

# Blockchain-Based Crowdfunding: A ‘Pay-it-Forward’ Model of WHIRL

Hasnan Baber

**Abstract:** Crowdfunding has revolutionized the way of raising funds for not only start-ups but for all traditional or existing businesses. Crowdfunding made it easy for fundraisers to raise funds as they don't have to knock on doors of banks and financiers and get the desired amount in return of interest or offering equity or even through donation, or reward. Blockchain, on the hand, is decentralizing the system of records and control which makes crowdfunding more transparent and secure. Though a number of blockchain-based crowdfunding platforms are already doing good business and they vary in crypto, model and type of crowdfunding. The study is conducted on a very new blockchain-based crowdfunding platform, WHIRL. The unique and different in this model is the model, “pay-it-forward” itself. The model assures that members will get their legit project funded after they help other projects succeed. The study also highlights some thoughts from the Executive Board of Directors and co-founders after doing a brief discussion with them.

**Keywords:** Blockchain; Crowdfunding; WHIRL; Crypto

## I. INTRODUCTION

Crowdfunding (CF) is a broad term which means the process of raising funds usually small amount from a large population known as the crowd to fund a business project, cause, loan or other financial need through the identified platform (Baber, 2019). Kirsby and werner (2014) credited two factors for rapid growth in CF- technological innovation and the financial crisis. Technological innovation started with web 2.0 as it led interactive participation of users with website. The financial crisis of 2008 made it tough for lenders to lend money. The study shows a decline in bank lending in Europe and the US though there was a surge in the US again after the crisis of 2008. Jenik et al., (2017) explained crowdfunding as a novel method of collecting funds from a pool of backers in a systematic way for a business model or cause through online application or platform. Contributors may back a project in the expected return of financial (e.g. equity and interest) or non-financial (e.g. donation or reward) benefits (Alonso, 2015).

Walport (2016) defined Blockchain technology as a dispersed technology-oriented ledger recording. It records all transactions in an efficient, transparent, secure and decentralized manner (Schatsky & Muraskin, 2015). The blockchain is the decentralized transparent ledger with the transaction histories and the database that is pooled by all network nodes, well-run by miners, observed by everyone, and owned and controlled by no one (Muneeza et al., 2018). It is like a colossal collaborating spreadsheet that everyone has access to and updates and authorizes that the digital transactions transferring funds are unique (Hartmann et al., 2019). The central level of the stack is the protocol which is the software system that transfers the money over the blockchain register (Zhao, & Coffie, 2018).

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Then, the top layer is the digital currency itself, Bitcoin, which is denoted as BTC or Btc when dealt in transactions or exchanges. Blockchain technology was the originating technology for Bitcoin (Nakamoto, 2008). There are numbers of digital or cryptocurrencies like Litecoin, Dogecoin, Ripple, NXT, and Peercoin. Though, Bitcoin is the first and largest.

As per the Statista report, crowdfunding has reached to US\$6,923.6m in transaction value in the month July 2019. Transaction value is projected to show an annual growth rate (CAGR 2019-2023) of 14.7% resulting in the total amount of US\$11,985.6m by 2023. The average funds raised in the campaign is US\$794 in 2019, which is lower than the last year's US\$818. In the year 2019, 8,724,000 campaigns were launched which is 35% more than the previous year. China consecutively from two years recorded the highest transaction value of US\$5,576m in 2019 as compared to the other countries of the World. The United States was the hub of blockchain investments in 2018. There were two big blockchain deals in Switzerland in 2018 – One valued 103\$ million raised by SEBO crypto and Definity raised 102\$ million. China also witnessed 90\$ Million deal by WeShare. France, Bahrain, and Dubai also evolved significantly in blockchain investments.

Swarm is one of the prominent “crypto-currency” crowdfunding platforms funding startups which focusses on incubator of digital currency had raised \$1 million in its own crowdfunding, completed in July 2014. The company's own crypto-currency was given a name Swarmcoin, which gives investors the right to the dividends from the startups. Konify was another blockchain-based crowdfunding platform which ceases to operate from 15-Feb 2016. Allcoinsnews Co-founder Hans Lombardo said, “Nonetheless, cryptocurrency crowdfunding platforms, such as Koinify, Swarm and Blocktrust, have not been sustainable, perhaps a result of regulatory uncertainty or the volatility of bitcoin”. Weifund also seems to be a promising running crowdfunding campaign on the Ethereum blockchain, where more focus is on safety through smart contracts. CapchainX claims to be the first crypto equity platform which helps to create, trade and manage equity on Ethereum blockchain. TokenD also offers blockchain-based crowdfunding but also provide other services like data integrate, voting, etc. through the blockchain. Another promising blockchain crowdfunding is Starbase but it is still in the launch phase. WHIRL is blockchain-based crowdfunding platform which was founded in 2018. WHIRL works on the principle of “Pay-it-forward”, which means a project can be only started when its owner has already backed or contributed towards other projects. This platform believes in inspiring the positive return loop of generosity.

