

Ribon Protocol Whitepaper

Draft version v.0.4

July 2021

Abstract

Ribon is a decentralized donation platform that allows donors to become promoters and, by doing so, encourages others to join them in a global culture of giving. This way it's possible to increase donations to charities, promote a culture of giving in the world and make people happier. The decentralized platform is governed by the community, and this whitepaper is a reader-friendly description of the Ribon protocol, which is built on Matic/Polygon, a layer 2 in Ethereum.

Introduction

Helping others makes us happier. While there is current scientific evidence regarding the positive effect that altruism has on our brain, different cultures have known this for centuries.

We can see the effects of the joy of giving by examining the amount donated annually around the globe. It's estimated that more than \$ 1.8 trillion is allocated to social projects yearly, and +70% of that is donated by individuals. By comparison, that's three times more than all the money that is spent on offline and online advertising combined in the entire world.

Even with all this donated money, we know this alone will not help us reach the UN Sustainable Development Goals (SDGs). Humanity needs to allocate much more resources annually in the next 10 years if we want to end poverty in all its forms, fight climate change, end hunger, achieve gender and racial equality, ensure quality education for all, and achieve the other ten goals as well.

Millennials and Generation Z are considered two of the most altruistic generations ever. We have a great opportunity to make significant progress towards global goals by managing to truly engage charitable donations in young people's lives. What we have seen are strategies for donations that rely on creating costly fundraising events and campaigns that are not optimized for a young digital audience, and because of that don't reach their full potential. Over the last 4 years, Ribon has mapped this scenario and optimized a strategy that resonates with a younger audience. The Ribon protocol doubles down on this strategy to bring scale to the donation ecosystem, offer the correct incentives to each participant and share our optimized donation experience for free.

Ribon is a decentralized platform that puts the act of donating into people's digital routine using a sponsored mechanism that allows anyone to give by following some simple steps. That's how the platform, led by the community itself, is able to increase fundraising for social projects, encourage a global culture of giving and make people happier.

Everything we do, we do to stimulate the greater good and improve the world. We believe that humanity can end extreme poverty before 2030.

Solution Overview

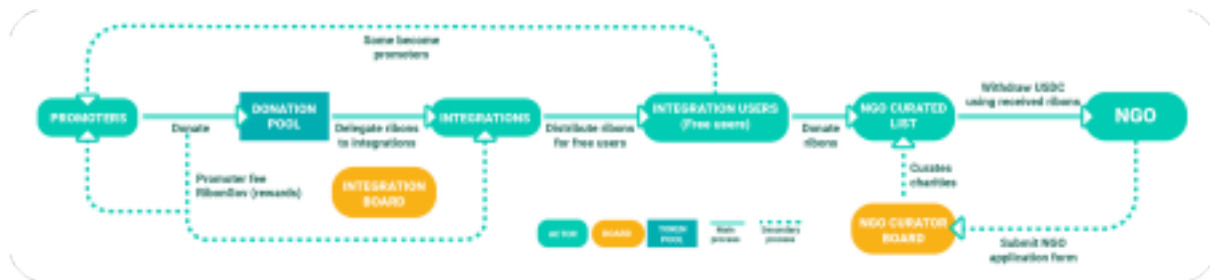
Ribon's decentralized platform allows regular donors to become promoters, thereby increasing their

initial donation and encouraging other people to donate as well. It is a unique and innovative framework, created by the Ribon team over the last 4 years and awarded by the Bill & Melinda Gates Foundation and by IDEO as one of the 10 most innovative platforms in the world in the area of everyday giving.

Through Ribon, **promoters** are able to connect with more than 40,000 monthly users to increase their donations by an average of 60%. Some of the best nonprofit organizations in the world have already received donations through the platform, such as the World Food Program, and big donors have participated as well, such as Impacto (Softbank's philanthropic arm).

This whitepaper details the next step in this journey - the launch of the RibonDApp (Decentralized Application) - and explains the three main processes in the application and how the community can govern it in this first version:

1. how we **increase** the **promoter's** donation (Donation Process);
2. how the **distribution** of ‘ribons’ happens via **integrations** (Integration Process).
3. and how the **selection** of listed **charities** happens (Charity Curation Process);



Ribon Protocol is built on Matic/Polygon, a layer 2 in Ethereum. That way we can have the mix we want in terms of security, a pungent ecosystem of tools, and transaction fees consistent with the micro-donations made on the platform.

