The PairCoin® Initiative

A Cryptocurrency for charitable givers

White Paper

V4.2

®

U.S. Patents Pending:

62/749,770: SYSTEM AND METHODS FOR CHARITABLE GIVING USING BLOCKCHAIN CRYPTOCURRENCY

16/120,812: SYSTEMS AND METHODS FOR HYBRID BLOCKCHAIN CONTROL

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1. The Problem

Charitable giving in Bitcoin[1] is a growing phenomenon[2]. Notwithstanding present solutions (see section, 'Competition'), charitable givers cannot efficiently make direct, transparent[3], planned cryptocurrency[4] donations to charity without the giver or the recipient, first exchanging it into fiat currency[5]. Cashing out of cryptocurrencies has unnecessary financial and tax consequences which limit the charitable giver's options.

2. The Solution

PairCoin introduces a patent pending, hybrid cryptocurrency that fulfills existing and upcoming needs of donors, securing and efficiently managing charitable contributions. The giver's share remains wholly decentralized, while the charitable portion is centralized with extensive customer management and support.

2.1   The Charitable Achievement

PairCoin has a simple mathematical path to create millions of dollars for charity. If everyone who acquires a PairCoin donates an average of 10% to charity, that sum will compound and aggregate with every new acquisition/donation. Let us demonstrate this using the 'lifetime' of 'one' PairCoin[6]. For demonstration purposes, we will use an ultra-

> One coin is mined/purchased by Jack, with 90% of the PairCoin privately held by Jack and 10% donated to a charity designated by Jack. After some time, Jack sells his 90% on an exchange which supports PairCoin and receives $0.90 in dollars or another cryptocurrency minus any exchange fee.
>
> Jill bought the .90 balance from the same exchange designating 10% to her alma mater. When Jill eventually sells her PairCoin to John, Carrie, Darrel, etc. the same scenario is repeated until 'this' PairCoin private ownership capacity is 100% depleted.

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[1] http://money.cnn.com/infographic/technology/what-is-bitcoin/

[2] http://fortune.com/2018/02/14/bitcoin-charity-donations-soared-10-fold-last-year-fidelity-says/

[3] https://blockboard.net/blockchain-charity-takes-center-stage-at-world-investment-forum-2018/

[4] https://www.fool.com/investing/2018/03/11/what-is-cryptocurrency.aspx

[5] Bloomberg Business Week, 10/22/2018, Colleges are Baffled by Bitcoin

[6] PairCoin, like Bitcoin, and other crypto's have no one-on-one correlation between a "coin", a blockchain block and a fiat currency. Owning 'one' Bitcoin is a virtual concept in which a single wallet address has accumulated the sum of 1.0, during one or more transaction blockchain ledger records. The same is true for Jack and Jill in our illustration above. Likewise, a PairCoin does not have a 'lifetime', because a charity divests a PairCoin by selling it to others, who as part of their purchase, buy a percentage on behalf of a charity.

conservative estimate which assumes that our PairCoin will be worth, on average, one U.S. dollar per PairCoin over the 'life' of the PairCoin project. We'll also assume that the average donation share is only 10%.

Extrapolating this to the 84,000,000 PairCoins to be created, a minimum of $84,000,000 will be donated to charity over the life of the project. Once PairCoin is accepted by the philanthropical community as a viable store of value and charitable transfer vehicle, and/or if the average charitable share is greater than 10%, the charity generated by the total of all PairCoin purchases will be many multiples of the total represented.

2.2   Tax Advantage Over Donation to Charitable Trust

The dynamics of cryptocurrency are fast-paced and far ahead of financial and tax regulations. PairCoin provides the potential opportunity for charitable givers to structure their PairCoin charitable deductions on either a cash basis or the equivalent of an accrual basis, i.e. date of donation when the charity receives the funds, creating a donation vehicle which is more powerful than a donor-advised fund (DAF). A donor advised fund is a separately identified fund or account that is maintained and operated by an IRS 501(c)(3) organization, also called a sponsoring organization.

The unique and flexible structure of the PairCoin Foundation may allow it to act as a standard DAF and as the equivalent of an extended-release charitable fund. A donor cannot use a DAF to stagger tax-deductibility of donations over time. Likewise, when a donor transfers money to a charitable trust, the tax-deductible event occurs immediately upon transfer from his or her possession.

PairCoin's charitable component can be effective immediately or later, as specified by the donor. PairCoin's use of the standard Bitcoin scripting feature to restrict gifts to a future date, presents a strong argument which may be made, such that timed donations using PairCoin may allow for tax-deductibility to occur at the time in which the donation-restriction has expired.

> DAF/trust example: Kareem gives $4,000 to a DAF or a trust on January 1, 2019, designating the United Way as their recommended donee. The trust is instructed to transfer $1000 to United Way each successive January 1st for the following four years.

> PairCoin example: John buys 40,000 PairCoins on January 1, 2019, designating 10% or $4000 for the United Way. A time restriction is selected for 1000 PairCoins to be redeemable each successive January 1st for the following four years.

In the case of a trust, the donation was divested by Kareem AND acquired by a legal entity (the trust) on January 1, 2019 which triggers the tax-deductible event. Any peripheral terms set by the trust are not considered significant by most tax jurisdictions.

In the case of the PairCoin donation, the donation was neither divested by Joh, nor acquired by any legal entity at the time of the donor's gift. The donation is a legend entry in a blockchain cloud; in virtual limbo until after each designated release dates AND after the United Way requests its transfer to them.

Although a strong argument can be made that John can actually stagger his charitable deduction over four years, the actual tax treatment of PairCoin will only be determined after the first test-case goes to the first tax jurisdiction. It may reasonably be expected to be argued to higher courts until legal precedents are created.

3. Introduction

PairCoin is an innovation in both blockchain and cryptocurrency technology. It is the first hybrid cryptocurrency[7] that has within in it two ownership components, a primary owner and a shared charitable owner. The PairCoin organizations also have two architectural components, one which is wholly decentralized and a second which is partially centralized. We have named the cryptocurrency PairCoin to represent the partnership between the private owner and his/her charity.

The primary owner's portion of the coin works just like Bitcoin. It is decentralized, privately owned and managed by an anonymous wallet. The shared portion of the coin works differently than Bitcoin. Its centralized, fully transparent, redemption requirement process ensures that only the true intended charitable recipient is the beneficiary of the coin. Partial centralization also provides a patent pending[8] solution to the pressing 51% hacking problem (see 'Risk Management') mitigating the potential need to undermine the PairCoin using a hard or soft fork resolution in the eventuality[9] of a hack.

