# I Gave
## A Decentralized Autonomous Charitable Organization

Draft 0.6

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Summary

Raising donations for operations costs is the most challenging obstacle for charitable organizations. I Gave is a DAO for funding charity operation costs. All Ether raised in the ICO will be go to donations to grow philanthropic organizations. A monthly vote by IGV token holders will decide the recipients. The I Gave DAPP is a smart contract for charitable fundraising. Fundraisers issue ERC-721 digital assets representing donation levels. A Metamask enabled embedded HTML snippet allows them to accept Ether donations on their fundraising site. Philanthropists purchase the ERC-721 tokens to make their donation. Web3 provides donor token holders new web experiences based on their donations.

# Problem

Philanthropy is the market for Love.
- Dan Pallotta

Large charities need funding to keep their organizations running. They must pay employees, raise funds, incur building costs, and marketing. Even then, donors must trust their money is well spent. These investments in themselves are often, wrongly, stigmatized.

From 1970 to 2009 the number of nonprofits to cross the $50M revenue barrier is 144[1]. The number of for-profit was 46,136. Why are nonprofits incapable of capturing market share?

Money is the symptom. Social dogma is the problem. It is taboo to profit from helping others. The things we are taught to think about giving and philanthropy and charity undermine the causes we love. We have no problem with someone making millions of dollars selling widgets but make half a million dollars curing sick kids and you risk character assassination[2].

Philanthropists prefer their gifts go to the needy. It's a difficult problem explaining that marketing benefits the needy. A donation that grows an organization can help tens or hundreds more.

Risk is also heavily scrutinized. A Hollywood movie can cost millions and flop at the box office. If a charity CEO fails to deliver a return in a short period of time they may lose their career. Without the ability to take risks, entrepreneurs cannot generate innovation in the space.

I Gave is a Decentralized Autonomous Organization (DAO) on the Ethereum Blockchain. Its purpose is funding the operation costs of charities and raising charitable funds using digital tokens. It relies on two token standards; ERC-20 & ERC-721. Charity campaigns issue ERC-721 tokens to receive donations. Donations represent units of need - '1 bottle of water', '1 college credit hour.'

Donors buy the ERC-721 token to make their donation. E.g. "I Gave 1 bottle of water donated during Hurricane disaster on 1/1/2000". "I Gave rent to the Humane Animal Shelter for 1 year for a kitten." The I Gave ERC-721 contract exists to tokenize donations.

I Gave collects 1% of all funds raised. The DAO's ERC-20 tokens are used as votes controlling these funds. I Gave ERC-20 Token holders will vote to spend half the monthly funds on a charity. The remaining half goes to token holders.

# Challenges

## Traditional Donors

Traditional donors are unlikely to convert USD to Ether just to use this technology. However, cryptocurrency has a history of charitable giving. At this time, the market cap of all cryptocurrency hovers near $800 Billion.

Fidelity Charitable received over $9M in Bitcoin donations in the first half of 2017. That amount is $2M more than all of 2016[3]. The total number of individual donors is over 150,000.

For the first half of 2017 the Bitcoin market cap was between $17B and $41B. Currently the Ethereum market cap sits at $100B. Cryptocurrency is a new market for raising money.

## Why do you need a token?

It's important to clarify the difference between the ERC-721 and ERC-20 standards. ERC-20 is the ICO token. It is highly fungible and functions well for currency and voting. The ERC-721 is an Asset token. It is non-fungible, and specific to some unique thing.

In my wallet, I have one dollar bills. There are many one dollar bills in the world all representing the same thing. When I graduated from military police training (USMC class 02-07) I received a certificate. There are many military police officers, but each of our training certificates are unique to us and our classes.

Currency is represented as the ERC-20 token. Certificates are possible using the ERC-721 token.

Each I Gave ERC-721 token certificate represents are unique donation to charity.

The I Gave ERC-20 token is used to govern I Gave and receive a monthly incentive from the funds that are raised.