Disclaimers:

RibonDApp is open source and can be used in any way. Those who would like to see a more loving world and a more pervasive culture of giving are more than invited to join our community, talk to us and find out how we could do something better together.

This whitepaper details Ribon Protocol's processes. Ribon DApp (our current implementation) functions as integration of Ribon protocol but is not eligible for any of the rewards and incentives listed in this whitepaper. The Ribon protocol and Ribon DApp repositories were created by Ribon Holdings and will progressively be released into community control.

Integration User Perspective (example)

A customer (**integration user**) receives online assistance on their credit card (**integration**). The attendant helps the customer with the service and at the end of the assistance gives a “donation voucher” as a reward for the customer.

By clicking on the voucher link, the customer can make a choice to donate a day of basic health for a person or a day of literacy for a child. This donation has already been paid by a **promoter**. The **customer - integration user** - logs into her email, clicks to donate, and, just like that, it was possible to help a person and the donation was registered in her newly created profile (**new integration user**).

As a user, she can make other donations for free by regularly logging into the Ribon App, performing routine activities at other integrations (such as playing her favorite game or answering questions from the HR department at her job), and interacting with other donors in groups.

She understands that the donation was funded by other people (**promoters**) and decides to proceed to the next step: become a **promoter** herself. From this point on, she commits to donating \$20 monthly, and like this encourages others to follow the same path. This is how her initial donation grows.

In the first week after her subscription, she watched as 100 other users decided which charities her \$20 should be transferred to. Since a portion of those users became promoters as well or made direct donations to the charities, her initial donation was increased to \$23 (calculation explained in “Donation Process”, section 9).

Ribon is the only place where a promoter can increase their initial donations without inviting other donors personally. Ribon is about giving others an opportunity to feel good by making donations so that some might join to donate even more.

Glossary of Terms

Promoters: donors that want to be part of the greater good and champion a culture of giving. By incentivizing other people to donate, they watch their initial donation grow and impact more people in need. Promoters can be compared to paying users.

Integrations: any platform that uses ribons (our tokens) as rewards for tasks that their users (‘integration users’) complete. It can be games that reward users for each level up, rewards from research companies for completing a form on the web, e-commerce that rewards users for writing a product review, and many other applications. That way, integrations can improve their brand awareness, increase user experience, reduce user churn and consequently increase revenue.

Integration Users: they collect and donate ribons to charities through integrations. Sometimes we call them ‘free users’, as their donations are sponsored by promoters. Users can always make direct donations from their own pocket to any charity on the platform without paying any fees. Some of them become promoters as well.

Charities: non-profit organizations that operate independently of any government, whose purpose is to address a social or environmental issue. They receive donations via Ribon protocol.

Charity curator board: responsible for analyzing new charities and managing the Curated Charity List. It is composed of members elected by the RibonDAO (Distributed Autonomous Organization) community. Their number, term period, rewards, and other governance details are decided by the RibonGov community.

Integration board: responsible for analyzing new integrations and managing the distribution of ribons for all integrations. It is composed of members elected by the RibonDAO community, using RibonGov to vote. Their number, term period, rewards, and other governance details are decided by the RibonGov community.

Ribons: a stable coin pegged to the USDC and donated by promoters, which users donate to selected

charities. Only selected charities can redeem USDC from the donation pool by using ribons. Ribons are always locked into our smart contracts, so there's no way users or integrators use or sell them in the open market or at any other protocol.

Ribon Token: it represents our path to decentralize the governance of our community. RibonGov holders can propose and vote on the next changes in Ribon protocol and by doing so build a better future together with a stronger culture of giving. The amount of RibonGov that will be minted and distributed, and how the governance process will run, will be announced when we mint the first RibonGov.

USDC: a stable digital coin that is pegged to the United States dollar and runs on the Ethereum, Stellar, Algorand, and Solana blockchains. USD Coin is managed by a consortium called Centre.

Donation Process

This process shows how a promoter can incentivize other people to donate without the need to invite them personally, make a campaign or create a fundraiser. The Ribon protocol allows a promoter to increase his donation amount and encourage a global culture of giving - the most innovative aspect of Ribon.



Donation Overview

Promoters submit one-time or recurring donations to the **Donation Pool**. Donations can be done using any token. When a donation happens, the following steps are triggered:

- 1) Donations are swapped to USDC and sent to the donation pool;
- 2) A fee is charged, swapped into RibonGov, and sent to the promoter and the integration involved in the donation;
- 3) The ribon tokens are issued proportionally to the donation;
- 4) The ribons are distributed for integrations (see details in 'Integration Process' section);
- 5) Integration users can donate ribons to selected charities;
- 6) Selected charities exchange ribons received from integration users for USDC and can withdraw money from their wallets;
- 7) Some integration users become promoters and make new donations. Ribon protocol calculates how much each promoter's donation has increased based on other donors' contributions.

