PLEDGECAMP

THE NEXT GENERATION OF CROWDFUNDING

Whitepaper v. 2.2

Last Updated: June 21, 2019

INTRODUCTION

Pledgecamp is a next-generation crowdfunding platform that incorporates blockchain technology for security and accountability.

- **Backers** gain a decentralized escrow mechanism which protects their funds
- **Creators** receive wide-ranging project support and lower platform fees
- **Platform Users** can earn token rewards as they help the platform succeed

The Pledgecamp team has previously raised millions of dollars on Kickstarter and have become among the top 1% most-funded crowdfunding experts on the platform.

This paper outlines a new crowdfunding ecosystem that introduces a Market Network for hiring services and a Knowledge Center for crowdfunding research. A two-token economy with Pledge Coins (PLG) and Camp Shares (CS) powers the platform and compensates users for their contributions to the ecosystem.

The design objective of this economy is to align the incentives of all participants in the network. This is accomplished through security features such as Backer Insurance, and through the design of the Token Economy.

We hope you can discover our vision in reading this paper and join us as a future user. Please make sure to always review the latest version of this paper and other official information only from https://pledgecamp.com.

DISCLAIMERS

This document is for educational purposes only. It does not constitute an invitation or solicitation of any partnership or investment in a security or any other investment instrument. The purpose of this document is to communicate the vision and viability of the potential future Pledgecamp platform. This document is a work in progress and subject to material change with or without notice.

This document contains forward-looking statements or information that relate to current expectations and views of future events. In some cases, these forward-looking statements can be identified by words or phrases such as "may," "will," "expect," "anticipate," "aim," "estimate," "intend," "plan," "seek," "believe," "potential," "continue," "is/are likely to" or the negative of these terms, or other similar expressions. Although the forward-looking statements contained in this document are based upon what Pledgecamp believes are reasonable assumptions, these risks, uncertainties, assumptions, and other factors could cause actual results, performance, achievements, and experience to differ materially from expectations expressed, implied, or perceived in forward-looking statements. Given such risks, prospective investors should not place undue reliance on these forward-looking statements. Risks and uncertainties include but are not limited to those identified in the below Risk Factors. These are not a definitive list of all factors associated with a making a contribution to Pledgecamp in connection with its operations. Pledgecamp undertakes no obligation to update any forward-looking statements to reflect events or circumstances after the date listed at the top of this document.

TABLE OF CONTENTS

FOREWORD

My name is Randi Zuckerberg. I'm the founder of Zuckerberg Media, an author, a radio host, and a lover of technology and entrepreneurs.

I've participated in crowdfunding across a number of different sites. I've had some good experiences, but I've also had a lot of experiences where I've been burned with a product that was never fulfilled.

Especially in this new economy, there is a lot of trust that goes into interactions with strangers. It will be more and more essential that we develop mechanisms where money is held in escrow or is phased out depending on certain milestones being reached.

That is why I've been so excited about smart contracts and some of the developments in crypto and blockchain. I think we have finally entered a world where people across the globe from one another can engage in really thoughtful, smart, entrepreneurial projects together.

It's time to make crowdfunding available across the globe, to take the intermediaries out who still get paid even if a project doesn't happen, and incentivize everyone to be aligned for a vision of entrepreneurship.

I consider myself a patron of entrepreneurship. I wake up every morning and I think, "how can I support more entrepreneurs?" More importantly, how can I scale my support of entrepreneurs? When I can support a project like Pledgecamp that is going to give millions of entrepreneurs a new opportunity to raise funding in a new way, for me, that is the vision.

Being able to really support and empower entrepreneurs—that is the dream.

Randi Zuckerberg
Founder & CEO, Zuckerberg Media

DEFINITIONS

Backer
A financial contributor to a crowdfunding campaign.

Backer Insurance
A security feature unique to Pledgecamp that secures campaign funds in escrow via smart contract.

Bounties
Simple marketing, creative, or other tasks that users perform for creators in return for Pledge Coin.

Campaign
A crowdfunding project, with a fixed funding period and goal.

Campaign Deposit
A refundable security deposit placed by creators in order to incentivize transparency.

Camp Share (CS)
A non-trading token asset that grants Moderator status to certain users and determines their compensation.

Creator
An entrepreneur or team launching a crowdfunding campaign.

The Crowd
The user base who participates in crowdfunding.

Crowdfunding
A decentralized funding model where funds are collected across a network of individuals.

ERC20
A technical standard used for issuing tokens on the Ethereum blockchain.

Gig Economy
A labor market defined by short-term, usually on-demand contracts for services.

Knowledge Center
A database of crowdfunding and business knowledge built and maintained by Pledgecamp users.

Pledge
A financial contribution to a campaign. Also referred to as "pledging" or "backing" a campaign.

Pledgecamp
A decentralized crowdfunding platform marrying the benefits of blockchain with crowdfunding.

Pledge Coin
An ERC20 token that enables payment and participation in Pledgecamp's features.

Smart Contract
A software function run in a decentralized manner on a blockchain.

Smart Crowd
An empowered user base unique to Pledgecamp that can earn secondary income for their contributions.

Staking
Committing a token to a period of non-use or transfer.

Token
A digital blockchain asset often used to facilitate the function of smart contracts.

SECTION ONE

A Brief Introduction to Crowdfunding

Definition, market size, and socio-economic impact.

> *"Crowdfunding, sourcing funding across a network of supporters, is potentially the most disruptive of all of the new models in finance... We estimate crowdfunding could address a $1.2 trillion opportunity over time."[1]*
>
> - Goldman Sachs Research; The Future of Finance (2015)

Modern crowdfunding emerged after the 2008 financial crisis, when many entrepreneurs found it impossible to raise funds from traditional banks and institutions.[2]

Online platforms allowed entrepreneurs to raise directly from communities of supporters without needing special connections to professional investors. A free market now determined which projects received funding, instead of the private dealings of elite venture capitalists.

Definition

Crowdfunding (also known as rewards-based crowdfunding) involves the delivery of goods or services in exchange for a contribution of funds. Online crowdfunding platforms connect projects with backers in exchange for a percentage, typically 5%.[3]

It is worth noting that rewards-based crowdfunding platforms such as Kickstarter or Pledgecamp do not generally permit the crowdfunding of equity or token offerings, although this may be included in the future Pledgecamp roadmap.

Market Size

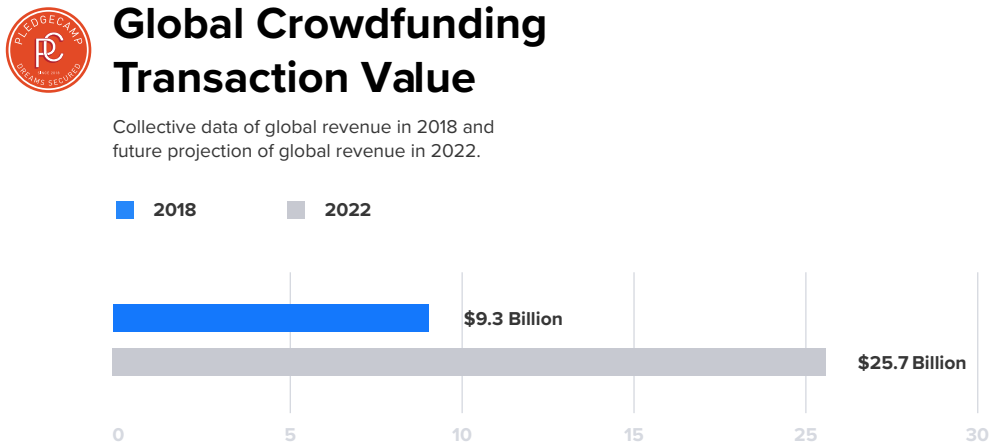


Figure 1 Global Crowdfunding Transaction Value[4]

Crowdfunding is shown to be effective at filling funding gaps, validating product ideas, and returning significant value for communities. Organizations created through crowdfunding have generated billions in revenue, employed thousands, and attracted hundreds of millions of dollars in follow-up venture capital. [5][6]

Company	Total Raised	Results
Oculus	**$2.5M	9,500 backers**	Acquired for $2B (Facebook) launched commercial VR industry
Pebble Technology	**$33M	212k backers**	Acquired (FitBit) launched smartwatch industry
Peak Designs	**$20M	95k backers**	8 successful campaigns #1 most crowdfunded active company

Figure 2 Notable Crowdfunding Companies [7][8][9]

Socio-Economic Impact

Steve Case, billionaire founder of AOL and philanthropist, describes the potential of crowdfunding in this quote:

> *"Crowdfunding offers the potential for a radical evolution of our largely institutional framework for allocating capital through foundations, funds, and banks to a more individually driven and direct investment framework."[10]*

In other words, crowdfunding shifts financial control away from exclusionary oligopolies and closer towards democratic communities. Crowdfunding's continued economic success would be a win for equality and society.