## Do Charities receive Ether or USD?

The DAO will exist on the Ethereum blockchain and be limited to the currencies supported by the network. For now, Ether is the primary currency. Charities may use a payment processor and provide an Ethereum address from their account. This will allow them to convert to USD if desired.

## What about Scaling? Network issues?

Ethereum is the largest cryptocurrency community. It has the most developers. It has the highest number of projects. It processes more transactions than all other cryptocurrency combined[4]. At this time, 89 of the top 100 tokens exist on the Ethereum blockchain.

Furthermore, in 2017 the Raiden payment channel network launched. This is akin to the yet-to-be-released Bitcoin Lightning Network. Omise-Go is making the first steps with Plasma (Sidechains) and scaling to millions of transactions a second. And the first steps of the network sharding roadmap have been made.

The underlying token standard powering the I Gave certificate is the same standard powering CryptoKitties. I Gave will benefit from technologies that scale the Ethereum network.

Ethereum's final advantage comes from the number of developers working on the project. Because of the high number of projects, Ethereum benefits from improvements submitted by those developers as well. One example of this is FunFair[6] who make their progress updates in blog format and detailing their problems and solutions.

# Benefits

## For Charities

Giving is an emotional act. It's not logical to take from your pocket and give to something that doesn't provide some immediate return. Donors make their decisions with their hearts.

I want to pay your operation costs. We will do so in two ways.

1. All Ether raised is scheduled to go charity in the form of a monthly allowance
2. .5% of all Ether spent on I Gave each month goes to the monthly allowance

I Gave gives you the ability to accept Ether donations for your current campaigns. Campaigns are not bound to the I Gave website. Charities can interact with the I Gave contract through the Ethereum blockchain. Though the I Gave website will provide a dashboard and embeddable HTML snippets that organizations can use to accept Ether donations on their own sites and accept donations from around the world.

Blockchain provenance enables your organization to automatically issue Donor Acknowledgement Letters. Including your 501c tax id gives the Ether donor the ability to claim their donation on their taxes.

MetaMask protects your organization from privacy risks. No personal data is ever stored on your servers or ever needs to be. It is not possible to hack I Gave and steal user information.

The immutability of the blockchain means that the I Gave contract will run the same, each time. It guarantees the security of the digital assets. It provides a history of every campaign, donation, and token ever issued – the same security afforded to the Ether currency is afforded to the I Gave tokens.

Cryptocurrency enables efficient microtransactions. Ethereum enables transactions of any amount for very low costs. Ask for items as small as a bar of soap or a bottle of water. Every Ethereum donation saves the 2%–3% overhead on legacy payment networks and costs are covered by the donor.

## For Philanthropists

Charity is too often an unsung deed. The cryptocurrency community is well known for its giving[8]. Though nothing exists to commemorate the act other than a transaction hash.

The I Gave smart contract rewards philanthropists with cryptographic proof of their donation in the form of a unique ERC-721 Token Certificate. Make donations by purchasing tokens that represent the specific charitable item. Instead of generic dollar amounts, an I Gave donation represents something tangible like bottles of water, clean clothing, and food.

Over time philanthropists build a collection of tokens that represent the items they've given to charitable causes.

Every certificate is unique to its campaign and limited in supply. A donor paying for a bottle of water will receive a token stating they gave '1 bottle of water.'

MetaMask + identifying a donor token could be an authentication or identification mechanism. I.e. Only accounts possessing tokens linked to a campaign, cause, or charity have access. Or VIP channels where high level donors have access to coordinate together, without necessarily having to disclose their identities.

Token Certificates may also function as a reputation mechanism among charities.

## For Holders

I Gave has a need for governance. Each month 1% of the funds raised on the platform go to the I Gave smart contract. Half of the funds go to IGV token holders whose balance is over or equal to the Max Token Supply / 100,000 tokens. The other half goes to a partnership charity.