Donation Details

We have listed the details of each of the steps described in the donation overview: **1) As promoter**

donations can be made using any token, we need to convert the original token to a stable coin (USDC). For that, we initially chose the **Balancer Protocol** to make the swaps, as it is also built on Polygon like Ribon. Standard balancer fees apply. If the swap fails, the tokens are returned to the promoter as an uncompleted Balancer transaction. After swapping to USDC, the funds are sent to the donation pool in wallet 0x3358axxxxxx*:

- a) We chose to make the swaps, even though it costs a fee, in order to filter out tokens with very low liquidity, which would make it hard for the NGOs to withdraw. b) Another reason for making the swaps is to shield the NGOs from crypto volatility. That way the NGOs feel they are never losing money, although they may also be forfeiting some gains. This is important so we can attract NGOs to the platform that are not used to trading cryptocurrencies, and allow for easier adoption.
- 2) Once the donation is in USDC, we make a new swap for the Ribon donation fee (more details in the Fee Structure section). This swap is done using liquidity pools at Balancer to convert the USDC fee into RibonGov token. The cheapest path to complete the swap is automatically used. RibonGov is sent to the community treasury wallet 0x5a4g04xxxxxx*. This RibonGov fee will be distributed according to this rule:
 - a) If the promoter donation is not referred by any integration, the promoter gets 50% of the RibonGov fee and 50% goes to the community treasury;
 - b) If the promoter donation is referred by an integration 50% of the RibonGov fee goes to the promoter and 50% goes to the referral integration that originated the donation.
- 3) For each USDC deposited in the donation pool, 1000 ribons are created;
- 4) Promoters get back 20% of the ribons generated by their donation:
 - a) This is done to incentivize each promoter to experience a donation using the platform and engage them as recurrent donors.
- 5) The other 80% of the ribons that are created are distributed to the integrations. At first, this will be done by people elected by the RibonDAO using RibonGov tokens to vote. Based on our experience some criteria that should be used to determine the amount (or proportion) of ribons that each integration get should be:
 - a) How much the integration is bringing in new donations (direct donations and new promoters);
 - b) For new integrations, the volume of users is a great indicator. The more users an integration has, the more promoters it can convert and greater is the awareness brought to the platform;
- 6) As an incentive to participate in the RibonDAO community, promoters and integrations receive RibonGov tokens from the community treasury proportional to their donation: a) The awarded RibonGov has 12-month vesting. During this period it may be used for votes and decisions in the platform, but can not be sold.
- 7) Integrations build rewards systems and distribute ribons to their users. Through smart contracts, ribons are delegated to integration wallets after leaving the genesis wallet. The distribution of ribons to integrations is explained in the 'Integration Process' section. Integrations work as a growth channel for engaging new integration users, converting some of them to new promoters, and retaining active users. The charities receive ribons from the donations of these integration users directly into their wallets:
 - a) Since ribons are locked inside our smart contract, ribons can't be transferred from an integration wallet to any other wallet besides that of the charity.
- 8) Only the selected and validated charity wallets are able to redeem USDC from the donation pool using the Ribons received. After the withdrawal, the ribons returned by the charity are burned in the donation pool:

a) There is no minimum amount of ribons received by the charity to withdraw USDC. 9) The protocol distributes ribons created by each promoter proportionally to the maximum number of integrations possible. When a free user makes: (1) a direct donation or (2) becomes a promoter by donating to the donation pool (new user donation), all the promoters that sponsored ribons for this user in the last 30 days are considered influencers on that donation. To measure donation increase for promoters, we use the following formula:

$$\text{a) Promoter donation increase} = \frac{\sum (\text{New user donation} * \text{Ribons sponsored by the promoter over the last 30 days})}{\text{all sponsored ribons donated by the user over the last 30 days}}$$

i) \sum represents the sum of all new user donations influenced by a promoter

Reminder

Various parts of the process should be largely decided and optimized by the RibonDAO community, for example:

- *Liquidity Pools and DEX's to be used;*
- *Fees to be charged;*
- *USDC / ribon exchange rate;*
- *Amount of ribons returned to the promoter;*
- *Existence and size of reward in RibonGov for promoters and integrations.*

Integration Process

Integrations are Ribon's main growth channel and an excellent user retention tool. By distributing ribons funded by promoters, the day-to-day routine of donating is possible. . It is also where we convert new promoters and increase the amount that the platform donates.