The average current distance between a VC and lead investment is only 70 miles, and just 2% of VC dollars go to female-founded companies. On the other hand, crowdfunding brings funding to non-coastal regions traditionally disregarded by VCs and is much more inclusive for women, who are in fact 13% more likely than men to achieve their crowdfunding goals. [11][12][13][14]

Democratic Influence of Crowdfunding

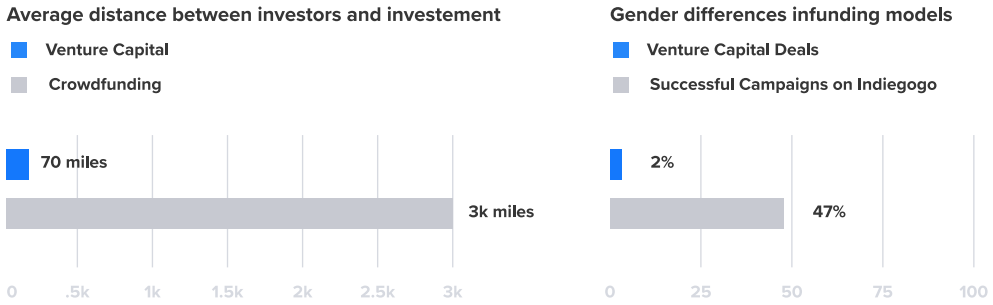


Figure 3 The Democratizing Effect of Crowdfunding [15][16][17]

The World Bank estimates that 344 million households in the developing world could contribute an additional $96 billion per year to crowdfunding, led by China, East Asia, Central Europe, Latin America/the Caribbean, and the MENA region. [18] According to their report, this number would represent 1.8 times the volume of venture capital investments.

This speaks to a global shift in attitudes towards inclusiveness and decentralization in fundraising, and a huge future opportunity for crowdfunding. The question arises: is the current model of crowdfunding prepared to capture this massive potential?

SECTION TWO

Crowdfunding Has a Trust Problem

Issues surrounding transparency, accountability, and centralization.

> *"Kickstarter isn't liable for any damages or losses related to your use of the Services. We don't become involved in disputes between users... We don't oversee the performance or punctuality of projects."[19]*
>
> -Kickstarter, Terms of Use (2018)

Current crowdfunding platforms lack security features that protect backer funds and keep project creators accountable. Consequently, the projects on these platforms exhibit extremely high rates of failure.

Here we consider Kickstarter, the crowdfunding platform with the most brand recognition. In a study of crowdfunding projects on Kickstarter, Wharton School professor Ethan R. Mollick discovered that as many as 85% delay delivery while 14% fail to deliver what was promised.[20][21]

Company	Total Raised	Results
Coolest Cooler	**$13M USD**	Only 1/3 of products delivered, requested additional backer funding
Ouya Gaming Console	**$8.5M USD**	3+ Months delayed delivery, shipped to Amazon before backers
Superscreen	**$2.5M USD**	Cancelled abrubtly after 10 Month Delay, No refunds issued
Zano Drone	**$3.5M USD**	Filed bankruptcy, failed to deliver altogether
Skully Helmet	**$2.4M USD**	Filed bankruptcy, failed to deliver altogether, legal allegations

Figure 4 Table of Kickstarter Failures [22][23][24][25][26]

The impact of this problem on user confidence is seen in the numbers. In total over US $500 million dollars[1] have gone to failed projects on Kickstarter alone, and less than one-third of their 15.7 million users have supported a second project.[27]

[1] This figure is derived from the $3.65 billion "Successful Dollars" on Kickstarter as of January 31, 2019 multiplied by the cited 14% failure rate, defined by a project not delivering what was promised, or nothing at all.

For crowdfunding to reach its full potential as described above, we must address the following three core problems:

1. A Lack of Accountability

Once creators successfully raise funds in a crowdfunding campaign, they spend funds however they see fit. If promised deadlines come and go without results, backers can do little but wait and hope.

Platforms are complicit in this high rate of failure by not holding creators accountable to their promises. This is because doing so puts the burden of responsibility on the platforms as dispute arbitrators or escrow agents, incurring mediation responsibilities and overhead costs.

Instead, pledges are labelled as "donations," making it nearly impossible for backers to recoup their losses through legal means.[28] Creators are able to deplete the entirety of funds, whether it is due to poor management or lack of preparation, and simply move on.

It is no surprise that when creators are able to overpromise and underdeliver without consequences, the result is frequent delays and failures. This leads to disappointment and damaged trust in the ecosystem.

2. A Lack of Transparency

Crowdfunding campaigns end after a defined amount of time, which incentivizes creators to prioritize marketing and raise as much money while time is available.

A slick marketing video and description page are effective at raising funds, so road-mapping and company disclosures take second priority. Backers are often left to analyze highly marketed campaigns without substantive information from the creators.

This leads to information asymmetry between creators and backers which prevents backers from protecting themselves. Because Kickstarter privately verifies a creator's personal information, backers may see this as validation of the truth of a campaign's marketing claims by allowing the project to list. However Kickstarter makes no such endorsements with their listing process. [29]

Incentivizing creators to provide more pertinent disclosures around identity and business operations would lower the risk for backers to invest and increase confidence in the model.

3. Centralization

Centralization places additional constraints on crowdfunding's ability to scale. Currently, Kickstarter creators must reside in one of 22 countries, equivalent to only 11% of countries in the world.[30] Challenges around handling multiple currencies and a centralized screening process for listing incurs massive overhead and logistics to achieve at a global scale.

In addition, centralization means that the parties in control are able to implement whatever restrictions and exclusionary policies they wish—a problem with institutional investing that crowdfunding emerged to address in the first place.

For example, Kickstarter requires creators to hold a bank account and major credit or debit card, even though 38% of adults worldwide remain excluded from the financial system.[31] In addition, the platform has chosen to ban fundraising for energy drinks in addition to other, fully legal, products.

A practical concern of this centralization is that a business model dependent on listing fees creates a financial incentive to list as many campaigns as possible, regardless of quality. As Finance professors Cumming and Hornuf point out in The Economics of Crowdfunding, such profits "depend not on the ultimate success of the venture but on the success of the fundraising campaign."[32] Centralization prioritizes the financial incentives of those in control, which do not best serve the participants.

SECTION THREE

The Solution Is Pledgecamp

A timely union of blockchain and crowdfunding.

> *"If platforms intend to operate in the market over a considerable period of time, they should, in line with Rochet and Tirole (2003), have good incentives to serve the interest of all market participants including the investors."[33]*
>
> -Cumming and Hornuf, The Economics of Crowdfunding

In order for an ecosystem to succeed in the long term, parties must be incentivized towards shared goals. In crowdfunding, creators and platforms should be equally invested as backers in the successful delivery of products.

Pledgecamp fixes long standing problems in crowdfunding by introducing accountability and transparency with smart contracts, and by aligning user interests through an inclusive and rewarding token economy.

Crowdfunding at its core is decentralized and democratic, but as noted in Section Two, the current implementation has been centralized and limiting. The distributed nature of blockchain is a logical fit with crowdfunding, and allows us to bring these much-needed features to crowdfunding now.

Backer Insurance

Backer Insurance is a security feature unique to Pledgecamp that enforces accountability by empowering backers to monitor the usage of their contributions. A smart contract holds a percentage of campaign funds in escrow, which is released to creators as project milestones are met. Milestones are defined before funds are raised so that the expectations between creators and backers are clear from the beginning.

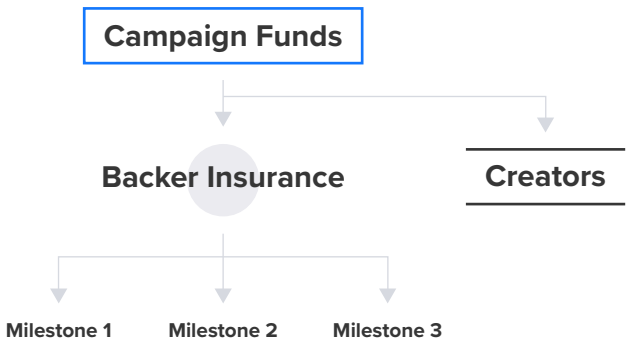


Figure 5 Backer Insurance Flow

Backers verify these milestones through democratic vote. It is important to note that backers do not have voting rights which dictate management decisions of the creator. The vote is specifically a distributed method of verification and mediation.

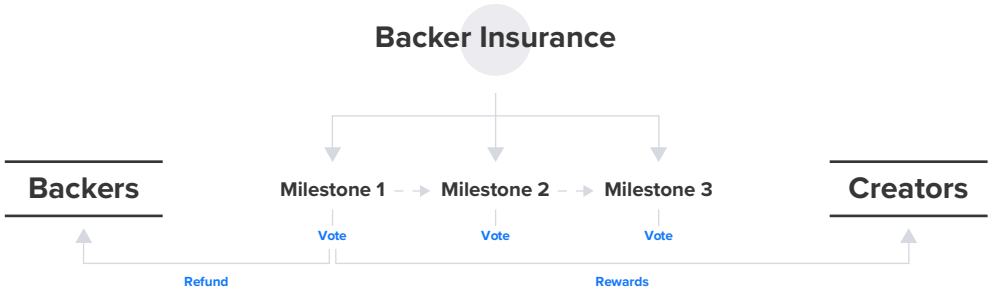


Figure 6 Backer Insurance Funds

Blockchain and smart contracts are necessary to make Backer Insurance possible. Instead of requiring teams of lawyers, creating smart contracts is essentially free, judgment is automated, and enforcement is guaranteed. There is no centralized party that assumes custodianship of funds or inherits mediation liability for user disputes. Responsibility lies with the very backers whose funds are at stake.

How it Works

Before launching a new campaign, creators provide a detailed roadmap with milestones, and determine how much Backer Insurance is appropriate for their project. The more Backer Insurance a creator offers, the lower the listing fee they must pay.