Initially DAPP and DAO governance will be controlled by the founder. Responsibility will transfer to the Holders over the course of one year. Holders will control the I Gave DAO and DAPP with a voting contract.

The majority of dev funds will be locked until token voting begins.

Veto privileges enable holders to cancel funding campaigns by preventing token sales for non-charity or frivolous causes. Funds voting will deploy as soon as it is available but no later than the holder transition 1 year after the ICO.

Initially 10% of token balances must back a proposal for it to succeed.

# Partnerships

Individuals and organizations can partner with I Gave. Partnered organizations are eligible to receive funding from the I Gave DAO funds.

Partners escrow fees are waived for starting campaigns I Gave DAPP.

Selection of partners will be determined by the founder until holder voting takes control. Partners will be capped at 5 until voting begins. This is primarily to build early partnerships with charities and to establish some baseline for expected results.

Only accounts on the partnership list are eligible to receive DAO funding. At launch, eligibility for partnership and funding will require that the organization use the I Gave DAPP to add Ethereum donation support to their current campaigns.

# Campaigns

To start a campaign on the I Gave DAPP contract you must escrow .1 Ether. This amount is changeable by holder vote. I Gave waves the escrow fee and campaign delay for partner organizations.

Each campaign contains a list of tokens with their supply and tracks the amount sold.

Campaigns will have a 24-hour delay before going live. This amount can be lowered or raised in the future or waived entirely for partners.

If a campaign is vetoed, its escrow may be forfeit. If the campaign is frivolous, the escrow will go to the monthly DAO fund. Questionable campaigns will have their funds returned.

Donors will have the opportunity to purchase tokens directly from the smart contract or using Metamask using the embeddable donation button HTML snippet from the I Gave website.

# Offerings

All products and technology will be made open source.

## Embedded Donation Button

An embedded HTML element that fundraisers may include on their own website to collect Ether donations. The script will detect Metamask and present the user with the ability to purchase the token. This is customizable with CSS to match the native look and feel of the branded website.

If metamask is not detected the button can be set to hide itself.

## The I Gave DAO

Token holders will have the opportunity to participate in governing the I Gave DAPP. Within one year after ICO and DAPP launch token voting will begin. The DAO will use a proposal contract to govern the I Gave DAO and DAPP.

Each token will represent one vote. Each proposal will cost a small amount of IGV that will be burned. You may vote against proposals.

## I Gave DAO: ERC-20 Token Contract

Name: I Gave Token
Symbol: IGV
Max Supply: 50,000,000,000
Decimals: 18
Exchange Rate: 1 Ether : 80,000 (+ 20,000 to dev fund)
Ether Spot: $1000 - will depend on market price

IGV will be ERC-677 compliant.

The role of the token is to provide a voting mechanism and incentive. Token holdings that are staked receive a monthly payment:

Stake = (1 / (total staked accounts))
Funding = 1% of all fundraisers

Payout = Stake * (Funding * .5)

All that is required to stake is holding over or equal to Total Supply / 100,000 tokens in a single account. Making the total possible stakers at any given time 100,000 accounts.

Staking rights will only be given for the first 100,000 IGV in any account. Double stake will not be rewarded for holding 200,000 IGV in a single account. Separate each stake into its own account.

### ICO

The ICO will be capped at 50,000,000,000 IGV. The exchange rate will be 1 Ether = 80,000 IGV. Accounting for dev funds, 1 Ether will create a total of 100,000 IGV. A successful ICO will create a minimum of 100,000,000 IGV (100 Eth). Contributors may withdrawal post-ICO if funding fails.

Funds given during the ICO will receive a one-time Founders ERC-721 token certifying the amount given to the DAO.

## Charitable Operation Funding Timeline

The ICO is capped at $50M USD based on a $1,000 Ether valuation. $50M will be the max goal as that will immediately cement the DAO as one of the largest charitable organizations in history. All funds will remain part of the DAO with the exception of the dev fund.