The centralized redemption process is overseen by the PairCoin Foundation to confirm the stored ownership hash on the decentralized blockchain and to manually vet the recipient organization's credentials. This provides an additional protection for the charitable owner.

3.1   PairCoin's Philosophy on Cryptocurrency

Fiat[10] currency valuation is based on the 'faith and credit' of a sovereign state. Equity share price is based upon 'market' valuation. The valuation of both fiat currency and equities fluctuate internationally by the minute; many experiencing as high a volatility as cryptocurrencies. This is based upon supply and demand and *not any intrinsic value of the currency or equity.*

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[7] US Patent Pending - 62/749,770: SYSTEM AND METHODS FOR CHARITABLE GIVING USING BLOCKCHAIN CRYPTOCURRENCY
[8] US Patent Pending - 16/120,812: SYSTEMS AND METHODS FOR HYBRID BLOCKCHAIN CONTROL
[9] The Disturbing Inevitability of Cyberattacks, https://www.wsj.com/articles/the-disturbing-inevitability-of-cyberattacks-1503355170
[10] https://www.investopedia.com/terms/f/fiatmoney.asp

Due to current cryptocurrency's equally valid market valuation, we firmly believes that cryptocurrency represents true value, no less than a fiat currency or equity.

We also believe that cryptocurrency will continue its journey to becoming a premier international currency, notwithstanding governmental attempts at regulation. We also believe that cryptocurrencies are incompatible with existing financial legal and tax models, such as currencies, commodities, equities, assets, etc. This is like forcing a circle into a square peg.

The PairCoin team will benefit the broad financial markets by seeking new models, business practices and technologies which fit and expand this new crypto world. PairCoin seeks to remedy several Bitcoin's shortcomings, create a hybrid methodology for charitable giving and to invent a desirable and trusted, centralized component which will utilize our patent-pending technology to protect PairCoin from hacking.

Above all, we seek to create value for the world's charities which seek to heal the sick, feed the hungry, relieve poverty, educate and uplift mankind mentally, morally, or physically. Our team is determined to promote PairCoin to meet these goals and to seek like-minded patrons and motivated partners, to participate in the creation, purchase and exchange of PairCoin. Erstwhile bitcoin fortune-seekers may prove to be the future's greatest philanthropists by sharing via PairCoin.

Our team does not to impose any personal perspectives on charitable-giving priorities. PairCoin owners decide which charities they choose to support.

4. Governing Bodies

4.1   State Regulation

PairCoin LLC is organized in the State of Wyoming and will manage a cryptocurrency exchange to serve customers who are regulated under U.S. laws governing exchanges, fiduciaries and banking.

PairCoin Foundation Inc. is incorporated in the State of Wyoming as a not-for-profit corporation. IRS form 1023 will be filed within the 27-month application deadline. It will manage the redemption process for charitable recipients. It will also manage one or more donor advised crypto-funds to facilitate our donor-customers charitable requirements.

4.2   Federal Regulation

The State of Wyoming[11] has expressed its desire to attempt to overrule the Federal government wherever they believe it has exceeded its statutory powers. Notwithstanding these efforts, PairCoin assumes that it will under the regulatory scrutiny of the SEC[12], FinCen, and the Department of Justice. PairCoin will comply with all required filings and reporting. See section entitled, 'ICO Filing' for detailed information on SEC filing plans.

4.3   International Exposure and Regulation

Foreign corporations will be organized in one or more crypto-friendly countries[13] to operate broader cryptocurrency exchanges than those permitted to be operated by our domestic companies. We are currently in discussion with a Bahamas based organization who has received approval to execute ICOs and maintain a cryptocurrency exchange.

This will facilitate serving citizens, who are not subject to U.S. and/or similar regulations regarding crypto investments and ICOs. PairCoin is also considering organizing a cybersecurity group in Israel to take advantage of their easy business environment and global leadership in cybersecurity start-ups[14].

5. Organizational Structure

Wyoming is poised to become the nation's most crypto-friendly state. These regulations are evolving and substantively uncertain.[15] At this time, Wyoming appears to be our best choice of corporate venue in the United States[16] and the Bahamas internationally.

PairCoin Foundation, Inc. is incorporated as a Wyoming not-for-profit corporation. Its purpose as stated in the articles of incorporation, "cryptocurrency related activities exclusively for charitable purposes, including making distributions to exempt

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[11] https://www.forbes.com/sites/rachelwolfson/2018/03/13/u-s-state-of-wyoming-defines-cryptocurrency-utility-tokens-as-new-asset-class/2/#6337f1c56d45

[12] A statement was issued by the SEC Chairman on June 7, 2018 differentiating between protocol tokens, security tokens and utility tokens. See section entitled, 'PairCoin Legal Definition'
[13] http://nomadcapitalist.com/2018/08/19/most-crypto-friendly-countries/
[14] According to the World Bank, Israel ranks very highly in terms of both ease of starting and doing business. http://www.doingbusiness.org/data/exploreeconomies/israel. Disclosure: The author of this document has a vacation/retirement home in Israel.
[15] The SEC initially made it clear that cryptocurrencies and tokens offered through Initial Coin Offerings (ICOs) are "*securities*," and therefore illegal unless registered through the SEC. Subsequently, a district judge backed the U.S. Commodity Future Trading Commission in defining cryptocurrencies as "commodities." Judge Jack Weinstein from a district court in New York ruled that, "virtual currencies can be regulated by the Commodities Futures Trading Commission (CFTC) as a *commodity*."

[16] *https://www.ethnews.com/wyoming-legislature-goes-all-in-on-blockchain-cryptocurrency-bills*

organizations under section 501(c)(3). It shall not carry on any activities not permitted to be carried on by a corporation exempt from federal income tax under section 501(c)(3) of the Internal Revenue Code." It will serve as a fiduciary custodian for charitable institutions holding PairCoin.

PairCoin LLC is organized in Wyoming and will employ the teams developing and securing PairCoin and as a limited digital asset exchange. It will be regulated by the State of Wyoming and will observe all fiduciary and capital reserve, cybersecurity, and banking compliance standards and requirements as set forth by the State of Wyoming and the Federal government.