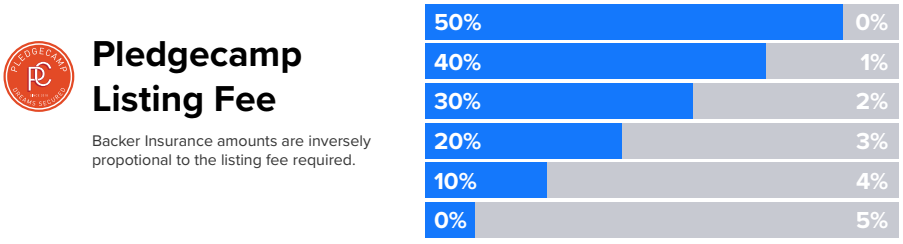


Figure 7 Relationship Between Backer Insurance and Listing Fees

Once a campaign is successfully funded, the Backer Insurance is automatically held in a smart contract encoded with the agreed-upon milestones and voting days. As a voting date approaches, creators are able to demonstrate evidence of progress and justify their use of funds.

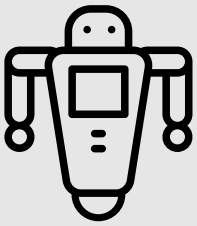
The campaign will continue to completion unless backers decide to cancel the campaign with a majority vote of "no confidence." In this case, backers receive a partial refund according to the Backer Insurance amount and will no longer receive a product from the creator.

The voting system allows creators the chance to present themselves and continue their projects, even despite delays. It is up to the backers to evaluate the creator's progress and trustworthiness in deciding to continue the project. A transparent and communicative creator may be able to instill confidence in backers and overcome delays.

In this way, Backer Insurance creates a powerful incentive for creators to set realistic deadlines and remain transparent and accountable throughout the life of the project—a desirable result even when setbacks sometimes occur.

Illustrative Example

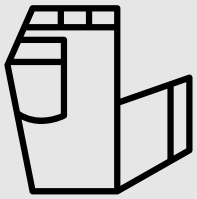
The following is a hypothetical example for illustrative purposes only:



Carol is developing a robot capable of folding pants. She pledges 40% of funds to Backer Insurance and promises to build a prototype in six months.

Fundraising is successful and after six months, Carol shares a video of the prototype folding pants as promised. Thanks to this proof, backers are confident that she can deliver the final product and agree to release the remaining Backer Insurance funds to Carol. Carol uses this final injection of funds to deliver the finished robots as promised. Backers are happy and Carol is able to start her new business.

An alternate example:



The first milestone arrives and Carol cannot prove any money was spent on the prototype, and backers discover that her main manufacturing partner dropped her for not receiving payment. Over 51% of backers vote that she did not fulfill her obligations and decide to recover the Backer Insurance. Because Carol provided 40% Backer Insurance, all backers receive 40% of their original contributions. In this worst-case scenario, backers experience a loss but at least have control over the outcome, and can recoup partial refunds.

Campaign Deposits

Before starting a new campaign on Pledgecamp, creators must place a refundable security deposit prior to listing. This Campaign Deposit creates a financial penalty for spam on the network and incentivizes creators to be more transparent while promoting their projects.

Campaign Deposits are fully refunded provided the creator performs enough "transparency tasks" including, but not limited to, uploading business registration documents, identification, proof of contracts, intellectual property registrations, code repositories, personal references, or even answering questions on live video. Each action refunds a fixed amount of the deposit until it is fully refunded.

For example, a creator may choose the five disclosures most applicable to their project and reclaim their deposit with those. Although the blockchain is unable to automatically verify that these disclosures are genuine or valuable, making them public allows the crowd to scrutinize and evaluate them. Backers may use this increased information to ask further questions and make educated decisions. Partial or full refunds of Campaign Deposits are returned once the funding period is over.

If a creator declines to perform these tasks, any unrefunded Campaign Deposit will be forfeited when the campaign is launched. Creators will be left to explain to backers why they preferred to lose their deposits rather than be more transparent.

Decentralization

Ultimately, the purpose of Pledgecamp is to align incentivizes to create an open and distributed model of innovation. In crowdfunding, the most valuable resource is the crowd itself, with all of the skills, knowledge, and connections contained within. Pledgecamp strives to enable what we call the "Smart Crowd": an empowered user base that contributes more than just monetary value to the ecosystem.

Content Creation
YouTube videos, blog posts, infographic creation, logo/branding design, etc.

Social Media Promotion
Exposing Creator's campaigns by sharing links, retweets, posting to FB, IG, etc.

Survey Creation
Filing out surveys to help collect market research data. Getting others to complete surveys, additional PLG Rewards.

Localization/Translation
Translating marketing material or product material or product manuals into additional languages for greater reach.

Figure 8 Contributions by the Smart Crowd

A gig economy powered by automated token payments allows creators to easily recruit temporary workers on an as-needed basis to help their projects succeed. This empowers users to monetize their passions and skills, creating an environment where any user can be an entrepreneur and earn secondary income.

These simple tasks, also called "bounties," can range from sharing a campaign on social media, writing reviews, or providing research data, to performing creative tasks or translation services for creators. Using a cryptocurrency allows this to be largely automated, scalable, trackable, and global.

In addition, a decentralized listing system allows the network to scale without the constraints of central screening. Any potential creator may list a campaign after placing a Campaign Deposit. This deposit reduces spam on the network, while quality control is maintained by a system of decentralized moderators.

Moderators are users who curate and govern the system by removing scam projects, abusive behavior, and illegal activity. Moderators are powerfully incentivized to cooperate and perform their duty because compensation is tied directly to their performance and health of the platform.

To complete its decentralized ecosystem, Pledgecamp introduces two additional marketplaces; the Market Network and the Knowledge Center. With a smart application of blockchain in Pledgecamp, we can foster trust and collaboration among the crowd and unlock the full, global potential of crowdfunding.

SECTION FOUR

The Pledgecamp Ecosystem

A Market Network and Knowledge Center complete the Pledgecamp ecosystem

> "Blockchain is the platform that enables real peer-to-peer transactions and a true "sharing economy"... It's time to jump in."[34]
>
> -IBM; Blockchain and the Sharing Economy 2.0 (2016)

Crowdfunding is one step in the overall journey for a creator. Successful innovation depends on access to the right partners and information. The Market Network and Knowledge Center are built upon this premise.

Current platforms fall short in providing these extra resources to creators. In many cases, these first-time entrepreneurs do not have extensive professional networks or ability to judge who the right partners are for them. On Pledgecamp, any entrepreneur will be able to search for trustworthy help in a secure and decentralized way.

With token incentives, participants in these marketplaces can interact in an open and decentralized way.

Market Network

The Market Network is a decentralized marketplace for services where creators can hire professionals to work on their projects. Using the Market Network provides significant advantages to both creators and vendors concerning trust and payments.

Because each project is unique, the specific fit between service provider and client is very important and the focus is on building long-term relationships around a complex project. This requires a marketplace that exhibit features of a social network—hence, "Market Network."[35]

On Pledgecamp, creators can see reviews of vendors that are immutable on the blockchain and open to all for review. Seeing a past roster of clients and a history of success or failure will give creators a reliable way to find the trusted help they need.

Smart contracts make drafting and enforcing vendor agreements essentially free, and paying with a cryptocurrency like Pledge Coin means cross-border transfers and transactions fees are a non-issues.

Another advantage is that payment contracts on the blockchain are transparent. Vendors will have confidence that they will be paid as promised

when funds are collected, and backers will see that funds are spent as promised. The increased transparency can give confidence to a prospective backers and make them more likely to trust and support the creator.

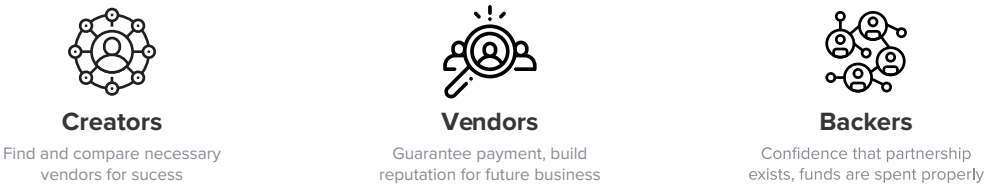


Figure 9 Market Network Benefits

In summary, creators who use the Market Network can demonstrate to backers that they have the partnerships in place to execute. Backers can pledge with confidence, knowing that smart contracts will enforce payments to these partners as promised. And vendors will know that a good job performance will be preserved on the blockchain forever and determine their future business. Thus, incentives are aligned towards achieving cooperation and results together.

Knowledge Center

This Knowledge Center will catalogue the expertise of the crowd specifically as it pertains to entrepreneurship, product development, and crowdfunding. Access to information is often the difference between success and failure, and currently there is not a clear market leader offering a forum and database for crowdfunding knowledge.

This section will consist primarily of a forum for questions and answers, and a searchable database. Information can range from general crowdfunding queries to specific project-level questions. Members of the Smart Crowd will have the opportunity to answer and build their reputations, or even be rewarded with tokens if offered.

The Knowledge Center will be a community-driven effort, and there is a strong incentive for vendors in the Market Network to contribute. Vendors who participate will demonstrate their expertise with a steady flow of informative content and answers to user questions. Upvotes and best answers chosen by the community will contribute to a vendor's increased reputation and status on the platform.