All ICO Funds will be distributed alongside the .5% of monthly fundraising fees. ICO fund disbursement will follow a timeline depending on the total funds raised. After ICO funds are spent, the .5% monthly funding fee will be the primary donation to charity.

| Goal | Ether Raised | Payout | Interval |
|---|---|---|---|
| Minimum | 100 Ether | 5 Eth | 20 months |
| Maximum | 50000 Ether | 50 Eth | 1000 months |

These projections are based on a static price of Ether. Which is very unlikely.

Optimistically, if the price goes up the amount may be lowered or interval extended. The goal of the ICO funds is to provide runway to incentivize organizations to use the technology.

Similarly, if a market crash or correction takes place the same mechanism may alter the schedule.

## Dev Fund

A Dev Fund will represent 20% of the total supply. For every 1 IGV created, .25 will be created for the dev fund. The majority of the fund will remain locked until token voting begins. Funds will be locked according a sliding scale.

| Eth Raised | Dev Fund Amount | Dev Funds Locked | Max Unlocked Dev Funds |
|---|---|---|---|
| <= 10000 | <= 2000 | 90% | 200 Eth |
| 10000 - 25000 | 2000 - 5000 | 95% | (200) + 150 Eth |
| 25000 - 50000 | 5000 - 10000 | 98% | (350) + 100Eth |

The unlocked dev funds will be spent transparently and leftovers will be burned. Progress accountability will be blogged weekly/monthly.

The release of dev fund will be controlled similar to Vitalik Buterin's recently proposed DAICO model[7].

## I Gave DAPP

A DAPP is a decentralized application. It is unstoppable Software logic that exists purely on a blockchain. It’s code is run and validated by miners on the network.

The I Gave DAPP provides charitable fundraisers a decentralized platform to raise Ether. Fundraisers use the DAPP to create campaigns, issue tokens, and withdraw campaign funds. Philanthropists purchase campaigns tokens from the DAPP to make donations.

Campaign tokens are ERC-721 compliant. Registered charities may include their Tax Id on their campaigns.

## I Gave DAPP - ERC-721 Non-Fungible Token Contract

Name: I Gave Asset
Symbol: I<3
Campaign: Set by the fundraiser.
Amount: Ethereum donation amount
Unit: The need being sought, E.g. ‘1 bottle of water’
Data: Optional number value, recommended: 0,1,2 for small, medium and large

Also referred to as donor tokens throughout this text. These are the tokens fundraisers issue that represents their need. Donors receive these tokens for contributing to a campaign. Each campaign sets a timeframe and a total supply to each campaign token. After the campaign ends or their supply runs out no more tokens of that type will ever be issued for that campaign again.

# Voting

Holders may interact with the voting contract or use the I Gave platform. A voting tool will exist that interfaces with MetaMask to make proposals. The voting contract will transition power and responsibility to the holders.

The voting contract enables holders to govern.

Holders may:
Vote to add an Ethereum address to the list of partners.
Vote to remove an address from the list of partners.
Veto a campaign.
Change the variables (govern) of the voting contract.
Change the variables (govern) the ERC-721 contract.
Commission development by adding developer funds to a developer wallet.

Voting will begin 1 year after launch or sooner.

# Security & Censorship

There will be attempts at abuse. A veto function can remove campaigns and tokens. An incubation period before campaigns go live can exist. Escrow can curtail frivolous campaigns. At release, these powers will be controlled by the founder. This will transition to token holders within a year.

# Launch

A limited testnet version of the ERC-721 token contract will exist at or before ICO time. Bounties will be posted and a security audit conducted.

The I Gave website will serve a dashboard front end for the I Gave ERC-721 contract.

# Roadmap

**December 2017 - Project Announcement**
**Q1 2018 - IGV DAPP Testnet Launch**
**Q2 2018 - IGV DAPP & ICO**
**Q3-Q4 2018 - Token Voting on testnet.**
**Q1 2019 - Control transferred to Holders.**

# Use Cases

## Individual Philanthropists

A Coastal community experiences a natural disaster. They are cut off from food, electricity, and freshwater. A retired truck driver hundreds of miles away starts a campaign. They fundraise necessities, and fuel their truck.