PairCoin International Ltd will be organized to more freely serve non-U.S. citizens who desire to participate in PairCoin charitable contributions[17] without the regulatory encumbrances which exist in the U.S.

Although the three companies will be working together almost exclusively during the formative years, the corporations will not comingle funds in any fashion. Each company plays its own role in promoting PairCoin. It is anticipated that the companies will contract labor and responsibilities to each other at prevailing rates for such services.

To provide greater clarity and a global picture of the PairCoin product, this document will refer to all 3 organizations as, "the company", "the companies" or in the possessive, "the company's", notwithstanding that they are wholly standalone organizations.

5.1   PairCoin Tax Oversight and Audits

Any organization involved in cryptocurrency is engaged in high-risk, high profit/loss activities on many fronts. PairCoin management is committed to maintaining all activities above-board, maintaining full transparency to all stakeholders.

We anticipate annual audits by multiple municipalities, due to the inevitability of taxing authorities perceiving an 'incestual' nature in the financial interactions between companies here and abroad, and between not-for-profits and for-profit corporations. All PairCoin companies will engage the highest caliber accounting expertise available and proactively prepare for this projected scrutiny.

5.2   Division of Responsibilities in the Companies

PairCoin Foundation, Inc.	PairCoin, LLC	PairCoin International Ltd.
Fiduciary responsible for management of charitable donations to PairCoin	Will manage a limited and centralized, domestic exchange to facilitate	Will manage a broad overseas exchange to facilitate redeeming PairCoin and many

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[17] According to the World Bank, Israel ranks very highly in terms of both ease of starting and doing business. http://www.doingbusiness.org/data/exploreeconomies/israel

Foundation, Inc., charitable trusts held on behalf of donees and donor-advised funds.	redeeming PairCoin into Bitcoin and/or fiat currencies.	cryptocurrencies.
Responsible to create and maintain a secure and efficient, centralized system for validating charitable redemption requests.	Will provide technical support to the centralized systems of PairCoin redemption on a contracted basis.	Will maintain a second, secure and efficient, centralized system for validating charitable redemption requests including overseas charities. Will provide technical support to the centralized systems of PairCoin redemption on a contracted basis
Responsible for the development and integrity of the PairCoin blockchains	Will deploy a team to develop and maintain the security and integrity of the exchange and (as contracted by PairCoin Foundation, Inc.) the PairCoin blockchain algorithm	Will be contracted to provide for the cybersecurity of all PairCoin blockchains and exchanges world-wide.
Ensure donor development to support and carry out organizational objectives		

5.3   Licensure/Compliance Requirements

The following licensures will likely be required for the companies respectively.:

- Become a licensed money services provider (MSP) with FinCen
- Become a mobile money operator (MMO) to provide financial services through mobile phones
- Comply with the Bank Secrecy Act, by verifying customer identities, maintain records of currency transactions for up to 5 years, and report certain transactions.
- Comply with the USA Patriot Act, requiring designation of a compliance officer to ensure compliance with all applicable laws, create procedures and controls to ensure compliance, conduct training, and periodically review the compliance program.
- Many individual state money transmission laws and corresponding regulations.
- Fiduciary and capital reserve requirements, cybersecurity requirements, and banking compliance standards set forth by Wyoming.
- IRS 501(c)(3) approval
- GDPR in the EU.
- ISO 27001 Information Security Management certification is highly desirable
- NYDFS Bitlicense

- U.S. Commodity Futures Trading Commission[18] [19]

5.4　Type of Coin – Legal Definition

PairCoin is a protocol token[20] as it offers no return on investment, although it may very well evolve into a trading commodity like Bitcoin. On June 6, 2018, Bitcoin was defined by Jay Clayton, SEC Chairman as a commodity. Eight days later, SEC director of corporate finance, William Hinman stated that Ethereum was not a security. In other words, no SEC filing would be necessary.

PairCoin is no different and should not require an SEC filing. Nevertheless, PairCoin intends to file with the SEC as if it was a security token, because the ICO is intended to fund operations, which may arguably be construed by regulators as an investment, albeit with no promised ROI.

5.5　ICO Filing

Under the 2012 Federal JOBS Act, there are two paths to a regulated ICO.

- Reg D 506(c) allows companies to raise an unlimited amount of capital without any SEC qualification required[21]. There have been a few examples of this path being taken by high level ICO's such as "Filecoin" and "Science." This ICO is only open to accredited investors, or extremely wealthy individuals.

- Reg A+ requires a two-year IPO-level CPA audit, SEC qualification, and is limited to $50m per year in capital. Reg A+ is open to non-accredited investors.

It is anticipated that a Reg D 506(c) filing will be employed. PairCoin companies will seek advice from experienced investment professionals for this filing.

5.6 Organizational Management Philosophy

 "When you give people freedom, you get chaos, but you also get incredible creativity. Because everyone tries to contribute to the community, you get a variety of expression"[22].

At PairCoin, we intend to create a disruptive organization managed and grown in a similar fashion to the world's most successful[23] decentralized organizations such as, Wikipedia and Alcoholics Anonymous[24]. Nevertheless, charitable funds must be safeguarded at every junction. To ensure cybersecurity, we will employ the very best

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[18] https://www.lexology.com/library/detail.aspx?g=393d458e-44bf-4a68-aa67-cfc299d220de
[19] https://blockonomi.com/hedge-fund-ponzi-scheme/
[20] Protocol Token: A store of value built on the integrity of a blockchain. Utility Token: Used to pay for a given service, like a subway token (https://goo.gl/qH1eu7). Security Token: Used to sell an ownership portion of a company or offers any return on investment.
[21] https://www.sec.gov/fast-answers/answers-rule506htm.html
[22] The Starfish and the Spider by Ori Brafman and Rod Beckstrom pg. 81
[23] Not necessarily profitable
[24] Read this: http://techland.time.com/2011/05/10/a-brief-history-of-skype

blockchain programmers earning commensurate compensation. Therefore, PairCoin must generate operating capital for the long haul. We also expect to need funding to meet challenges from every corner of the marketplace.

A true disruptor, the PairCoin Initiative disturbs the sensibilities of crypto aficionados and crypto adversaries. Advocates of the purely decentralized nature of cryptocurrency are scandalized by PairCoin's proposal for partial centralization. Adversaries of cryptocurrencies are opposed to PairCoin's partial decentralization.