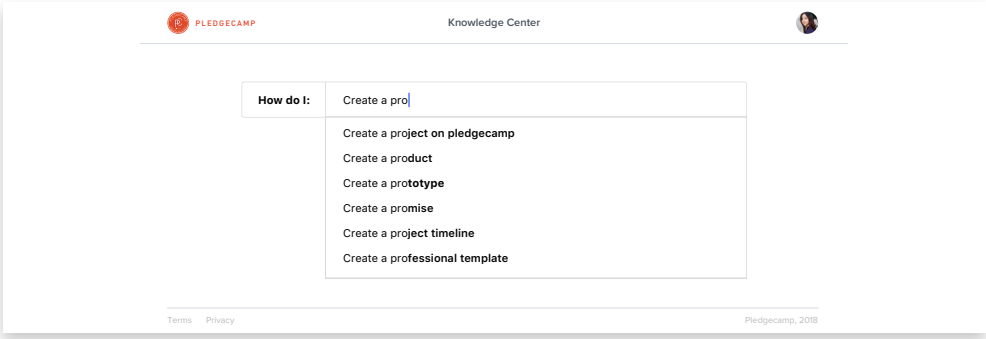


Figure 10 Knowledge Center Search

SECTION FIVE

User Moderators

Decentralized moderators police user behavior in exchange for platform fees

> "The best for the group comes when everyone in the group does what's best for himself and the group."[36]
>
> -Nobel Economist, John Nash

On Pledgecamp, users are ultimately responsible for the listing, curation, and outcomes of campaigns. As a result, responsibility for the success of the platform is spread across the entire network of participants and requires distributed moderation.

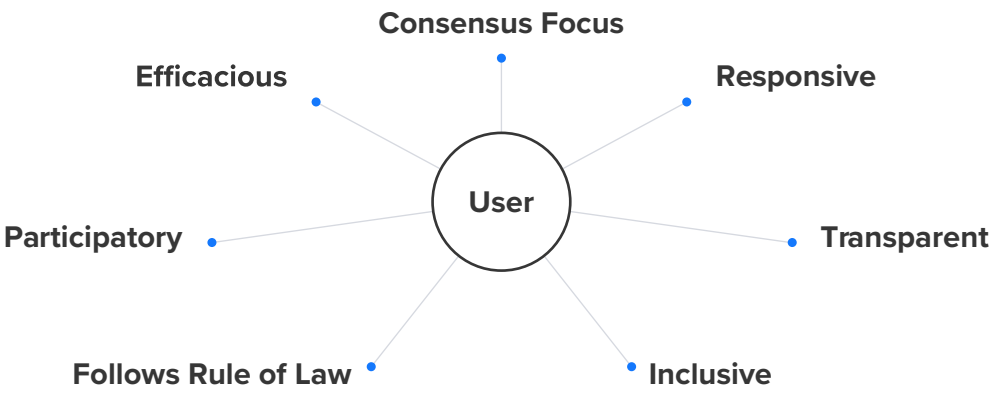


Figure 11 Pillars of Effective Governance

Moderators perform key functions that maintain the health of the system by removing listings and user behaviors that violate the Terms of Service. Moderators earn the right to perform this work by demonstrating a stake in the platform, ensuring that their personal interests are in line with other users and the platform as a whole. In this way, Moderators are motivated to achieve consensus on the truth and resist corruption.

Moderators receive the listing fees generated by the platform as compensation for their role. As the platform grows more successful through their actions, the listing fees should similarly grow in proportion. In this way, Moderator compensation is tied to the health and success of the platform.

Moderation Process

Procedure for Moderator Governance

1. User flags an alleged violation of the Terms of Service
2. Statistically significant flagging will trigger Moderator intervention
3. Consensus of 7 or more Moderators needed for corrective action
4. Moderators are awarded listing fees for upholding their duties over time

Figure 12 Procedure for Moderator Governance

The first responsibility for spotting harmful behavior lies with the crowd. Any user who suspects instances of fraud, abuse, or other illegal activity may flag the alleged violation. Violations are defined by the Pledgecamp Terms of Service and are set by the community. When the number or rate of flags becomes statistically significant, the issue will be settled by a jury of Moderators.

A jury of 12 Moderators will randomly be assigned to decide the issue within 24 hours. Their identities will remain secret in order to prevent collusion. A consensus of at least 7 jurors is required to trigger a corrective action. If necessary, additional Moderators will be assigned until a minimum of 7 votes is recorded.

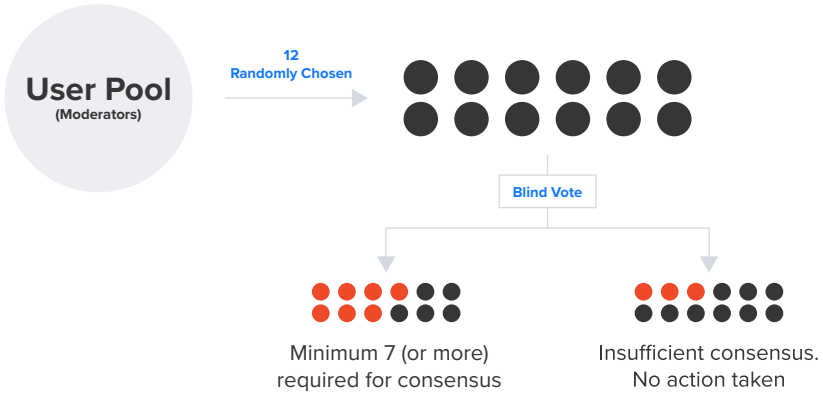


Figure 13 Moderator Process

Once consensus is achieved, the identities of the Moderators and their decisions will be made public to expose any potentially suspicious behavior. Moderators who are suspected of abusing their positions may themselves be flagged, and put before other Moderators for a determination of whether wrongdoing has taken place. In addition, Moderators who fail to vote when summoned will lose their status after three strikes and their compensation will

be forfeited to the remaining Moderators.
The implementation of the Moderator system is based on the game theory concept of Schelling Points (see Appendix 1.0) and trial procedures used throughout the world. The system may be optimized with platform launch data with consensus from Moderators.

Illustrative Example

The following is a hypothetical example for illustrative purposes only:

Bobby discovers a newly launched Pledgecamp campaign promising to build equipment that manufactures illegal drugs. This is a clear violation of the Terms of Service and harmful for the platform's image. Bobby flags the campaign and presents his concerns to other users, who also flag the campaign.

8 Moderators agree that the campaign should be removed, 1 disagrees, and 3 fail to vote. With sufficient consensus achieved, campaign funds are automatically refunded, the Campaign Deposit is forfeited to the Platform Reserve, and the campaign is closed from collecting any additional funds.

An alternate example:

In a separate case, Bobby discovers a campaign that he and others suspect of making fraudulent claims. After the vote, only 4 Moderators feel there is sufficient evidence above suspicion of fraud, thereby allowing the campaign to continue. Still, potential backers are able to see that 4 independent Moderators agreed that there was reason for concern. Bobby is free to voice concerns in the comments that the creator can subsequently address, creating a transparent atmosphere where backers can make informed decisions.

Reward Scheme for Moderators

Moderators perform a critical role for the ongoing health of the platform, particularly as a replacement for centralized control and governance. As such, compensation should be commensurate with the importance of their role.

Listing fees are a logical choice for compensation because they represent real economic gain created under their governance, and will grow along with the success and impact of the platform.

Moderators are required to stake Pledge Coins to non-trading in order to demonstrate their alignment with the interests of the platform. The total of staked Pledge Coins on the platform will necessarily be less than the total fixed supply of Pledge Coins.

Compensation for Moderators shall be determined by this formula:

$$C(p) = F(p) * \frac{CS_{user}(p)}{CS_{tot}(p)}$$

- C is the Moderator's Compensation
- F is the total fees collected from campaigns
- CS_{user} is the average PLG stake of the user
- CS_{tot} is the average total PLG staked outstanding
- (p) represents the current period

The first term on the right-hand side of the equation, F(p), denotes the entirety of listing fees collected by the platform in a current month. This is multiplied by the Moderator's stake of Pledge Coins (CSuser) divided by the total amount of staked Pledge Coins (CStotal).

In simple terms, a Moderator who hypothetically holds 5% of all Pledge Coins staked on the platform will receive 5% of the listing fees each month.

Averages of Pledge Coins stakes within each period, as well as a vesting period, are enforced to discourage a user from suddenly increasing their Pledge Coins stakes before the calculation is made.

Periodic compensation is enforced because Moderators are needed to remain "on duty" and perform their role responsibly over a period of time. Isolated payments for each vote make it challenging, if not impossible, to hold a Moderator accountable to their actions over time. In addition, it is not practical to put a price tag on each individual vote. Instead, periodic compensation for Moderators, who may be called upon to act at any time within a period, will satisfy this needed role over periods of time.

SECTION SIX

Token Economy

A two-token system that encourages trust and long-term staking

> "The important thing is that for the token to have a stable value, it is highly beneficial for the token supply to have sinks – places where tokens actually disappear and so the total token quantity decreases over time."[37]
>
> -Vitalik Buterin, On Medium-of-Exchange Token Valuations (2017)

A two-token economy involving Pledge Coins (PLG) and Camp Shares (CS) powers the Pledgecamp ecosystem. The design of this token economy prioritizes stable token value as a medium of exchange (see Appendix) and incentivizing a distributed user base to cooperate for the long term health of the platform.