The pay-it-forward model looks really good and sustainable which led to investigate and research about the best practices this company is following, which can be a road map for those blockchain companies which focuses on helping those who do not have any access to finance.

### II. ABOUT WHIRL

The WHIRL's vision is to create such an environment in the world where people will help each other in an endless loop of giving and showing generosity. The company believes in empowering the people to start their project by begging their family and friend or applying for loans from financial institutes. The WHIRL follows the principle that if a person wants to accomplish a project, other projects have to be backed first. Talking with Anti Danilevski, Executive Board of Director, he said "When I've envisioned WHIRL, two situations were in my mind. First, Back in the 1960's, in the Soviet Union, Government started an initiative that was called "Kassa of mutual help". I've not found anything like that in the US or other countries. In short, it was a fund where people were pooling money on monthly basis, and at the times of need, they could use accumulated funds (sometimes with a multiplayer) to solve their problems, like, acquiring an apartment, land, etc. Later, these properties turned into commercial structures, but I think in the 1990's this set up was dissolved due to the different crises like USSR disintegration, and change in the regulations. I don't think we have such official structures or policies now, even if there are those are more like mutual-funds of US. Second, back in 1990-2000's, there was a huge flow of foreign workers into Russia, especially in Saint-Petersburg and Moscow. They were working on the miscellaneous jobs, mostly unofficial and illegal - builders, loaders, carriers and other "slavery" jobs with the low salaries, just enough for food, room (often rented for 10+ people) and survival. Obviously, they had no source of income to buy something, especially in Moscow, with cosmic prices of real estate. But now, almost all of them have personal flats. They have used the same principle: around 40 people gathered and pooled funds into a "pot", and they have used this money to buy rooms, or apartments for each of them. There must have been a set of rules and guidelines for any default person who stops paying funds after getting an apartment. Maybe they used to take away the room or apartment if a person defaults. Anyway, this model was working then and it can work now as well." Adding about the current problems with classic crowdfunding, he said "classical crowdfunding, which is withering down and turning into a PR machine for existing companies, not for innovators and startups. Or, someone is buying something on Ali-express or any other wholesale store and selling it through Kickstarter."

### A. ROADMAP OF THE COMPANY

The company started its operation in the second quarter of 2018 with testing of its alpha version website and core development of the website. In the same year, the company came established its legal statutes, whitepaper development and opened a beta version of the website. At the beginning of 2019, WHIRL started selling the tokens in exchange for fiat money and developed version 2 of the website. In the third quarter, WHIRL has been growth through viral

marketing and word of mouth for both sides of the market. The market was expanded in Korea and Japan. The fourth quarter of 2019 is important for the company and all the focus is on accomplishing the milestones like the first 1 million dollar project fundraising, 15000 core members in the community and launching a mobile application. The company is aiming to build a large network of crowdfunding and collaborating with blockchain token sale platforms and call this network as KICKONOMY. The platform is also planning to expand in India and see it as a huge market. The aim of the company by the end of 2023 is to have 40,000 campaigns per month which seem not so difficult to keep a view at the current growth rate and new market expansion strategy. The company is also aiming to raise 1.6 Bn dollars in which 0.42 billion funds should be raised through the equal value of WRL tokens.