They issue tokens for 1, 5 and 10 gallons of diesel fuel, cases of bottled water and emergency food supplies. Each token is denoted in Ether according to its real-world cost.

## Communities in Need

Entrepreneurs in the third world can be threatened by donations. Blind charity can have a negative impact on small economies. Entrepreneurs and small towns can raise funds for materials and resources and lift themselves up.

## Research and Development

Jane is a cancer researcher and lab time is expensive. She is able to tokenize units of lab time – 30 minutes, hours, days. The entire world can fund Jane's lab time. To acknowledge the donors, she includes a short message from each donor in the preface of her research paper.

## Access and Events

A crypto-arborist is fundraising to save a forest. They decorate a living Christmas tree with Internet of Things enabled light bulbs. For every bulb on the tree, a token is issued. After purchasing a token, donors visit a site where the charity identifies the donor token and presents a controller app so they can change the light's color, brightness and add a short message.

Each year, previous donors have a spot on the tree and new donors sponsor a new tree.

## Virtual Reality

Projects like Decentraland are using Ethereum to build a public virtual world. While virtual reality provides a video game-like experience, it is possible to add digital property like a crypto kitty or an I Gave token to a virtual environment and interact with it.

It is entirely reasonable that a person in a virtual home, for example, could manifest their I Gave certificates in their virtual world. These virtual items would be unique, in that they have some form of provenance. They are not just randomly generated game code – they have cryptographic proof of their uniqueness.

## Large Organizations

Donor tokens can be used to detect and provide access to separate parts of your website. MetaMask enabled sites can check if the visitor possesses any donor tokens. This enables high-end user experiences for million dollar philanthropists. This can be done while maintaining the privacy of the user's identity.

## Local Impact

A baseball team needs jerseys and equipment. Each player's jersey is represented by a token. Each donor sponsors a player on the team. The team thanks the donors by creating their own team website. They use the web3 library to detect when a donor arrives and gives them updates on the team/player stats.

## Collectibles

One player falls in love with the game. They grow up to become a famous baseball player. They wear the same number from their first jersey their entire career. The original donor passes the token as an inheritance in their family, like a rookie baseball.

## Virtual Pet Adoption

A no-kill animal shelter needs to raise money to pay for healthcare, room and board for their animals. They issue a token for each pet. Donors adopt the pet by paying for a full year of care. While waiting for adoption, the shelter provides the donor with pictures and video of their adopted pet playing with caretakers.