We intend to begin our journey employing decentralized corporate management and incorporate centralized management as we grow.

5.7 Management Team

Cryptocurrency is in its infancy and like any 'gold rush' has attracted hucksters and shysters. This has created a regulatory environment which is unfriendly to all cryptocurrency ventures, regardless of conduct. It has also attracted the attention of legal firms specializing in class-action lawsuits[25].

PairCoin's companies will do two things to fulfill its mission and maintain successful ongoing operations.

- Attract the most professional and 'clean' executive management
- Assemble a regulatory and legal war-room team in advance of the inevitable onslaught

All members of the executive team recognize that notwithstanding their credentials and early involvement, they are likely destined to a lateral move once the organization matures, requiring more seasoned management executives, experienced in leading extremely ambitious projects.

Other than management, we intend to subcontract all other services such as: IT, DevOps, security, regulatory, legal/tax work and utilize XaaS[26] as the company's general operations model. The companies will operate few if any physical servers or workstations. All operations will run in a secured AWS environment.

Why subcontract Information Technology?

Hacks and hackers are evolving daily, requiring lightning fast prevention and response. Therefore, the Cybersecurity Officer will monitor the activities and summaries of work of one or more service firms who provide SECaaS (security as a service). When

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[25] https://sftp.polsinelli.com/publications/news/resources/upd0318news.pdf

[26] https://www.forbes.com/sites/danielnewman/2017/06/27/why-the-as-a-service-model-works-so-well-for-digital-transformation/#7488845d6490

considering total cost, this provides a more secure, agile and cost-effective security model than most individuals or corporations can provide on their own.

The same holds true for finance, regulatory and legal affairs, which are evolving very rapidly in the cryptocurrency arena. The respective PairCoin officers will interact/monitor the activities of their respective subcontracted team's activities daily. Marketing services will be purchased from third-party firms and managed by a PairCoin employee.

PairCoin's companies will benefit from the experience and clout of more seasoned, traditional firm's guidance in these new areas. Our executive team will be a roll-up-the-sleeves working group rather than the traditional face-to-face model. It is anticipated that every team other than management, will be working remotely in a decentralized fashion[27] [28].

5.7.1 Management Team Profiles

Avrohom Gluck, M.A., CEO

Avrohom is president of ERM 31000 Training and Consulting and the author of this white paper. He provides education in risk management, compliance, data privacy and cybersecurity. He is the   author of the Bank Holding Company Compliance Manual published by Lexis Nexis and a member of CompTIA's Blockchain Cornerstone Committee.

Avrohom served for 10 years as a Director of Quality Assurance at an international medical device company followed by ten more years as a director of a multimillion-dollar, not-for-profit agency. In 1996, he was invited by the FDA to present at the National Institute of Health regarding the FDA's regulation of medical software. He has another ten years of experience managing software teams, including off-shore programmers

Avrohom has 30+ years of experience in public speaking and a Master's in Leadership from Bellevue University, Nebraska.

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[27] https://www.goco.io/blog/rise-decentralized-organization/
[28] https://www.hbs.edu/faculty/Pages/item.aspx?num=53193

Eliezer Martin, CPA

Chief Financial Officer, Rhodium Capital Advisors LLC

M.A. Accounting, Fairleigh Dickinson University

Rhodium Capital Advisors LLC is a closely held boutique investment fund in Montebello, NY, with almost 1 billion dollars of assets under management. Eliezer has been employed by Rhodium since January 2013, where he manages the accounting and reporting team, meeting requirements of management and institutional investors. He previously held positions as Vice President of Business Compliance, Accounting and Data Management, including payroll and human resources and has 10+ years of experience in varied fields including non-profits.

Daniel Flegmann, Chief Cybersecurity Officer

Danny's 30 years of experience in the technology space make him a true pioneer of the technology revolution.

Danny serves as VP of Information Technology at CDx Diagnostics and has been employed there since 1975. He pursued degrees in Computer Technology at Control Data Institute, Computer Science at Herbert H. Lehmann College and Electrical Engineering at City College of New York and is actively involved in a major migration of on-prem systems to AWS.

Kenneth Johnson, CEO, BlueSentry DevOps Team

Blue Sentry is an advanced tier, multi-competency AWS consulting partner with deep technical expertise and experience on the AWS platform. Blue Sentry's core expertise is designing secure and scalable applications and the infrastructure to support them on AWS. Blue Sentry has over 60 AWS certifications on its engineering team. Blue Sentry has several block chain projects to its credit and 2 engineers hold the Linux Foundation certification in blockchain.

Chaim Gluck, Data Scientist

Chaim is presently employed as a data scientist at Sokat Consulting in Maryland doing predictive risk analysis on Federal data sets. He has extensive experience with AWS, Docker, web scraping, data visualization and the Python Data Science stack.

At PairCoin, Chaim will be responsible for creating all financial reporting for company and customer alike, in an arena where prices demonstrate real-time differences from exchange to exchange. As a software developer, Chaim will serve as technical liaison between the CEO and the DevOps team and provide critical cryptocurrency trending data to the CFO as a basis for PairCoin's need for routine capital holdings and crypto/fiat balancing.

5.7.2 Relationships Disclosure

Eliezer Martin is married to Avrohom Gluck's daughter. Chaim Gluck is Avrohom's son. Both were early adopters and passionate believers in the PairCoin project.

5.8 Compensation Roadmap

To retain the team who launches the PairCoin products, incentive compensation will be timed in a fashion which will ensure team growth, retention and succession for key employees.

- Board of Directors, 'tbd' PairCoin to vest after 'n' year(s)
- Company Officers, 'tbd' PairCoin to vest annually over 'n' year(s)
- Other Senior Staff, 'tbd' PairCoin to vest annually over 'n' year(s)
- Key consultancies, 'tbd'

5.9 Economics of PairCoin Operations

PairCoin will require an adequate budget for management of remote operations. This includes remote meeting, remote communication and collaboration tools, travel and lodging for face-to-face meetings and cloud services. Additional expenses may include renting co-working spaces for certain teams.

5.9.1 Minimum Viable Product

PairCoin LLC commits to developing a MVP to be completed prior to the ICO sale, funded with pre-ICO sales. The MVP includes:

1) Modification of current Blockchain software algorithms to satisfy PairCoin's unique requirements.