### B. PAY IT FORWARD MODEL

At the core of WHIRL is a pay-it-forward economic model, which is intended to generate a positive response loop of generosity and giving. The 'pay it forward' system ensures that anyone who launches a campaign has already paid their dues. This principle of WHIRL vividly differentiates itself from every other crowdfunding platform. In every other platform, campaigns a fundraiser have to fulfill its promise to its backers. With WHIRL, they have already fulfilled their duties of backing other projects. It is simple you push everyone up, you will get a chance to go up and others who follow you will do the same. A user can sign up for two things-one to buy WHIRL's own cryptocurrency known as WRL and for second directly to back a project through fiat or other crypto-currency. Unlike most platforms, WHIRL accepts a large number of currencies. WHIRL supports around twelve crypto-currencies like WRL (WHIRL), BTC (Bitcoin), ETH (Ethereum), KICK (KickCoin), ADA (Cardano), BCH (Bitcoin Cash), DASH (Dash), EOS (EOS), LTC (Litecoin), USDT (Tether), XML (Stellar), and XRP (Ripple), with more on the way as per the reports. Such a wide range of crypto support is making WHIRL different and better from other blockchain-based crowdfunding platforms. This enables users all over the world to access a broad cross-section of the cryptocurrencies. In the next couple of months, WHIRL is planning to add fiat deposits via Visa, MasterCard and wire transfer within the next couple of months which will open a new market segment for the company. The company believes that the introduction of fiat money is important to achieve the mission of the company and maximizing the crowdfunding quantum in numbers and amount raised.

To register only authenticate members; WHIRL has established a two-factor authentication process. For KYC authentication, the members are asked to upload their proof of identity after knowing the country which issued it. The second step is the selfie with proof of identity to compare the document photo with a person. In the third step proof of address has to be uploaded and thus making sure that only authenticated members contribute and start projects.

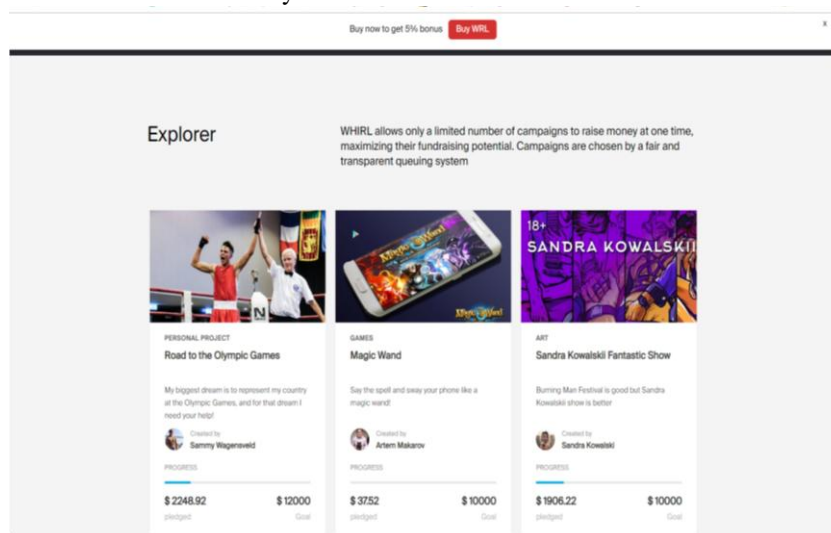
The problem with conventional crowdfunding platforms is that the project owner sometimes fakes the backers to attract the attention of potential backers. The early backer accounts are created by the friends of the project owner who withdraw their pledges without any penalty after the project gets a response or fail to impress the backers. Sometimes even create fake accounts and make an invalid pledge with fraud or empty bank accounts or card. So project owners and even some platforms were giving the impression of over achievement in threshold goal of the project, which was actually a scam to attract users.

A backer can donate directly with crypto or fiat currency, though fiat support is not yet there. For every dollar contributed backer will get 7 karma points. If the user backs with WRL, which is WHIRL's own crypto, then for every dollar contributed, 10 Karma points will be earned. In this way, WHIRL is promoting its own crypto. The company opens a window of WRL sale for a short period of time. So far the company has done four rounds of sale at the discounted rates and the fifth one is going on. The company has distributed 4,592,635,643.0 WRLs so far which is equivalent to \$4,101,601.0 USD. The company also encourages crypto from other companies over fiat and provides 8.5 Karma points for using partner company crypto-like KICK. As WHIRL claims to be socially driven so the company is offering bonus points on backing an identified non-profit campaign for people who are left from the formal financial system or we can say financially excluded.

Here WHIRL has to be cautious and come up with statuses about which project should be treated non-profit and which regulations will govern and monitor such projects. Though the company mentions that they have process intact and will allow only that non-profit organization to start their social project which has proven past track record. Also, the company offers zero commission on such projects. When Anti was asked about the non-profit projects, he said that there is no minimum requirement of Karma points for such projects.