Pledge Coin (PLG)

A Pledge Coin is an ERC20 token on the public Ethereum blockchain that enables key features of the platform.

Uses for PLG

1. **Payment**
   Borderless, low-fee currency used to back campaigns and hire services.
2. **Security**
   Enables Backer Insurance and Campaign Deposits, restoring trust to crowdfunding.
3. **Reward**
   Enables automated bounties for the Smart Crowd performing verifiable tasks.
4. **Staking**
   Staking Pledge Coin awards Camp Shares to the user. Conditions apply.

Figure 14 Uses For PLG

Camp Share (CS)

A Camp Share is a non-exchange token that allows users to achieve Moderator status and earn compensation from the listing fees collected by the platform. Staking PLG to acquire CS acts as a "sink", a term described by Vitalik Buterin above, by effectively reducing the circulating PLG supply as demand for CS increases.

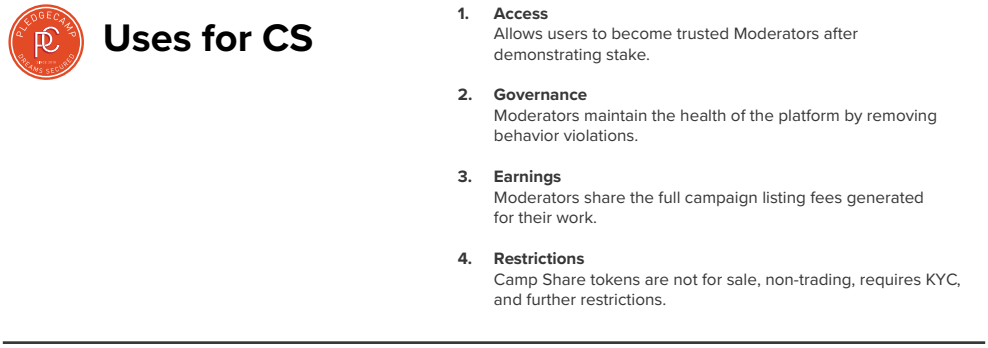


Figure 15 Uses For CS

The restrictions for gaining Moderator status are as follows:

1. User must perform KYC and meet eligibility requirements for their jurisdiction
2. PLG is transferred to a non-trading "staking" smart contract
3. CS is awarded to the user at a fixed 1:1 ratio
4. A minimum balance of 100,000 CS is required to achieve Moderator status
5. Moderators must maintain their status by performing the required duties
6. Burning CS will return an equivalent number of PLG after a 30 day vesting period, reversing the stake

In summary, the Pledgecamp Token Economy achieves its major objectives through the use of Pledge Coins and Camp Shares. Pledge Coin enables access and powers the bulk of interactions in the ecosystem, while Camp Share allows participation in the Moderator work system and proves a user's alignment with the interests of the platform.

The end result of this economy is to reward those who add value to the network while aligning the incentives of all parties. Each party acting in their own interest is incentivized to act in the interest of the group. When incentives of all users are properly aligned, crowdfunding can finally realize its true distributed nature and support entrepreneurship and innovation across the world.

Token Distribution Overview

Pledgecamp will mint a total of 10 billion PLG in an initial token distribution. Tokens for public sale are intended for future consumption on the platform

in the form of pledging campaigns, hiring services, or achieving Moderator status. As such, users are required to perform identity verification, meet minimum eligibility requirements, and adhere to maximum purchase quantities per user, among our other terms of sale.

Pledge Coins will not be generally available to US persons or entities.

Token Allocation

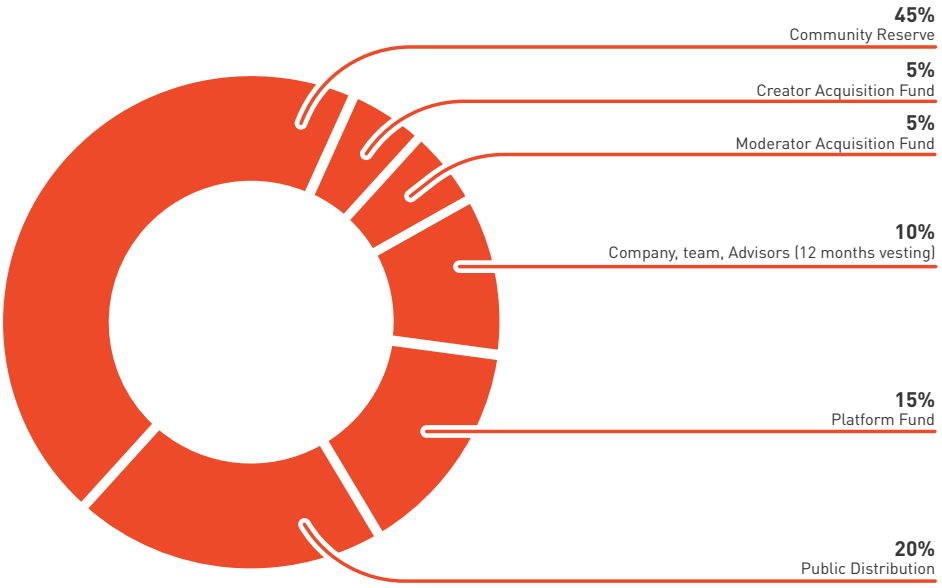


Figure 17 Token Allocation

Initial Moderator Bonus: 5%

5% of the initial Token Allocation, or 500,000,000 PLG, will fund the Initial Moderator Bonus. This fund addresses the concern that in the early stages of the platform, there may be insufficient listing fees generated to properly incentivize Moderators to perform their duties, although they are no less important.

To ensure that their vital duties are performed as needed, this Initial Moderator Bonus will supplement their regular compensation of listing fees according to the following formula until the fund is depleted permanently in 36 months.

Initial Creator Fund: 5%

5% of the initial Token Allocation, or 500,000,000 PLG, will fund the Initial Creator Bonus. This initiative to recruit initial projects to the early platform will take two forms. First, creators who run a successful Pledgecamp campaign will earn the following bonus:

$$C = PB * 0.2$$

- C is the Creator's Compensation
- P is the median pledge amount in PLG
- B is the number of individual backers

This amounts to an approximate 20% bonus added to the pledge of each backer. The cumulative bonus amount must be spent on services in the Market Network, to ensure that funds are used directly on their projects. This will also attract early vendors who can receive these funds. Any campaign suspended by Moderators is not eligible for this bonus.

In addition, portfolio companies of eligible startup incubators and accelerators will be awarded up to 50,000 PLG per company that lists on Pledgecamp. This incentive is to encourage companies to run their projects on our nascent platform.

If the Initial Creator Fund is not depleted after 36 months, the remainder will be allocated to the Platform Fund.

Company, Team, Advisors: 10%

10% of tokens will incentivize the company, team, advisors, and future hires, subject to 12 months of vesting after allocation.

Platform Fund: 15%

15% of tokens will fund key strategic partnerships, developer grants, ecosystem investments, and infrastructure improvements for the ongoing health of the platform.

Public Allocation: 20%

20% of tokens will be distributed to the public.

Community Reserve: 45%

45% of tokens will be reserved for maintaining the token economy in light of potential value fluctuations (see Appendix), additional infrastructure needs, and investments.

SECTION SEVEN

Business Overview

Our mission, vision, team and competitors

> "When I can support a project like Pledgecamp that is going to give millions of entrepreneurs a new opportunity to connect globally around their projects and raise funding in a new way, for me that's the vision... that is the dream."
>
> -Randi Zuckerberg, CEO of Zuckerberg Media (2018)

Disruption occurs when deep industry insight combines with new technology to solve big problems. Our team includes top crowdfunding experts with over 25 years of collective experience as well as high-profile advisors in technology, business, and blockchain. We have raised millions of dollars on Kickstarter and have become among the top 1% most-funded experts on the platform.[39]

We are uniquely positioned with world-class partners who have previously helped launch products such as Coinbase and Slack. In addition, partnerships with business incubators provides a funnel for new startups to launch on Pledgecamp, while strategic investments from established crypto exchanges positions us for entry into the space.

Current market factors, along with the team's strong positioning, suggest that the creation of an open and trusted crowdfunding platform is both achievable and necessary. As shown in earlier sections, global crowdfunding offers the potential for huge social impact and profits. Ultimately, with the right infrastructure in place, the success of crowdfunding can be realized from the efforts and participation of the crowd itself.

Pledgecamp Mission

Our mission is to create the most trusted and open crowdfunding ecosystem.

Pledgecamp Vision

Our vision is to give any entrepreneur the opportunity to fund and deliver their innovations with the support of a global community.