2) License or purchase an off-the-shelf, cryptocurrency-exchange software package for use on both web-based and mobile applications. This white-labeled exchange will require customization to accommodate PairCoin. This will be achieved by collaboration between the exchange vendor's team and PairCoin's DevOps teams. A vendor has been identified and discussions are ongoing.

3) Launch of multiple PairCoin blockchain nodes and exchanges.

5.9.2 Budget for MVP

Compensation for management team:	$200,000
Blue Sentry IT, half-team:	$240,000
Legal and Accounting:	$75,000
Software, Cloud and misc.	$10,000
Travel, Communication, misc.	$15,000
Total:	$640,000

6. ICO Structure

During 2018, PairCoin LLC will launch an initial coin offering[29] to fund the ongoing activities of the companies. The ICO will include a pre-sale of 25% of the ICO to fund pre-ICO activities.

All pre-ICO purchaser's charity share will be a donation to the PairCoin Foundation which will receive 10% of the purchase amount[30]. Non-presale ICO purchasers may designate any U.S. registered charitable organization as the coin's secondary recipient who will receive a minimum of 10% of the purchase amount[31].

To our knowledge, this ICO is the first to raise 10% of its entire crowdfunding for charity.

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[29] The ICO will be designed and implemented in the protocol (coin) level of the blockchain rather than as a token. This is because PairCoin, as a Protocol Token is a new, and modified, independent blockchain, and PairCoin Foundation can issue the coins to the supporters of the initial offering. The pre-ICO purchasers will be purchasing a token which may be exchanged for PairCoin after the ICO on a 1-to-1 basis.
[30] This differs from regular ICO, and all post-ICO PairCoin purchases who may designate the public charity of their choice.
[31] This differs from all post-ICO PairCoins which may designate between 1 – 99.999% to charity.

6.1   ICO Details

In advance of the ICO, PairCoin LLC will mine and issue 10% of the total future 84,000,000 PairCoin. These 8.4 million PairCoin will be offered for sale to the public during the Pre-ICO and ICO periods. PairCoins may be purchased during the ICO using either fiat currency or the top 3 cryptocurrencies by market capitalization.

The crowdfunding of the 435 ICOs launched during 2017 raised an average of $12.7 million[32]. The PairCoin ICO is anticipated to raise approximately $15M. This will ensure adequate capitalization for the ongoing operations of the company, enabling it to ensure the security and long-term efficacy of the PairCoin cryptocurrency for both the primary and charitable holders.

6.2 ICO Sales

6.2.1 Pre-ICO Sale

During 2019, 25% of the 8.4 million PairCoin will be offered to the public at a fixed pre-ICO price of $1.00/PairCoin. 90% of the revenue will be divided between PairCoin LLC and PairCoin Foundation. An additional 10% will accrue to PairCoin Foundation as the mandatory charitable recipient of the pre-ICO sale.

6.2.2 ICO Sale

The 75% balance of the 8.4 million PairCoin will be offered at a fixed $2.00/PairCoin, on the ICO offering date until the end date. The beneficiaries will be a distribution of equal shares to PairCoin LLC and PairCoin Foundation, plus 10% donated to acquirer's choice of charity.

6.3   Conclusion of the ICO

On the conclusion date of the ICO, the balance, if any, of any unsold ICO PairCoin from these 8.4 million, will be retained and divided equally between PairCoin Foundation and PairCoin LLC. Public mining of PairCoin will be available to the public after the conclusion of the ICO. PairCoin LLC and PairCoin Foundation will engage in mining to accrue PairCoin for use as future distributions for employee compensation and employee retention incentives. Employees will be permitted to mine PairCoin on their own time, using their own equipment.

Growing public interest in PairCoin is anticipated, which may lead to a secondary market for mining and trading PairCoin. This will modestly increase the coin's value for both charity holders of PairCoin and the companies' holdings. It is also possible that a lack of public charitable involvement may cause a decrease in the value. The company makes no representation in this matter.

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[32] https://www.businessinsider.com/how-much-raised-icos-2017-tokendata-2017-2018-1

6.4   Post ICO Capitalization

The completed ICO will provide the companies with the following capital:

1) **Pre-ICO:**
   a. 25% of 8.4M PairCoins (2.1M) x $1.00 = $2.1M – 10% ($210,000) = $1,890,000.
      i. $1.89M will be allocated equally between PairCoin Foundation and PairCoin LLC.
      ii. The 10% charitable portion will be allocated to the PairCoin Foundation.
2) **ICO:**
   a. 75% x 8,400,000 (6.3 million) x $2.00 = $12.6M - 10% ($1,260,000) = $11,340,000
      i. $11.34M will be allocated equally between PairCoin Foundation and PairCoin LLC
      ii. The 10% will be donated to the charities of the acquirer's choice

The completed ICO of 8.4M PairCoins will raise a total of $14.7M, providing the companies with the following operating capital:

1) PairCoin Foundation: $6,825,000
2) PairCoin LLC: $6,615,000

The amount raised for public charities (not PairCoin Foundation)   : $1,260,000

The market capitalization of PairCoin after the successful completion of the entire ICO will be $16,800,000 (8.4M PairCoins * $2). This number will continue to change as new PairCoin's are mined and the PairCoin price fluctuates.

The total charitable ownership of PairCoin at the completion of the ICO (including PairCoin Foundation) will be a total of $1.47 million raised for charity.

The total PairCoin holdings of the company will depend on the amount sold in the ICO. See section 6.3.

6.5   Charitable Redemption

To ensure the secure operation of PairCoin Foundation redemptions, charitable beneficiary companies will be restricted from redeeming PairCoins via the PairCoin Foundation for 1 year following completion of the ICO. This restriction will be recorded in the blockchain and the PairCoin Foundation's centralized redemption database. For more information, see Technical Overview.

6.6   Management of Cryptocurrency Assets

Highly liquid cryptocurrencies such as Bitcoin and Ethereum, Ripple, etc. will be held by the company. At all times, a portion of these cryptocurrencies will be converted automatically into crypto or fiat currencies with buy and sell stop-loss orders. This is intended to protect the companies' market capitalization from market volatility and reduce risk of inadequate capital for continued operations.

Initial amounts and buy and sell stop order prices will be determined 1 week before the ICO by the board of directors. The stop-losses will be reviewed and updated at regular intervals and remains the responsibility of the CFO, in consultation with the board of directors.

