⦿ Personal Data Token (PDT) Ecosystem

The PDT ecosystem is tailor-made to utilize blockchain infrastructure.

As a data marketplace, we plan to use blockchain technology to help individuals:

- **Reclaim their personal data & digital ID**

- **Protect personal data**

- **Monetize personal data**

Usage and utilization of personal data has been asymmetrically beneficial to centralized digital platforms, instead of (oftentimes at a cost to) consumers/users. To wit, Google and Facebook alone racked up a combined $150bn in 2017 revenues trafficking in consumer data, while the consumer was left with scant tangible gains from the trading of their data.

The creation of the Personal Data Token (PDT) and ecosystem is designed to address the asymmetric personal data power-structure and will use blockchain architecture to give consumers more control and ownership over their data.

The token itself isolates and atomizes personal data as the key underlying scarce resource backing the value of the overall PDT ecosystem.

Token Utility and Purpose

PDT serves two key functions in the ecosystem:

1) As an access key to participate in the ecosystem. Data providers and requestors must acquire and hold tokens to participate in the marketplace.

2) As a medium of exchange for data transactions.

An ecosystem token aligns incentives of all participants by promoting desirable, self-interested behavior.

Ecosystem Participants

Data Providers - Data providers, also known as 'Users', provide consent-based personal data to the ecosystem. They will be compensated with PDT for connecting specific data-sets via Datacoup apps and when they agree to enter into specific transactions with data requestors. Users can spend PDT on apps and other ecosystem services.

Data Requesters - In the PDT ecosystem, data requesters are comprised of:
– Data Buyers (eg; Market researchers, hedge funds)
– Data Partners (eg; Insurance companies, banks)
– App Developers
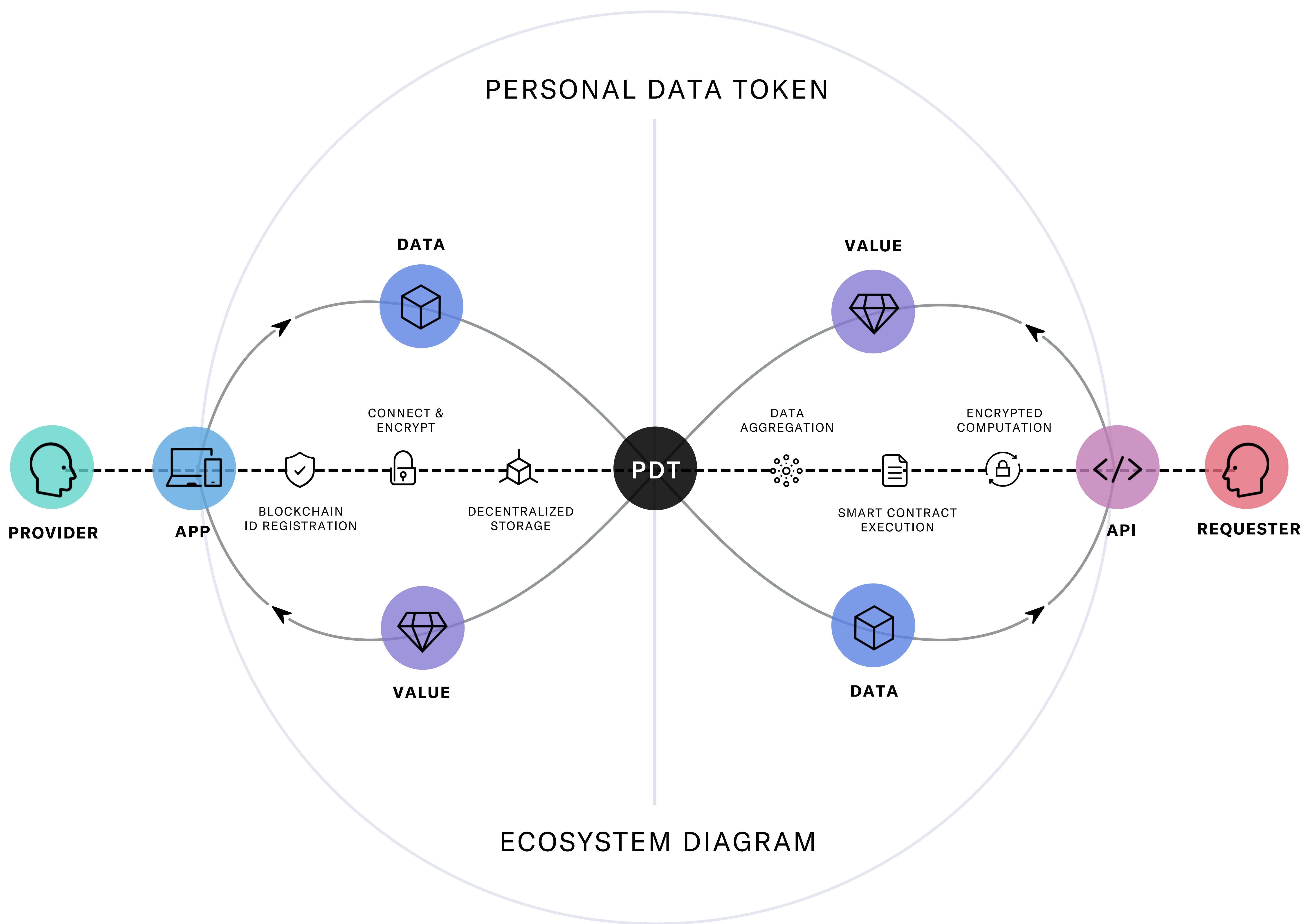– Service Providers (eg; Attestation providers)

Requesters typically bring monetary value or a service to the ecosystem, in exchange for access to data

Ecosystem Administrator - The administrator sets basic guidelines for transactions in the marketplace, provision of initial technologies and other administrative objectives. Datacoup will serve as the initial ecosystem administrator.

Ecosystem Data Transactions

Customer Relationship Value - Identity-linked data has 'customer relationship value'. Data partners and service providers with pre-existing customer relationships may wish to offer discounts, premium access or other perks to their customers for sharing data through PDT ecosystem apps.

Analysis Value - Data also has 'analysis value'. Data buyers across all economic verticals want access to aggregate pool of anonymous data in order to harvest broad consumer patterns and trends relevant to the data buyer's business.

PERSONAL DATA TOKEN

DATA

VALUE

CONNECT & ENCRYPT

DATA AGGREGATION

ENCRYPTED COMPUTATION

PDT

BLOCKCHAIN ID REGISTRATION

DECENTRALIZED STORAGE

SMART CONTRACT EXECUTION

PROVIDER

APP

API

REQUESTER

VALUE

DATA

ECOSYSTEM DIAGRAM

Provider - Data providers (users) share and control access to the key ecosystem resource: consent-based personal data.

App - Through Datacoup apps, providers connect their data, set preferences and agree to enter into specific transactions with data requestors.

Data - Valuable consent-based personal data like spending history, search and browsing history, location, fitness, social and more.

Requester - Comprised of data buyers, data partners, developers and service providers, requesters represent the demand side of the data marketplace.

API - The API serves as the endpoint for requesters in which they can receive programmatic outputs from privacy-preserving data computations.

Value - Value like cash, discounts, cryptocurrency and more, are offered in return for access to provider data.

PDT - With minimum balance requirements and token-staking, PDT ownership is the only way to access and transact in the ecosystem.