Key Advisors

Randi Zuckerberg
Founder of Zuckerberg Media

David Ambroz
Exec Director | Disney Televeision

Prince Abdullah
Member of Saudi Royal Family

Ryan Scott
CEO | ICO Advisory Group

Christian Sullivan
Advisor Republic.co

Dr SungJae Hwang
CEO | Foundation X

Alan Chang
Lead of Operations | AirBnb

Reshma Sohoni
Founding Partner | Seedcamp

Carlos Gotlib
CEO | Dreabits Labs

Matt Curcio
VP of Data | Ripple

Keith Teare
Founding Shareholder | TechCrunch

Jim Augustine
COO | Zuckerberg Media

Jorge Rodriguez
Developer | Ethereum

Edward Kim
VP | Cryptolux Capital

Dr Ryu Jung Hee
CEO | FuturePlay

Spencer Yang
Founding Partner | #Chain

Patrick Yang
Founding Partner | Amity Ventures

Alvaro Garnero
Advisor | Pledgecamp

Founders

Jae Choi
CEO

Sam Pullman
CTO

Eddie Lee
President

Development Team

Thomas Leupp
Developer

Darryl Boediarto
UX/UI Designer

Wiliiam Starr
Developer

Galen Danziger
CTO | Mousebelt

So Choi
Senior Frontend | Mousebelt

Charn Lee
Developer | Mousebelt

Andrei Pirvulescu
Developer | Mousebelt

Oleg Baturov
Project Manager | Mousebelt

Nikki
Designer | Mousebelt

Igor
Developer | Mousebelt

Thomas Li
Developer | Mousebelt

Ohta Yoshida
Backend | Mousebelt

Business/Marketing Team

Kaur Kirikall
Marketing | Mousebelt

Andrew Cheng
Head of Biz Dev | Mousebelt

Jake Stott
Community | Mousebelt

Olivier R.
Community | Mousebelt

Markus Reisner
Program Manager | Mousebelt

John Tabatabi
Investment Analyst | Mousebelt

Santiago Semino
Community | Mousebelt

Olga Kirikova
Ambassador Program | Mousebelt

UX/UI Team (Concluded)

Hanson Wu
Design Lead | MetaLab

Konstantin Sokhan
Technical Producer | MetaLab

Jonah Grindler
Product Designer | MetaLab

Shaun Gardner
Principle Designer | MetaLab

Margaret Gray
UX Research Lead | MetaLab

Mike Wandelmaier
Design Director | MetaLab

Scott McConnell
Product Designer | MetaLab

Julia Steffen
Sr. UX Content Strategist | MetaLab

Bill Barham
Product Designer | MetaLab

Agencies

Mousebelt
Engineering, Biz Dev

Dentons Rodyk
Legal

Berlin Cameron
Branding (Concluded)

WXY Group
Marketing, Asia

Momentum6
Media

MetaLab
UX/UI (Concluded)

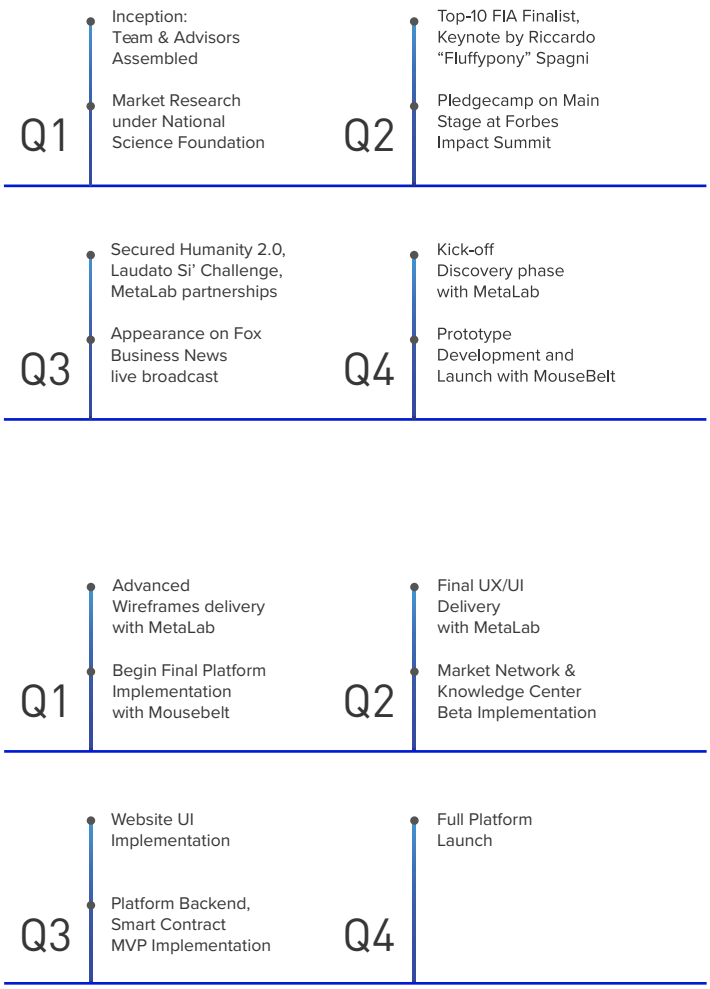
Sponsors

Humanity 2.0
humanity2-0.org

NSF I-Corps
Bayicorps.com

Laudato Si Challenge
lsc19.org

Roadmap


2018
Q1
Inception:
Team & Advisors
Assembled
Market Research
under National
Science Foundation
Q2
Top-10 FIA Finalist,
Keynote by Riccardo
“Fluffypony” Spagni
Pledgecamp on Main
Stage at Forbes
Impact Summit
Q3
Secured Humanity 2.0,
Laudato Si’ Challenge,
MetaLab partnerships
Appearance on Fox
Business News
live broadcast
Q4
Kick-off
Discovery phase
with MetaLab
Prototype
Development and
Launch with MouseBelt
2019
Q1
Advanced
Wireframes delivery
with MetaLab
Begin Final Platform
Implementation
with Mousebelt
Q2
Final UX/UI
Delivery
with MetaLab
Market Network &
Knowledge Center
Beta Implementation
Q3
Website UI
Implementation
Platform Backend,
Smart Contract
MVP Implementation
Q4
Full Platform
Launch

Competitors

Two of the market leaders in crowdfunding are the US-based Kickstarter and Indiegogo, founded in 2009 and 2008 respectively. The problems that affect these market leaders are described in great detail in Section Two. Some specific differences are highlighted below:

	Pledgecamp	Kickstarter	Indiegogo
Flexible Listing Fees	✓	✗	✗
Backer Insurance	✓	✗	✗
Escrow Service For Incremental Distribution of Funds	✓	✗	✗
Proof of Progress Throughout Campaign	✓	✗	✗
No Bank or Credit Card Required	✓	✗	✗
Decentralized Governance	✓	✗	✗
Ability to Earn by Working on Campaigns	✓	✗	✗
Incentivizes Creator Transparency	✓	✗	✗

Figure 18 Competitor Matrix

FAQ

What is Pledgecamp?

Pledgecamp is a decentralized platform that aims to solve longstanding issues of trust and misaligned user incentives in crowdfunding.

What makes Pledgecamp different?

Pledgecamp provides security for backers in the form of Backer Insurance and transparency requirements for creators. Blockchain allows users to mediate disputes and guarantee financial enforcement without requiring a third party mediator or custodian.
A decentralized marketplace further allows participants to be compensated for their contributions to the network, and to allow all people to join regardless of geography or demographics. A native token ensures that incentives are aligned, good behavior is rewarded, and that users benefit when their actions lead to the health and growth of the network.

Why Blockchain?

Blockchain allows strangers across the world to engage in complicated financial transactions within a programmable framework of trust. Without it, key benefits offered by Pledgecamp's new features would be impossible.

Crowdfunding is decentralized funding and innovation that aligns perfectly with the decentralized nature of blockchain technology, and it is an industry with key problems in the area of trust.

Pledgecamp utilizes blockchain technology to be the first to offer Backer Insurance, an escrow wallet framework that allows users to self-regulate without requiring intermediaries. A native token also incentivizes engagement with the platform, and aligns all users to act in the interests of the group as a whole. These improvements will be essential to fix crowdfunding as we move together towards a vision of global innovation.

What is Backer Insurance?

Backer Insurance is an escrow wallet powered by a smart contract which enables backers to protect campaign funds from misuse by creators. It provides a financial incentive for creators to be better-prepared before launching their campaigns and more realistic when setting initial expectations. Should creators fail to deliver on their promises, backers will have the option to recover the Backer Insurance amount instead of granting it to the creator to finish the project.

Is Backer Insurance safe from Sybil attack?

Rational actors will find there is little financial incentive in trying to manipulate the Backer Insurance vote. First, Backer Insurance is a portion of campaign funds that are withheld from the total amount. A scammer will find a greater incentive to run a scam on another platform (such as Indiegogo) where no

funds would be withheld from the total and could instead scam for the entire amount.

Second, the campaign deposit system requires creators to make meaningful disclosures or else forfeit a financial stake. These disclosures will help make it apparent to a potential backer if this is a serious project and creator, or just a scam with no substance. Should the project to be found a scam and removed, the deposit will be forfeit. Because of the deposit and required disclosures, along with Backer Insurance, a scammer would find it more difficult and financially riskier with lower payout to run a scam on Pledgecamp. Because the nature of crowdfunding and innovation of crowdfunding involves risks, no system of rules can guarantee against loss or failure, but providing adequate transparency requirements and good incentives makes attacks or a black swan event unlikely.

Backers also do not have an incentive to attack and wrongly refund Backer Insurance because doing so would necessarily result in a financial loss (it is a partial amount of the whole funds). It is more of a last resort that provides compensation that backers would not receive on any other platform, and as a security mechanism that provides incentives for creators to behave better.

What benefits do creators receive?

Although many of the security features seem designed for backers, they will ultimately benefit a responsible creator as well. For example, campaign deposits and Backer Insurance are fully refundable and received by the creator if they simply keep their promises and provide transparency about their intentions to backers. In return, creators will pay significantly less listing fees, or even no listing fees, which can save much-needed capital for an entrepreneur.