Integrations distribute ribons for every action performed within their platform. They are varied and diverse, and each integration can customize the experience to suit its specific needs, both in increasing some business metric but also as a reward to loyal customers or for tasks that are important on the integration platform.

Integrations benefit from engaging with a charitable cause, specifically if it is one in tune with the company strategy.

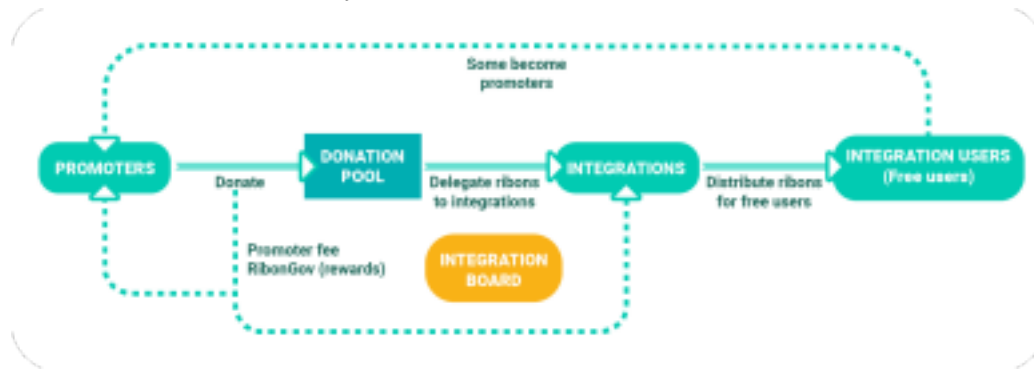
Integration examples:

- A survey company may distribute ribons to respondents to its surveys. By notifying them that there will be a “free donation voucher” for respondents at the beginning of the survey, it can increase the completion rate - In a successful case at Ribon a company managed to reduce the cost of surveys by 30% (Case 121 Labs) with such a strategy;
- An e-commerce company can distribute ribons at the end of each purchase and also in the delivery process at each notice by email or message as a way to increase satisfaction with the purchase and delivery process;
- A mobile game can distribute ribons at the end of each level-up to increase user retention.

Integrators spend nothing on the Ribon platform, and there is no cost to either launch or maintain an integration. On the contrary, several integration users/customers can become promoters and, when that

happens, integrations receive rewards in RibonGov so they can actively participate in decisions on Ribon protocol evolution.

Of course, there is an implementation effort to use the platform, but we try to minimize this by providing the Ribon DApp source code. Ribon DApp source code is our best awarded white-label implementation of the donation platform, via which integration can get up and running very rapidly. Integration is free and indeed encouraged, to customize the Ribon DApp experience to its needs and share that with the Ribon community.



For a platform to launch an Integration using the Ribon protocol, these steps must take place:

- 1) Integrator implements integration using Ribon DApp open source code;
- 2) Integrator receives integration board (approval process) permission to start ribon distribution / use;
- 3) The ribons are delegated to the integration;
- 4) Integration free users can now allocate ribons to listed charities;
- 5) Integration board periodically validates integration activity;
- 6) Integration board approves RibonGov token reward distribution in proportion to each integration user base engagement and new promoter generation.

The following text details each of the steps:

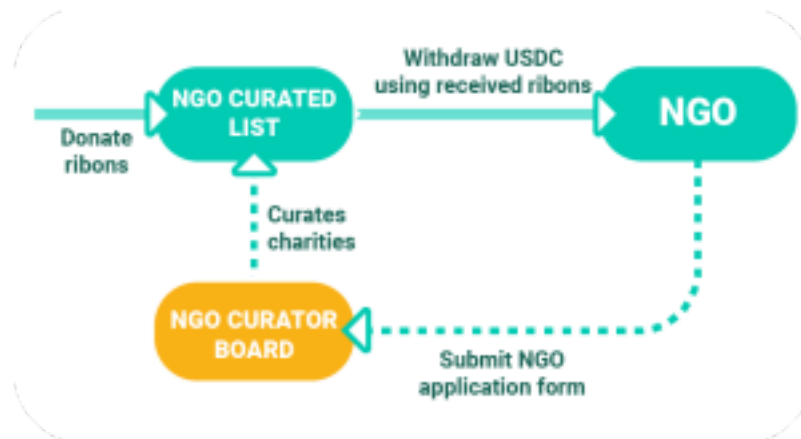
- 1) The new integration may have been initiated by the integrator after hearing about Ribon, or through commercial or marketing processes. Because Ribon DApp is open source, it is possible to adapt it in the most creative ways to suit the integrator's needs. Integrations can use code from RibonDApp to streamline the implementation of the integration, which brings, for example, the front-end of a fluid donation process (the most advanced the community has to offer).
 - a) Invitations for new integrations and rewards incentivize new integrations, which aim to expand the platform, is a decision of RibonDAO (community).
- 2) In order to avoid fraud or misuse of the ribons that are distributed to integrations, an integration board of 5 members will be elected, which decides the amount or proportion of ribons to be sent to each Integration.
 - a) The members of this board are elected by the RibonDAO community and can be exchanged by the same community at any time.
 - b) The Board decides whether to release ribons for a new Integration and manages Ribon distribution for the existing Integrations based on their performance. c) It is mandatory that the rules, data, and codes used to decide this distribution be shared with the community, as well as any decisions made by the Board.
 - d) The creation of the board is considered the first step towards decentralization (currently this is done by the team at Ribon), and will evolve in the future by decisions of the

RibonDAO community.

- 3) The ribons issued by Promoters' donations are delegated to Integration's wallets. a) Ribons are delegated whenever the donation pool reaches a predetermined amount of USDC \$1,000, an amount that can be adjusted by RibonDAO community as the platform grows.
b) Ribons are delegated to the Integration wallet rather than sent to avoid trading on ribons, which would cause price volatility and affect the Promoter donation amount. c) The Board can change ribon proportion distribution based on each Integration's ability to consume their ribon allotted quota.
d) After 90 days ribons that are delegated to an Integration but where not used are moved back into the donation pool. This is done to avoid hoarding and make sure that donated money reaches the charities.
- 4) The ribons are made available to users to be distributed to selected charities. Two main options are possible:
 - a) Ribon collection for later donation, a 2 step process to the donation. Where Free Users may collect ribons in various contact points and later choose how much to donate for each Charity. At which point ribons are moved to the Charity wallet.
 - b) A donation to a Charity, a single-step donation where a fixed amount of ribons is moved to the Charity wallet.
- 5) In Ribon's 4 year experience running a donation platform some of the important aspects that should be considered to evaluate an integration are:
 - a) Quality of integration implementation, both technical and communication with the integration user base;
 - b) The volume of integration users that were engaged with donations benefits both integration itself and the donation platform;
 - c) The volume of new promoters brought in by the integration. That is what makes the donation platform value growth over time;
- 6) Integrations receive 2 types of rewards:
 - a) Their allotment (proportion from the donation pool) of ribons increases with the amount of Free Users that are engaged.
 - b) They receive RibonGov tokens each time they bring in a new donation from a Promoter to the donation platform. This RibonGov fee is collected at the time of the donation creation and is distributed according to this rule:
 - i) If the promoter donation is not referred by any integration, the Promoter gets 50% of the RibonGov fee and 50% goes to the community treasury;
 - ii) If the promoter donation is referred by an integration 50% of the RibonGov fee goes to the Promoter and 50% goes to the Referral Integration that originated the donation.

Charity Curation Process

The process of registering a social project and participating in the Ribon protocol happens through the following steps:



- 1) Any project can complete the registration form to apply to participate on the Ribon platform. A charity can use the RibonDApp interface and follow the registration steps.
 - a) The form to do so will always be available free of charge on the Ribon DApp; b) Some integrations may implement that part of the interface, but that is not required to be an integration.
- 2) A board of elected representatives from the RibonDAO community validates the Charity registration and allows its entry into the platform, and from that moment, the nonprofit organization belongs to the curated charity list.
 - a) The board authenticates the charity contact and financial information (wallet) and confirms the veracity and availability of other information such as budget and social impact reports;
 - b) It's important to say that the curators will not do social impact analysis of the projects, which is a huge workload in itself. Usually, it requires a local presence where the charity operates and there are hundreds of hyper-qualified organizations around the world for this role;
 - c) The RibonDAO community decides who and how many board members there will be, the number of rewards in RibonGov they will receive, and how long their term is; d) In addition, board members have an obligation to consistently post reports to the community, explaining the basis for their decisions.
- 3) When an NGO joins the curated list, its social project gets a public profile on the Ribon platform. Ribons can only be donated to social projects listed on the curated NGO list. a) Integrations are free to choose which charities from the curated NGO list they will use in their implementation;
 - b) Each NGO can monitor its current balance and ask for withdrawal using Ribon DApp.
 - c) Direct donations can only happen to NGOs on the curated list.
 - d) Focused promoters must choose a charity from the curated list.