7. Intellectual Property

Several of PairCoin's innovations are patentable. Two patent application have been filed with the USPTO and are currently patent pending.

62/749,770: SYSTEM AND METHODS FOR CHARITABLE GIVING USING BLOCKCHAIN CRYPTOCURRENCY (Provisional application)

16/120,812: SYSTEMS AND METHODS FOR HYBRID BLOCKCHAIN CONTROL (Full application)

The PairCoin and PearCoin text mark s have been filed as trademarks, as well as our tagline, *"The Giving Coin"*.

7.1   URLs

The companies have acquired the following domains:

- PairCoin.net, .foundation, .info, biz, .us, .exchange
- PairCoinllc.com
- PairCoinExchange.com

- PearCoin.us, .exchange
- Paircoin.co.il
- Paircoin.org.il
- Pearcoin.co.il

- Pearcoin.org.il
- PearCoinllc.com
- PearCoinExchange.com
- PareCoin.us

8. Risk Management

8.1 Internal and External Context

Making good decisions in the face of uncertainty is dependent on:

a) Establishing the context in which the organization operates
b) How well the organizations operations have embedded within them a framework for managing risk
c) Reiterating (a) and (b) throughout the organization's operations and lifecycle as the organization and its context changes.

This white paper intends to establish much of the expected context of the organization, but most of it is to be considered a projection with many unknowns. The greatest risks facing this new cryptocurrency organization are:

- Cybersecurity risk of hacks and data corruption
- Regulatory intervention
- Quality of personnel and their ability to deploy
- Competition

These risks are addressed below.

8.2   Cybersecurity

8.2.1 51% Attack

Because cryptocurrency transactions are final and cannot be reversed, merchants do not need customers to provide information like billing address, name, etc. allowing cryptocurrency to be used swiftly and anonymously. Furthermore, finality in transactions allows for smart contracts to be created with a "code-is-law" ethos. An attack on the finality of an altcoin transaction undermines its utility and value.

New altcoins are specifically vulnerable to a 'majority' or 51% attack[33]. The party most vulnerable to losses because of these attacks are the various crypto exchanges[34] because of double-spending. Furthermore, it is rumored that quantum computers already exist which could mount an attack on even well-established cryptocurrencies. A majority attack would at the very least, allows the perpetrator to double-spend cryptocurrency by rolling back and erasing his previous transactions.

The source of this vulnerability is part and parcel of the algorithms used in most cryptocurrencies which require all chains to validate and sync against 'the longest chain' ensuring accountability of all transactions. The blockchain's greatest strength is also its weakness.

The patent-pending decentralized component of PairCoin allows for the opportunity to resolve the threat of a 51% attack via a 'kill-switch' mechanism which will be programmed into the blockchain block header and transaction list data section. Should an attack on the PairCoin blockchain be confirmed, the board of directors of the

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[33] CoiledCoin, Terracoin, Feathercoin, Krypton and many others have fallen victim to a 51% attack. Mining pools have already approached the power necessary to successfully initiate a 51% attack. In July 2014, GHash.io managed to exceed 51% of the total hashing power of the bitcoin network, albeit with no malicious intent. Malicious miners purchased extra hashing power from Nicehash to facilitate their successful 51% attack on Krypton in 2016.
[34] Bitcoin Gold Hacked for $18 Million May 24, 2018

PairCoin Foundation will provide secret hash codes in their possession[35] to authorized PairCoin developers to introduce an intervention into the PairCoin blockchain.

This method provides a legal and authorized 'hack' into the blockchain which can reorder the chain to bypass the newly introduced/hacked 51% blockchain. This intervention is designed to kill the malevolent block, forcing the ongoing sync of the chains to revert to the last valid block. Other similar interventions are designed to enable a reversal of individually identified, malevolent transactions.

8.3 Regulatory Intervention

See section 4.

8.4 Staff

See section 5.7

8.5 Competition

Several socially responsible organizations have already understood cryptocurrency's potential for charity. None are pursuing anything near the scope of the PairCoin Initiative.

1) https://www.fidelitycharitable.org/giving-account/what-you-can-donate/donating-bitcoin-to-charity.shtml -- Expansion of their meg-donor advised fund (DAF) to accepting cryptocurrency. This is our biggest competitor in terms of credibility, market capitalization and market share.

2) http://bitcoinforcharity.com/ -- Promoting bitcoin for charity.

3) http://2give.info/ -- A cryptocurrency to support charity. This appears to be an amateur venture; its website does not function on mobile.

4) http://commoncollection.com/ A global meeting place for human needs and potentials.

5) http://utrust.io – goal of boosting emerging economies through a secure blockchain-based banking system.

6) http://merit.me – A recent endeavor which is the closest to PairCoin. They have created a new consensus algorithm called proof of growth. Invite only.

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[35] Trade secrets are often more successful than patent protection for the security and integrity of a product design (e.g. the recipe for Coca Cola).

7) http://givecrypto.org – Founded by the CEO of CoinBase, it seeks to raise $10 million in 2018 and $1 Billion by 2020. Recipients are emerging markets.

8) http://aidcoin.com – An ERC20 token that seeks to prevent charity scandals via transparency.

9) http://pineapplefund.org –donated $55 million of bitcoin to charities. All funds have been allocated.

10) https://www.producthunt.com/posts/cryptocare-2 -- Allows users to donate to 9 charities in exchange for a virtual collectible.

11) https://unhashed.com/cryptocurrency-news/binances-donation-portal-bring-transparency-charity/ -- similar to aidcoin, seeks to facilitate beneficiaries maximum receipt of donations via transparency.

9. Technical Overview

9.1 Project Milestones

1) Creation of a testbed PairCoin blockchain and an operational PairCoin blockchain
2) Creation of a testbed exchange and an operational exchange with a minimum of the following exchange pairs: PairCoin/Bitcoin, PairCoin/USD, Bitcoin/USD.
   a. The website will have an API via a backend service that both iOS and Android devices can use. It will allow for:
      i. The creation of accounts.
      ii. Request for a money deposit.
      iii. Requests to send money.
      iv. Cryptocurrency > Currency exchange proxy APIs.
      v. Management of accounts.