In addition, access to the gig economy, marketplace features, and knowledge center on the platform provides much-needed access to resources and guidance that can be sometimes more important than straight cash for those building their businesses. For pros and first-timers alike, Pledgecamp will provide the support and opportunity needed to everyone, not just the well-connected elite.

And finally, a quality creator recognizes that a happy backer leads to a happy creator. If backers have confidence in the system, they will be more willing to provide the capital that creators are seeking. As stated in the White Paper, less than one-third of Kickstarter users return to back a second campaign—this equates to potentially millions of dollars left on the table due to low confidence, that we aim to recover for creators with our new mechanisms of trust.

What is PLG used for?

PLG, or Pledge Coins, are used for backing campaigns, placing deposits, holding value in Backer Insurance, exchanging services between network participants, and for staking in order to earn specialized roles and earning opportunities.

How does currency valuation affect platform features?

Because stability is a characteristic of maturity that the cryptocurrency markets have not achieved yet, several safeguards will be put in place to ensure short-term fluctuations do not threaten the normal operation of the platform.

When pledging campaigns, PLG may be committed but not collected until the moment funding concludes. PLG will be pegged to USD to ensure creators are collecting enough to complete their projects in the face of fluctuations. Should fluctuations of occur, the amount of PLG will be automatically adjusted to account for the difference in the peg to USD. If a user committed a certain amount and is found to have insufficient PLG to cover the difference in value, the user will have the opportunity to acquire more PLG to continue their pledge, or cancel it.

Once Backer Insurance is committed to the blockchain, the platform will maintain its USD value at the point it is distributed to users. Excess PLG will be committed to the Platform Reserve, while a deficit will require taking PLG from the Platform Reserve.

Thus, in the short-term these mechanisms will help ensure that price commitments are honored despite movement in the USD-PLG exchange rate. In the long run these mechanisms will be less needed as cryptocurrency markets reach greater stability.

How is PLG distributed?

PLG will be pre-mined and distributed according to the Token Allocation plan. Users within certain jurisdictions may be restricted from acquiring PLG at the discretion of the Company. This document does not comprise a solicitation of sale or investment. Any information regarding a public sale or exchange listing are outside the scope of this document.

Where can I learn more?

Visit our website at https://pledgecamp.com and our blog at www.medium.com/pledgecamp.

Join our telegram channel at t.me/pledgecamp, or reach out via email to hello@pledgecamp.com.

Appendix

1.0. Schelling Points

At this point we will define further the concept of Schelling Points and their significance in game theory. Introduced by Nobel Prize-winning economist, Thomas Schelling in his book The Strategy of Conflict (1960), Schelling describes a "focal point for each person's expectation of what the other expects him to expect to be expected to do."37

In layman's terms, this Schelling Point is a solution that people will tend to use when faced with the problem of coordination without advanced communication. An example of this on the Pledgecamp platform may look like this:

Five users (blind to each others' identities to prevent collusion) are elected as moderators and offered a reward payout by the system for correctly removing campaigns that promise to deliver illegal drugs. A campaign flagged by users clearly promises illegal drugs in violation of community rules. Each of the five moderators is faced with a choice: vote to remove this campaign, or vote to approve it as a false positive.

Each moderator knows that if their vote is in majority agreement with the other moderators, then they will receive the reward generated . If they are in the minority of the vote, they will lose their moderator status and receive no reward.

Thus, each moderator understands that the other mystery moderators are motivated to achieve consensus together in order to receive a reward. In the absence of any collusion or coordination, the logical solution for all parties will be to vote for the correct answer.

Even if a few moderators act irrationally, the overall outcome of the vote will likely not be affected and instead, they will only lose their moderator status and forfeit any potential reward for their contribution to the network. Thus, Schelling Points show how aligning the individual interests of users can simultaneously benefit the entire network and achieve consensus in the absence of a centralized authority.

1.1. Becoming a Moderator

To become a moderator, a minimum quantity PLG must be staked to receive Camp Shares (CS) which make you eligible to become a moderator. This sum shall be 100,000 PLG at the outset, though adjustable based on real-world data to ensure there are enough participating Moderators to sustain the system. Because Pledgecamp is built using a blockchain, the system can perform double-blind audits where Moderators do not know the actions other Moderators are taking, but these are all publicly recorded so a Reputation Score can be built into its framework. Moderators are compensated proportionally to their amount of PLG stake.

If a Moderator chooses the same outcome that over 51% of Moderators choose, that moderator will earn one point towards its Reputation Score. In the case that a Moderator votes in the minority, it will lose three Pledge Points. This is to incentive voting in a truthful manner, because in a blind vote, voting truthfully will most likely correlate with the majority (see "Schelling Points" described above).

This means any user can gain or lose Moderator status as an account may have a negative number of points.

The total number of Pledge Points a Moderator has is what yields a Reputation Score on Pledgecamp. Every Pledgecamp user has only one Ethereum address, so each Ethereum address will have its own Reputation Score. As users must KYC to become a Moderator, certain personally identifying details will be referenceable within the ecosystem. As such, users are unable to create duplicate accounts to become a Creator and also moderate on the approval of their own campaign or settle their own disputes.

The pool of Moderators will be put into a percentile framework based on the number of Pledge Points they have, creating a healthy level of competition inside of the Moderator network. Any bad actors in the Moderator pool that vote contrary to the majority in an attempt to create unjust outcomes will be penalized, resulting in a lower Reputation Score.

The Reputation Score is calculated using the following formula:

Reputation Score = Values Below Moderator Rank x 100 / Total Number of Moderators

For example, assume there is a total of five Moderators on Pledgecamp. These Moderators have the following number of Pledge Points they have earned: 24, 29, 38, 52, 61. To determine the Reputation Score of the Moderator with 52 Pledge Points, of the total sample size of five moderators, there are three moderators below their rank. In the formula it looks like:

$$\text{Reputation Score} = \frac{3 \times 100}{5} = 60 \text{ points}$$

Please note that five Moderators is for the ease of an illustrative example as Pledgecamp aims to have many thousands of Moderators on its platform.

The lower a Moderator's Reputation Score, the less weight their vote will hold. As other Moderators are acting in good faith on the platform, they will be gaining Pledge Points while bad actors are losing them, creating a faster deceleration for the impact bad actors can have on Pledgecamp's user governance model. If a Moderator fails to fulfill their duty to vote, their Reputation Score will also drop, due to a lower number of Pledge Points in the percentile category.

Should a Moderator's Reputation Score dip to an unacceptable number, the user will be suspended as a Moderator and not receive compensation for that period. However, their Reputation Score shall reset for the next period as the only "second chance" they will receive. Should their Reputation Score drop to an unacceptable level again, they will no longer be allowed to remain as a Moderator nor receive any compensation.

1.2. Ease of Use for Non-Crypto Users

Ease-of-use is a priority for the Pledgecamp platform design, and the objective is to appeal to the mass market and not a solely crypto-focused one. To that end, there may be a need to accommodate users who are unfamiliar with blockchain and do not want to deal with crypto wallets or exchanges to

use the product. As much as possible to aid user adoption, the platform will still protect these users with blockchain-powered functionality but streamline the experience to the point where backing a project on Pledgecamp may be similar, if not easier, than backing on Kickstarter or Indiegogo.

Backer Insurance will necessarily remain a blockchain feature controlled by smart contracts and backer vote, but the portion of campaign funds that are received by the creator at the conclusion of the campaign may "pass through" Pledgecamp and not require any conversion into cryptocurrency. This amount can be pledged in fiat, via credit card or other traditional method, and passed through to the creator, who will likely need fiat for many business operations.

A simplified diagram of such a proposed system may look like the following:

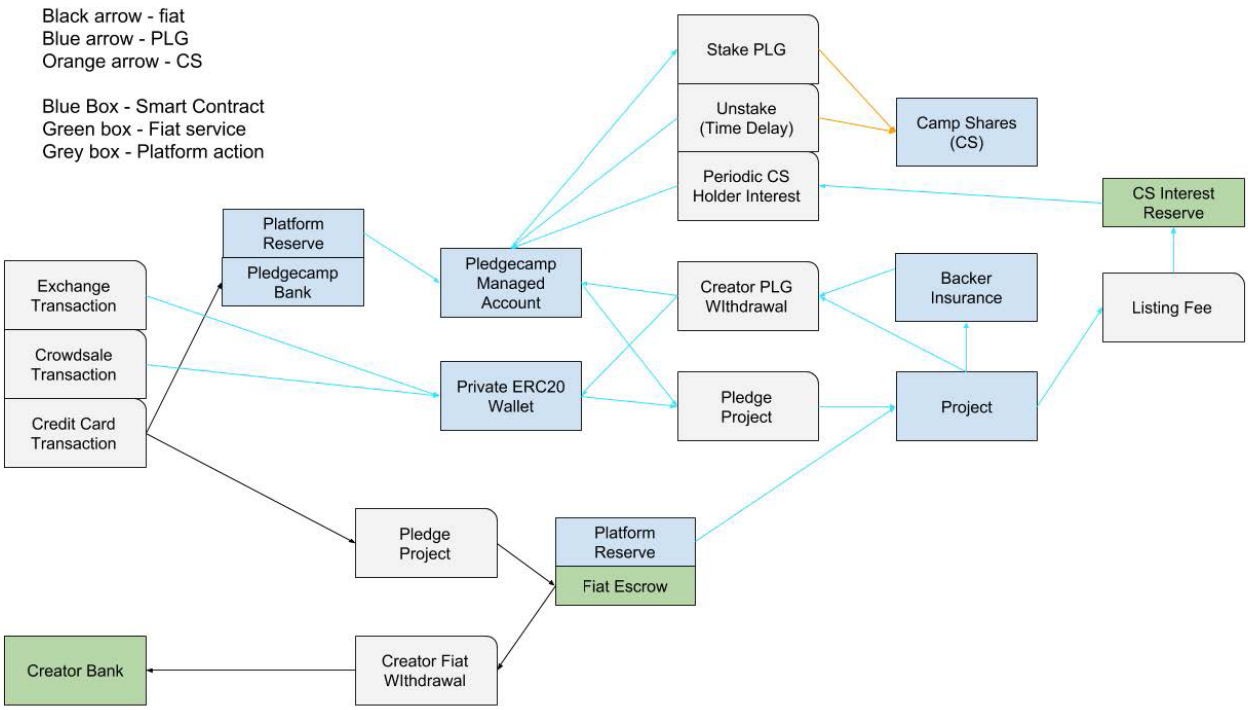


Figure 19 Currency Flow Diagram

Managed accounts are wallets that users can use on the platform to store and transfer their PLG or CS that are managed by the platform. Users may use private ERC20 wallets at any time as well.

As familiarity with cryptocurrency increases over time, the inclusion of fiat elements will become less and less important. As it stands now, this functionality and limited incorporation of fiat will not detract from the decentralized nature of listing procedures and Backer Insurance as a security mechanism. It also does not affect the sum of listing fees in any way that compensates only CS holders for their work. The objective of this possible payment flow is to increase user adoption and project listings, which will benefit everyone in the network.

Citations

[1] Goldman Sachs. "The Future of Finance", Mar 13, 2015, p. 12. https://www.planet-fintech.com/file/167061

[2] InfoDev, World Bank, Finance and Private Sector Development Department. "Crowdfunding's Potential for the Developing World", 2013, p. 14. www.infodev.org/infodev-files/wb_crowdfundingreport-v12.pdf

[3] "Top Fundraising & Crowdfunding Platforms." Crowdfunding.com, Aug. 23, 2018 www.crowdfunding.com/

[4] "Crowdfunding - worldwide." statista, https://www.statista.com/outlook/335/100/crowdfunding/worldwide. Accessed 1 May 2018.

[5] Douglas Cumming, Lars Hornuf. "The Economics of Crowdfunding, Startups, Portals, and Investor Behavior", 2018, p. 146.

[6] "How Much Venture Capital are Kickstarter and Indiegogo Hardware Projects Raising?". Cbinsights. Aug 11, 2014, www.cbinsights.com/blog/crowdfunded-venture-capital-hardware/

[7] "Oculus Rift: Step Into the Game." Kickstarter, https://www.kickstarter.com/projects/1523379957/oculus-rift-step-into-the-game. Accessed 1 May 2018.

[8] "Peak Design." Kicskstarter, https://www.kickstarter.com/projects/peak-design/greatest-hits-revamped-capture-slide-and-slide-lit/creator_bio. Accessed 1 May 2018.

[9] "Pebble Technology." Kickstarter, https://www.kickstarter.com/profile/getpebble/created. Accessed 1 May 2018.

[10] InfoDev, World Bank, Finance and Private Sector Development Department. "Crowdfunding's Potential for the Developing World, 2012, Foreword. www.infodev.org/infodev-files/wb_crowdfundingreport-v12.pdf

[11] Stuart, Toby and Sorenson Olav."The Geography of Opportunity: Spatial Heterogeneity in Founding Rates and the Performance of Biotechnology Firms" Research Policy, February, 2003, vol. 32, issue 2, p. 229-253.

[12] Candida G. Brush et al. "Diana Report Women Entrepreneurs 2014: Bridging the Gender Gap in Venture Capital", Sept, 2014, p. 7. www.babson.edu/Academics/centers/cwel/thought-leadership/diana/Documents/ diana-project-executive-summary-2014.pdf

[13] Olav, Sorenson et al. "Expand innovation finance via crowdfunding". Science Magazine. Dec. 23, 2016, Vol 354, Issue 6319, p. 526-1528.

[14] Greenberg, Jason and Mollick Ethan. "Activist Choice Homophily and the Crowdfunding of Female Founders". Administrative Science Quarterly, Nov. 5, 2016. Vo 62, Issue 2, p. 341 – 374. journals.sagepub.com/doi/10.1177/0001839216678847

[15] Agrawal, Ajay et al. "The Geography of Crowdfunding". National Bureau of Economic Research, Feb. 2011. https://www.nber.org/papers/w16820.pdf. Accessed 1 May 2018.

[16] "Female Founders Got 2% of Venture Dollars in 2017." Fortune, http://fortune.com/2018/01/31/female-founders-venture-capital-2017/. Accessed 1 May 2018.

[17] "Crowdfunding is a Female Founder's Best Friend." Forbes, https://www.forbes.com/sites/geristengel/2016/03/16/crowdfunding-is-a-female-founders-best-friend/#556ca1d97c64. Accessed 1 May 2018.

[18] InfoDev, World Bank. 43.

[19] "Terms of Use." Kickstarter, https://www.kickstarter.com/terms-of-use. Accessed 1 Sept 2018.

[20] Mollick, Ethan and Alicia Robb. "Democratizing Innovation and Capital Access: The Role of Crowdfunding". University of California, Berkeley. Winter 2016, Vol. 58, No. 2, p. 84, CMR. Berkeley.edu

[21] Cumming, Douglas and Lars Hornuf. "The Economics of Crowdfunding, Startups, Portals, and Investor Behavior", 2018, p. 137.

[22] "The Second-Biggest Kickstarter Project Ever Is Also a Spectacular Fail." BGR, 15 Apr. 2016, bgr.com/2016/04/15/kickstarter-coolest-cooler-fail.

[23] "The Ouya Is Basically Dead." Forbes, 7 Mar. 2014, www.forbes.com/sites/erikkain/2014/03/07/hit-kickstarter-video-game-console-ouya-is-basically-dead/#493b52415a55.

[24] "SuperScreen Kickstarter fails, takes $2.5M down the drain." Slashgear, 11 Oct. 2018. https://www.slashgear.com/superscreen-kickstarter-fails-takes-2-5m-down-the-drain-11549706/.

[25] "How Zano Raised Millions on Kickstarter and Left Most Backers with Nothing." Medium, 18 Jan. 2016, medium.com/kickstarter/how-zano-raised-millions-on-kickstarter-and-leftbackers-with-nearly-nothing-85c0abe4a6cb.

[26] "Failed HUD Helmet Maker Skully Spent Funding On Strippers And Exotic Cars: Lawsuit." Jalopnik, 8 Oct. 2016, jalopnik.com/failed-hud-helmet-maker-skully-spent-r-d-moneyon-strip-1785093398

[27] Kickstarter Statistics. Jul. 20, 2018 www.kickstarter.com/help/stats. Accessed 22 Nov, 2018.

[28] Strickler, Yancey et all. "Kickstarter Is Not a Store." Kickstarter, 20 Sept. 2012, www.kickstarter.com/blog/kickstarter-is-not-a-store.

[29] "Creator Questions." Kickstarter, https://help.kickstarter.com/hc/en-us/categories/115000492154-Creator-questions. Accessed 1 May, 2018.

[30] "Who Can Use Kickstarter." Kickstarter, Aug. 23, 2018. help.kickstarter.com/hc/en-us/ articles/115005128594-Who-can-use-Kickstarter

[31] "Who Can Use Kickstarter." Kickstarter, Aug. 23, 2018. help.kickstarter.com/hc/en-us/ articles/115005128594-Who-can-use-Kickstarter

[32] Cumming, Douglas and Lars Hornuf. "The Economics of Crowdfunding, Startups, Portals, and Investor Behavior", 2018, p. 238.

[33] Cumming, Douglas and Lars Hornuf. "The Economics of Crowdfunding, Startups, Portals, and Investor Behavior", 2018, p. 3.

[34] Ludy, Lawrence. "Blockchain and the Sharing Economy 2.0." IBM Corporation, 12 May 2016. ibm.com/developerworks/library/iot-blockchain-sharing-economy/index.html

[35] Currier, James. "From Social Networks To Market Networks." TechCrunch, 27 June 2015. www.techcrunch.com/2015/06/27/from-social-to-market-networks.

[36] "A Quote by John Nash." Goodreads, www.goodreads.com/quotes/229916-the-best-forthe-group-comes-when-everyone-in-the. Accessed 1 May 2018.

[37] Buterin, Vitalik. "On Medium-of-Exchange Token Valuations." Vitalik Buterin's website, Oct. 17, 2017. https://vitalik.ca/general/2017/10/17/moe.html.

[38] Curcio, Matt. Personal interview. 19 Nov. 2018. https://www.youtube.com/watch?v=PTNf-SVpCW0&feature=youtu.be.

[39] As of 22 Nov 2018, only 328 of 154,246 successfully funded projects have raised $1M or more, a 99.98 percentile result. "Stats." Kickstarter. https://www.kickstarter.com/help/stats. Accessed 22 Nov 2018.