When a backer accumulates enough karma points gets eligible for starting its own fundraising campaign. Here members are asked to fill a KYC form if they have not done

it so far. The minimum threshold to start a project is 500 karma points. The Karma points are directly related to the limit of funds a fundraiser can raise. For example, after accumulating 500 points a project can be started but the cap of funds to be raised will be 500\$ only. In this way, WHIRL encourages the members to back other projects up to the level which satisfies their demand of funds for own project. This is actually a sustainable model as 1\$ yields 7 points for starting a project of capped value 5000\$, a member has to back other projects with maximum 715\$. If the member is backing a non-profit project or using WRL or any other crypt then the yield will be higher. So every time a project is successfully funded, the owner of the project has funds more than the funds contributed to other projects. This time WHIRL is offering the highest cap of 30,000\$ which they call as "micro" fundraising tier. In the future, they will raise the tier to accommodate the high fund required projects. The platform has a securitizing procedure which prohibits some categories of fundraising like hate speech about a person or community. Once a project is approved and meeting all guidelines of the platform, it goes live for pledging the funds. The unique thing about WHIRL platform is that it features only a few crowdfunding campaigns at one-time which has its both benefits and drawbacks. The advantage for featuring only a few projects is that all attention of member community is only on few projects and there is a high possibility of successfully completing maximum projects. Also, those members who want their project to go live soon, they have to go up in queue level that is only possible when the current project will be successfully funded so they have no option other than funding the live projects and making it easy for themselves to get their project live. On the other hand, it is not giving a variety of projects according to the community demands and interests which can discourage the backers. The WHIRL claims that campaigns are chosen to go live by a fair and transparent queuing technique. The live projects can be seen in the explore a section of the website. Different types of projects are live and category of each project, project owner, name of the project, a descriptive image, fund goal, and total pledged amount so far is shown on the main page as shown in figure 1.



Source: WHIRL website

Figure 1. Exploring different crowdfunding projects

There can be three outcomes possible for a project after coming live on the platform. One, a moderator may feel that the project is against the guidelines even after the approval, can remove the current project. Second, the owner of the project may cancel it sighting any valid reason. In both of the scenarios, the project owner will retain the Karma points and the fund, if any, collected so far will be taken over by the platform. The third outcome is that the campaign is