9.2 Token Architecture

PairCoin is based upon the current Bitcoin architecture. Like Bitcoin, PairCoin uses peer-to-peer technology to create, operate and manage PairCoins with no central authority. Transaction management and money issuance are carried out collectively by the network. Transactions are permission-less and borderless; the software can be installed by anybody worldwide; PairCoin does not require any ID to purchase the primary portion of the coin. PairCoins are censorship-resistant; nobody can block or freeze a transaction of any amount and it is irreversible once settled, like cash. PairCoin is fast: transactions are broadcasted in seconds and can become irreversible within an

hour; online and available 24 hours a day, 365 days per year. 84 million PairCoins is the maximum to be created.

The modifications to accommodate consumer protection for the charitable shared portion, i.e. the additional unique features of PairCoin, will result in changes to the bitcoin source code. While the changes and testing are significant in number, they do not represent a major technical challenge. The solution to the 51% hack which is to be incorporated in the blockchain software is described fully in the patent application. All PairCoin source code will be in the public domain at GitHub.

9.3   Mining Incentive

The PairCoin will have all the incentives which have been widely successful for the original Bitcoin. These are the ability to mine the PairCoin and earn the block rewards and the transaction fees. The incentive differs in one crucial way. No PairCoin can be mined or purchased without benefiting a charitable endeavor.

Many of the common concerns expressed[36] in opposition to Bitcoin are less relevant to PairCoin because PairCoin miners create real value for the world's charities. The same applies to the criticisms of ASIC mining for Bitcoin. In fact, PairCoin may revive an interest in the declining usability and value of ASIC devices.

Furthermore, most crypto currencies are manipulated via traders using technical analysis. It is possible that controlled exchanges may diminish this concern.

Recently[37], Nvidia has abandoned the manufacturing and sale of GPU cards targeting bitcoin miners, due to the low bitcoin value and the increased difficulty for mining. We anticipate a fire-sale of new and used cards which our companies may purchase to mine PairCoin, whose initial 'difficulty' will be low upon ICO.

9.4   Acquiring PairCoin

PairCoin will be mined and purchased like other cryptocurrencies. When acquired, two ownership hashes (or "wallets") must be provided. The first wallet represents the primary owner's portion of the PairCoin. The second wallet represents the percentage of the PairCoin that is designated as a gift to the charitable recipient. Additional identifiers for the charity beneficiary will also be provided, should an initial hash wallet be assigned to them with this donation.

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[36] NYT, 1/21/2016: "The mining of Bitcoin does not provide equal chance to anyone on the network to solve the proof of work problems required to generate their own Bitcoins. Instead, specialized miners are now taking over and generating the vast majority of Bitcoins. These machines are basically supercomputers networked together. They draw massive amounts of electricity. The average consumer just can't compete."
[37] https://bitcoinnews.com/gpu-manufacturer-nvidia-abandons-crypto-mining

The division between primary purchaser/owner and charitable beneficiary may equal any percentage of the purchased or mined amount (ex. 90% primary owner, 10% charitable recipient). A minimum of 1% must be designated on behalf of a charity of the donor's choice[38]. If no charity is designated, or if charity cannot adequately represent itself at the time of its redemption, the charitable portion will, by default, revert to a general charitable fund managed by PAIRCOIN FOUNDATION'S Board of Directors[39].

9.5   Mining PairCoin

The mining algorithm will mimic Bitcoin's with additional inputs required:

1) The miners will need to add additional input fields:
    a. Exact legal name of charitable institution to share with (default is PairCoin Foundation)
    b. U.S. EIN # of charity in digits only format (e.g. 13-4453462 entered as 134453462)
    c. Percentage to go to charity (default is 10%)
    d. If available, an existing wallet hash of the charity

9.6   Purchasing PairCoin

Buying PairCoin will mimic buying Bitcoin's with a few additional inputs required:

1) The purchaser will need to add additional input fields:
    a. Exact legal name of charitable institution to share with (default is PairCoin Foundation)
    b. EIN # of charity in digits only format (e.g. 13-4453462 entered as 134453462)
    c. Percentage to go to charity (default is 10%)
    d. If available, an existing wallet hash of the charity
2) A charity may also mine or purchase PairCoin entirely for themselves. In this case, the primary ownership portion will have no restrictions, while the charitable portion will have the charitable recipient's restriction. Charities or donors may use this feature to create an endowment on behalf of the charity.

9.7   Divesting PairCoin

A non-charity can trade, sell or give PairCoin exactly as one does for Bitcoin on either the PairCoin Exchange or any other exchange supporting PairCoin[40]. Non-restricted

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[38] See section entitled ICO.
[39] This serves two purposes, a) the integrity of the charitable purposes of PairCoin is preserved, b) the legality of the purchasers charitable tax deduction is preserved.
[40] Via an API which will be on github.

PairCoin which is transferred from one wallet to another does not require a charitable contribution.

9.8   Charities Redeeming, Selling, Gifting PairCoin

Charities can only divest PairCoin via the PairCoin Foundation, who will execute the transaction on an authorized PairCoin exchange. No other entities will have the ability to redeem a charitable portion of PairCoin in any fashion, even via an authorized PairCoin Exchange. This represents the centralized portion of the PairCoin Initiative which provides for third party confirmation and oversite of the charitable portions of all PairCoins.

When a charity owner of PairCoin redeems their PairCoin into fiat or bitcoin, the PairCoin Foundation's sells it to a new non-charitable buyer on an authorized exchange. When this transaction is facilitated by the foundation, the buyer's PairCoin is stripped of its charitable, restricted designation. In effect, the PairCoin is re-entered into circulation.

10.0 Patent Applications

Electronic Acknowledgement Receipt	
EFS ID:	34076749
Application Number:	62749770
International Application Number:	
Confirmation Number:	1080
Title of Invention:	Systems and Methods for Charitable Giving Using Blockchain Cryptocurrency
First Named Inventor/Applicant Name:	Allen Gluck
Customer Number:	134785
Filer:	Jonathan Torchman/JODI LANG
Filer Authorized By:	Jonathan Torchman
Attorney Docket Number:	AMG-002
Receipt Date:	24-OCT-2018
Filing Date:	
Time Stamp:	12:57:48
Application Type:	Provisional

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$140
RAM confirmation Number	102418INTEFSW13091700
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

Electronic Acknowledgement Receipt

EFS ID:	33617029
Application Number:	16120812
International Application Number:	
Confirmation Number:	1264
Title of Invention:	SYSTEMS AND METHODS FOR HYBRID BLOCKCHAIN CONTROL
First Named Inventor/Applicant Name:	Avrohom Gluck
Customer Number:	29393
Filer:	Matthew William Glause/Tyler Siegfried
Filer Authorized By:	Matthew William Glause
Attorney Docket Number:	AGP102US
Receipt Date:	04-SEP-2018
Filing Date:	
Time Stamp:	14:28:50
Application Type:	Utility under 35 USC 111(a)

11.0 Frequently Asked Questions

Q. What is the problem PairCoin is solving?

A. PairCoin donations are 100% secure, transparent and fungible and will facilitate the acceptance of cryptocurrencies by charities.