## Philanthropic Organizations

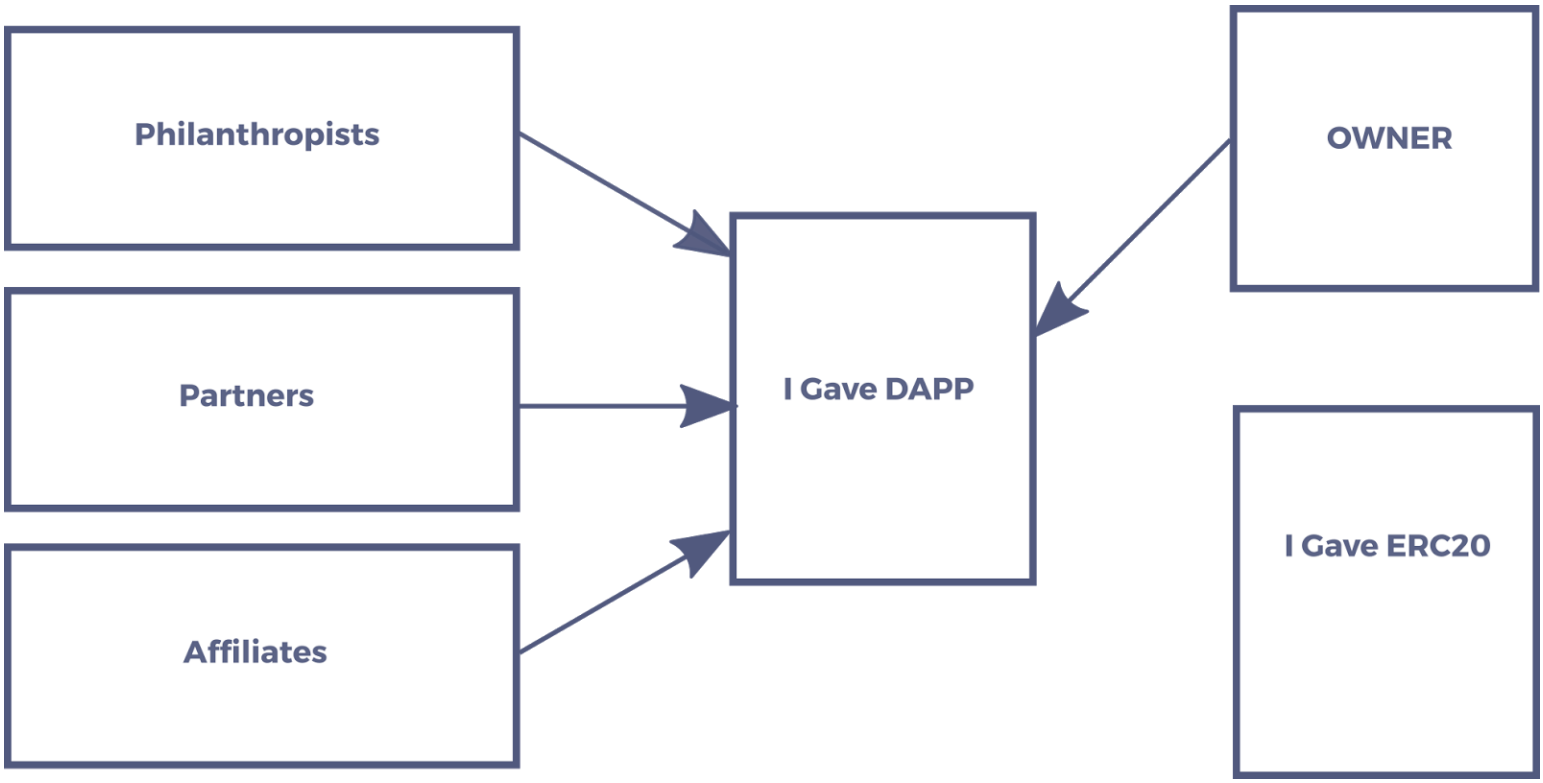
An uber wealthy philanthropist commissions a website that uses MetaMask for access control. They wish to remain anonymous but organize with their peers. Instead of usernames and passwords, they require you control over 100 Ether worth of donor tokens.

This gives the philanthropists greater control over their personally identifying information. Combined with existing security identity becomes a push transaction. It also restricts access to communication channels. Only those who can provide some cryptographic evidence take part.

They meet in secret, plotting, their identities unknown even to each other… to save the world.

# Addendum I: High Level Diagram

## Phase I - Launch




Philanthropists
  Make charitable donations purchasing ERC-721 tokens

Partners
  Create charitable campaigns and issue ERC-721 tokens to the campaign. Do not pay escrow fee.

