality and female founder advocate
- Supported by NatWest (UK's top 5 largest retail banks) and IESE Business School, #1 ranked Executive Education Program Worldwide (Financial Times)

NatWest

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THANK YOU

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