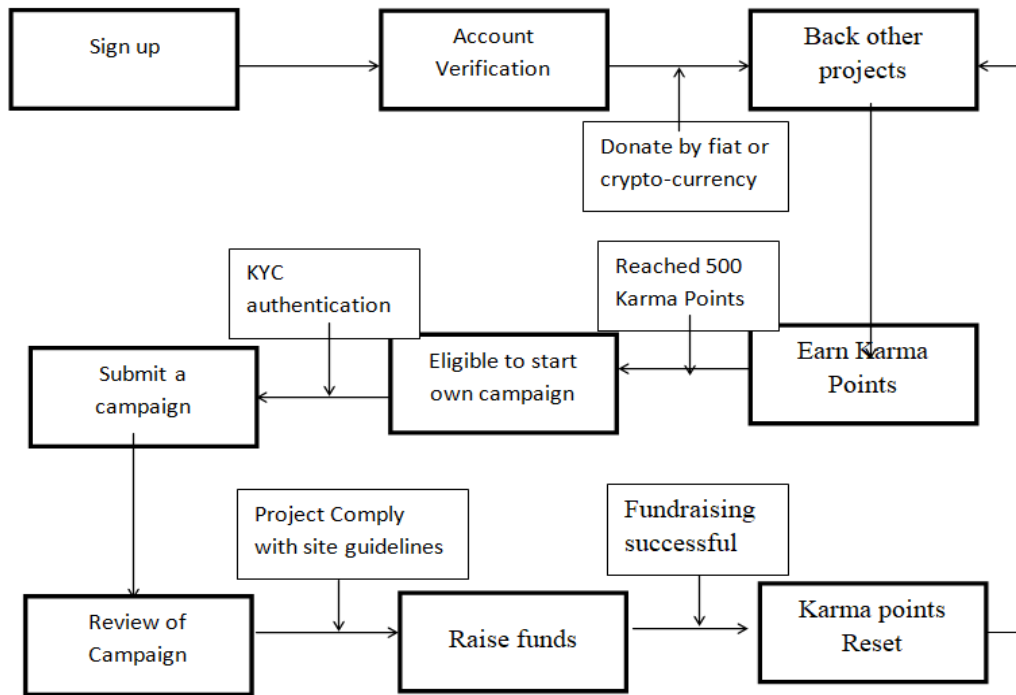


Figure 2. WHIRL model

Source: Author

successfully funded and reached its goal. In this case, a moderator will approve the closure of the campaign and transfer all funds from the WHIRL’s cold wallet to the owner’s external wallet. WHIRL also have improvised in case of security of crypto compared to another platform. WHIRL will use cold storage wallets, which are safe and tend to keep minimum currency online to safeguard its members from hacking and theft. The campaign owners Karma points are reset to zero again and has to start from the backing another project before starting a new project of its own. WHIRL charges 5% commission on all payments which are equal to Kickstarter but latter charges extra for payment processing. WHIRL will not retain any of its own cryptocurrencies like WRL OR KICK but they will be burned to maintain the money supply. Once the platform starts higher capped projects then only 50% of the commission received tokens it will be burned as the member base will be large.

WHIRL’s model is novel when applied to digital crowdfunding, but it’s been around for ages in other forms. Local communities, self-help groups or ethnic population around the world have leaned on community giving pools to help their members fund their most important needs. Members give today, so they can receive tomorrow. It’s a proven model that works and prevents members of the community from losing face begging for donations, resorting to theft, or having to take out crippling bank loans. Figure 2 demonstrates the overall working of the WHIRL platform. There were many fraud schemes and projects where investors have lost millions of dollars the above model works on give now and take later looks sustainable.

The word ‘Karma’ is derived from a Sanskrit word Karman which means work or deed. It basically has its roots in Hinduism which believes in the spiritual principle of doing a good deed today to get good reward tomorrow (Keyes & Daniel, 1983).

C. CROWD RESPONSE

Trackico.io, a platform which provides information about the Initial Coin Offering (ICO) and gives 4.4/5 rating to the WHIRL. Rating is based on the information available about the projects and does not signify the investment ratings. On producthunt.com, WHIRL has got 4.8/5 rating from 51 reviewers which is quite good at the infancy stage of the company. Foundico.com gives 6.7 scores and more importantly gives a high rating to the accessibility of main information about project and finance but gives a low rating to team and marketing. ICOmarks.com gives 8.6 ratings and in contrast to all above ratings, ICObecnch.com provides only 2.7/5 ratings to WHIRL. ICObench provides rating only on one parameter i.e. ICO profile while ICOmarks provide a rating on three parameters- ICO profile (45% weight), Social Activity (35% weight) and Team (10% weight). Some positive feedback from customers-“Efficient Pay it forward strategy”, “Interesting concept, creating viral effect in fundraising”, “Interesting model, smart idea”, “Adding social aspect to blockchain, this helps the platform to be more alive and relevant”, “WHIRL platform brings together people with similar characteristics.

In addition to the benevolence, these people who advertise the projects listed on the platform have aimed to spread the social responsibility projects to the world”, and “give and take the concept”. There are some negative comments as well- “Regulation of platform is vague”, “Need to back another project before you can attract funds for your project”

Roel Wolfert, co-founder said

“Consumer crowdfunding was an original use case for blockchain technology, and today we realize its promise and potential with WHIRL, but we didn’t stop there. WHIRL is built to unite the world in mutual self-support and create a platform with real social impact that helps people realize their dreams.”

Wolfert established WHIRL to assist non-profit based organizations and populations who’ve been shut out of the crowdfunding revolution as a consequence of being unbanked or simply due to their geography. Though it is too early to predict about the future of this company the model seems to be promising and as Anti said “I’m totally transparent about WHIRL - it is a very bold idea and we knew there are chances it won’t fly from the start. I hope we’ll start earning enough money with KICK ECOSYSTEM and will be able to invest in WHIRL’s promotion.”

### III. CONCLUSION

The study is about WHIRL Company which is among the few blockchain-based crowdfunding platforms available for backers and fundraisers. Crowdfunding platforms need a sustainable model for social projects. Social projects are usually for the problems which exist in society and need to be addressed. The WHIRL accepts projects in any field until it is within the guidelines and policies of the company. The model Pay-it-Forward is based on the old formula of the collaboration of local communities to pool money for development, future expenses or helping each other in certain aspects of life like marriage, education, death, employment, housing, etc. The Pay-it-Forward model allows people to start their camping only after they helped somebody else to accomplish their project. It works on the Karma points which a member has to collect in order to start its own campaign. The study will be helpful for social entrepreneurs, business students, backers, fundraisers and executives of crowdfunding platforms.

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