Fee Structure

Promoters donations: 7% fee

Fees from promoter donations are charged to:

- 1) Fund improvements in the Ribon protocol;
- 2) Fund improvements in the Ribon DApp experience;
- 3) Give incentives to protocol participants.

The fees are converted into RibonGov token using the cheapest swap cost within all the liquidity pools where RibonGov is listed. The RibonGov token is then transferred to the promoter and the integrations that participates in the generation of fees.

All the fees are controlled by the community via votes on RibonDAO. These values are initial suggestions based on our experience and market knowledge.

Conclusion:

We believe that the donation platform of the future will be decentralized, and we're becoming that platform.

Ribon started as a centralized company seeking market fit and great network effects, and now it's on the path to becoming a progressive and decentralized platform where all participants have aligned incentives in spreading altruism.

Instead of directly inviting other people to donate with you, a user can simply become a promoter on Ribon and that will happen automatically. Ribon harnesses the power of goodness and human cooperation that people experience when making a donation, which in turn motivates others to adopt a spirit of giving. We believe this will be a game-changer in the philanthropic ecosystem.

Ribon can be one of the key actors to help end extreme poverty in the world before 2030, bring crypto to the masses, and bring greater joy and meaning to humanity in the process.

References

'Does Giving Make You Happier? Or Do Happier People Give?' by Utah State University (College of Science)

<https://www.usu.edu/science/discovery/fall-2017-stories/does-giving-make-you-happy#:~:text=A%202010%20study%20found%20%E2%80%9Cpeople,we%20freely%20choose%20to%20give.>

'The warm glow of kindness is real, even when there's nothing in it for you' by ScienceDaily: <https://www.sciencedaily.com/releases/2018/09/180927105720.htm>

'Measuring the World's Most Generous Countries' by U.S News:

<https://www.usnews.com/news/best-countries/articles/2019-12-20/the-worlds-most-generous-countries>

Estimate based on the size of the American donation market and world and American 2018 GDP. According to Giving USA 2019, Americans gave \$427.71 billion to charities in 2018: <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>

'The Ultimate List Of Charitable Giving Statistics For 2018' by NP Source:

<https://www.google.com/url?q=https://nonprofitssource.com/online-giving-statistics/&sa=D&source=editors&ust=1623341446622000&usg=AOvVaw1tm6DbPP5PC84w4mq1acc>

'Advertising media owners revenue worldwide from 2012 to 2024 (in billion U.S. dollars)' by Statista:

<https://www.statista.com/statistics/236943/global-advertising-spending/>

‘New Report Estimates SDG Financing Needs for 59 of the World’s Lowest-Income Countries’ by Sustainable Development Solutions Network:

<https://www.unsdsn.org/new-report-estimates-sdg-financing-needs-for-59-of-the-worlds-lowest-income-countries#:~:text=Achieving%20the%20SDGs%20in%20low.billion%20per%20year%20through%202030.>

‘Brazilian socialtech Ribon is recognized among the most innovative in the world by the Bill and Melinda Gates Foundation’ by LABS:

<https://labsnews.com/en/articles/technology/brazilian-socialtech-ribon-is-recognized-by-gates-foundation/>

‘Engaging the Next Generation of Philanthropists’ by CCS Fundraising

<https://ccsfundraising.com/engaging-the-next-generation-of-philanthropists/>

Ribon’s Official Website:

<https://ribon.io/en/>

Ribon App:

<https://app.ribon.io/>

‘The Maker Protocol: MakerDAO’s Multi-Collateral Dai (MCD) System’ by MakerDAO: <https://makerdao.com/pt-BR/whitepaper/#introduction>

‘Uniswap v2 Core’ by UniSAWP:

<https://uniswap.org/whitepaper-v3.pdf>

‘Balancer: Automated portfolio manager and trading platform’ by

Balancer: <https://balancer.fi/>

‘USDC: the world’s leading digital dollar stablecoin’ by Circle:

<https://www.circle.com/en/usdc>

‘Costs of Fundraising Cost’ by Affinity Resources:

https://www.affinityresources.com/pgs/articles/fundraising_costs.html

‘Yes, Responsible Companies Perform Better’ by Shel Horowitz:

<https://inbusinessphx.com/in-business/yes-responsible-companies-perform-better#.YMem0fIKiUk>