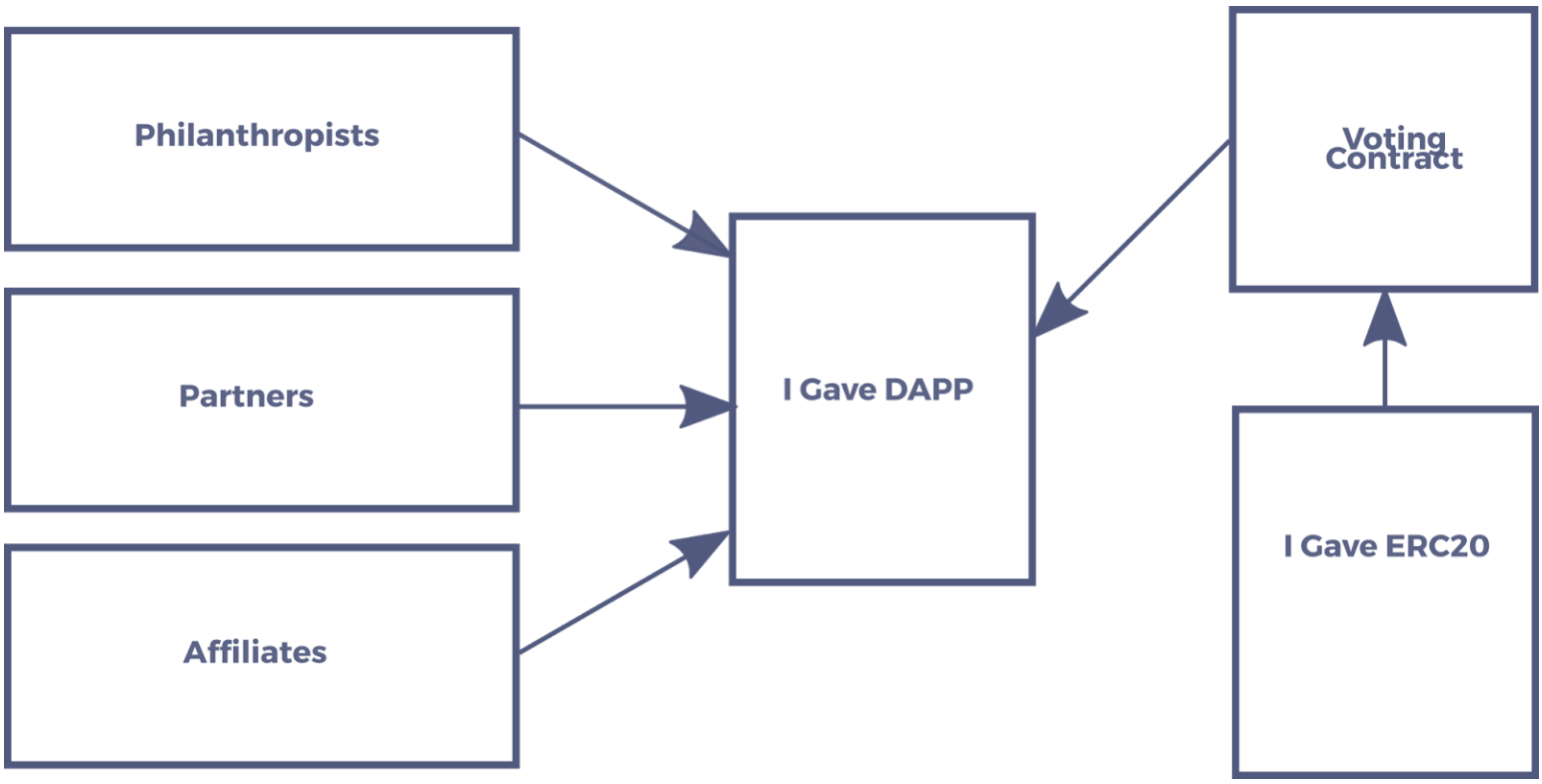
Affiliates
  Create charitable campaigns and issue ERC-721 tokens to the campaign. Pay escrow fee.

Owner
  Govern I Gave DAPP. Veto frivolous campaigns. Change escrow amount. Change owner. Add Partners.

I Gave DAPP
  Smart contract tracking Campaigns, tokens and tokens held by philanthropists.

I Gave ERC20
  Token contract for DAO governance.

## Phase II




I Gave DAPP Ownership changes control to a voting contract. Voting contract will accept proposals from I Gave ERC20 holders. Holders will have the same abilities as the owner in Phase I.

# Sources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