Q. Will PairCoin make it easier to donate?

A. Yes. PairCoin Foundation's customer service is designed to assist charities with easily receiving donations, managing them and divesting them. PairCoin is proud to be the first cryptocurrency to offer customer service

Q. Charities are presently hesitant to accept cryptocurrency. Will PairCoin change this?

Most colleges are still uncomfortable with accepting cryptocurrency as a donation[41]. We hear their concerns about volatility, taxation, liquidity, inflation and transparency. Keep reading to find out how PairCoin is ideal for an investment portfolio.

Volatility: PairCoin transfers are not intended to kindle volatile price movement as the coin will not be available for trading on regular exchanges, OTC and futures markets. It is hoped that PairCoin will become a stable, slow-growth store of value for charities.

Taxation: The PairCoin Foundation will provide tax planning and strategy for its stakeholders.

Liquidity: The PairCoin Foundation will run a cryptocurrency exchange to allow the charitable holders of PairCoin to exchange their PairCoin to fiat or other cryptocurrencies. It is hoped that secondary authorized exchanges will also become available.

Inflation: Like bitcoin, the number of PairCoin are limited in quantity and should not be strongly affected by inflation.

Transparency: PairCoin's centralized charitable foundation is intended to help allay charity's fears of legal liability because its charitable receipts will be completely transparent.

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[41] https://bitcoinist.com/universities-are-extremely-hesitant-to-accept-crypto-donations/

Q. Charities are not equipped to accept and redeem cryptocurrency. Will PairCoin equip them receive and redeem PairCoin and other cryptocurrencies?

A. Yes. PairCoin's centralized foundation and exchange focuses on assisting charities to easily accept and redeem both PairCoin and other cryptocurrencies with the smallest exchange fees in the industry. No other cryptocurrency is inherently supportive in this fashion.

Q. Will PairCoin increase the overall donation of monies to charity?

A. Yes. See section 2.1 above. With the advent of PairCoin, charities will have full assistance for accepting, managing and divesting PairCoin via the PairCoin Foundation. It is hoped that they will gradually become accustomed to receiving cryptocurrency donations. Miners who were previously focused on personal gain will become philanthropists by mining PairCoin. (section 3.1)

Q. Only a fraction of potential donors own cryptocurrency. Why does the public need PairCoin?

A. Market demand is validated by Fidelity Charitable[42], which started accepting Bitcoin in November 2015. $7 million was donated in 2016 and $69 million in 2017, making cryptocurrency the fastest-growing asset type accepted by Fidelity. The biggest draw to Fidelity Charitable's platform is it's investor-managed fund, which lets donors give away assets including cryptocurrency without having to pay capital gains taxes. PairCoin provides this feature and much more.

Q. Won't cryptocurrency be considered an appreciated asset? If so, will converting it to PairCoin trigger large capital gains tax liabilities?

A. No. The PairCoin Foundation which is a 501(c)(3) charity, operates a donor advised fund which receives the assets in whatever form they are in, cash, other cryptocurrencies, etc. Conversion to another asset of equal value will not trigger capital gains taxes. PairCoin's unique nature may be recognized by taxing authorities in a fashion that will diminish taxable events. (See section 2.2).

Q. Why would I be willing to give a percentage of my money every time I transfer funds?

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[42] https://www.fidelitycharitable.org/docs/giving-report-2018.pdf

A. The only time you donate a percentage of your funds is when you choose to make a new donation by purchasing PairCoin. For example, if you want to donate $10,000 to a charity, you can acquire $10,000 of PairCoin designating $9900 to the charity of your choice and $100 to yourself or to the same or other charity. The difference between the two portions of the 'pair' is that the $9900 is managed, and if desired, restricted. This is done by the PairCoin Foundation, PairCoin's centralized arm, while the recipient of the $100 receives decentralized and unrestricted PairCoin, exactly like Bitcoin.

When you transfer or sell the $100 unrestricted PairCoin, you have no charitable requirements.

Q. Best practices for cryptocurrency transaction is to use fresh wallets for each transaction. If I transfer money to another wallet that I own, why should I donate a percentage to charity?

A. Non-restricted PairCoin which is transferred from one wallet to another does not require a charitable contribution. The non-restricted portion of the coin operates exactly like bitcoin.

Q. Why is PairCoin using the "old" Bitcoin technology? Other blockchain platforms are cheaper and more efficient.

A. The use case for PairCoin is very much like bitcoin and not like Ethereum or XRP. PairCoin seeks a very reliable blockchain platform like bitcoin. PairCoin is not concerned about the speed of the transaction in the way XRP intends to overtake the international SWIFT system.

Q. Why can't PairCoin's goals be achieved with a smart contract for a timed donation on an Ethereum blockchain?

A. Although PairCoin will provide certain 'smart-contract' like features, it is fundamentally a transparent, reliable store of value. These features are rarely used conditional features already built into the bitcoin blockchain. PairCoin seeks to achieve a completely new legal paradigm for tax advantages (see section 2.2) by structuring their PairCoin charitable deductions on either a cash basis or the equivalent of an accrual basis, i.e. date of donation when the charity receives the funds, creating a donation vehicle which is more powerful than a donor-advised fund (DAF). This is not achievable with an Ethereum smart contract which is simply a timed donation.

Q. Isn't PairCoin's partial centralization introducing risks which other cryptocurrencies do not experience?

A. The bitcoin 'experiment' is only about ten years old, and we're still learning. Notwithstanding the growing pains of volatility, cryptocurrency has proven itself a reliable store of value and not endured a hacking attack since 2010. The greatest risk to a new bitcoin clone is a 51% attack like that experienced by blockchain clones Shift and Krypton in 2016. PairCoin has developed a patent-pending solution to this problem to mitigate this risk.