Unlocking the Intrinsic Value of Impact through Global Impact Capital Markets

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Proof of Impact

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Abstract

Impact is by and large invisible:

Those who want to fund it do not know if their money is put to work to achieve the impact they seek.

Those implementing impact have very few means of showing the progress towards the impact they achieved.

There is an opportunity to create a direct link between an impact event and its funding. We propose to do this by building a **global marketplace for impact capital**. We argue that this is the best way to connect impact outcomes to funding.

By combining emerging technology with transparency and financial engineering, we anticipate that impact can eventually transition from an impact lens to a tradable asset class thus improving both the amount and efficiency of investing in impact.

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Figure 1 - Proof of Impact is creating a global Impact Marketplace that allows for the simple funding, execution and trading of impact investment products. The Marketplace is built upon the verification of impact data by creating unique impact event tokens.

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Table of Contents

Abstract ........................................................................................................................................... 2

Context: Changemakers and the Purpose Economy ........................................................................... 4
Impact: the currency of the changemaker generation ......................................................................... 4
Impact Financing today ....................................................................................................................... 6
The Size of the impact market ............................................................................................................ 6
Current Challenges in Impact Financing
  Challenge 1: The Impact Black Box .................................................................................................. 7
  Challenge 2: Inputs vs. outputs ......................................................................................................... 9
  Challenge 3: The double attribution problem ................................................................................. 9
  Challenge 4: The cost of Evaluation ............................................................................................... 11
  Challenge 5: Liquidity in Impact Markets ....................................................................................... 11
A Global Impact Marketplace ........................................................................................................... 13
Prerequisites:
  Individual Event Verification (Impact event proof points) ............................................................. 14
  Financial Structuring / Financial Engineering .............................................................................. 16
Blockchain’s Value Add ....................................................................................................................... 21
Which is the best blockchain for Impact? ......................................................................................... 21
The value of public blockchains ....................................................................................................... 22
Do we need a native token? ............................................................................................................... 22
The Impact Marketplace ................................................................................................................... 24
Impact Seller: The User Experience ................................................................................................... 25
  Step 1: Onboarding ....................................................................................................................... 25
  Step 2: Selecting Impact Events .................................................................................................... 26
  Step 3: Delivering and Tracking Impact Events ........................................................................... 26
  Step 4: Payments and Dashboards .............................................................................................. 26
Impact Buyers: The User Experience .................................................................................................. 27
  Step 1: Buyer Onboarding .............................................................................................................. 27
  Step 2: Research and Due Diligence ............................................................................................. 27
  Step 3: Deploying Capital and Generating Returns ....................................................................... 27
  Step 4: Tracking and Managing Impact ....................................................................................... 29
Conclusion .......................................................................................................................................... 30
ANNEXES ......................................................................................................................................... 31
  Annex 3: Proof of Impact Use case: Impact origination & Investment structure for Ocean Cleaning .......................................................... 4

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Context: Changemakers and the Purpose Economy

In our lifetimes alone, economic fundamentals have shifted several times under the pressure of innovation. Starting in the 80s, industry-centered models powered by capital and fixed assets made way to information-centered models powered by technology and software. Then, new models emerged, centered around social networks, powered by connections and engagement.

Each era produced winners and losers. Every time, incumbents slow to embrace the new rules were forced to submit to first-principle, new generation businesses that “got it right”.

Most recently, social engagement models gave people a taste of their potential power over companies and governments. Yet there are strong signals that the ‘social economy’ is slowing down¹.

Feeling exploited by false engagement and a forced social narratives, a whole new generation of users are left wanting a more active, authentic role for themselves, in a new type of economy, powered by new rules. These new consumers – we call them Changemakers - are ready to define an identity for themselves through acts of positive change. They care for their impact on the world. They need Purpose. And they want to be in control.

Impact: the currency of the changemaker generation
Changemakers want to change the status quo. They don’t believe in output industries and traditional economic theories that glorify growth without taking into account externalities and the social and environmental long term costs. They don’t buy property, even when they can afford it². They don’t set up pension funds and do not invest in the stock market³. They embrace alternative economic models that prioritize community and sustainability over fast

¹ A new 2019 Children and parents: media use and attitudes report highlights the continuing decline of Facebook use by younger demographics with 12-15 year olds with a Facebook profile decreasing from 40% in 2017 to 31% in 2018.
² “Why young people don’t buy cars and apartments anymore” On brightside.me.
³ Joseph D. N. Kendrick “Why Are So Many Young People Investing in Cryptocurrency?”

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Conflicts and struggles on the other side of the world feel a lot more real than they did for any previous generation. For the first time, perhaps this generation doesn’t only feel that they may be able to cure disease, end poverty, save the planet, but they feel that it is their responsibility to do so.

Spearheaded by the Changemakers, a new economic paradigm is here:

The Purpose Economy. Powered by impact.

As consumers, businesses and policymakers adjust to The Purpose Economy, a need is emerging for a dedicated, first-principles infrastructure that allows global economic interactions at scale, around purpose and impact.

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4 Excellent example of a quintessential Changemaker, Greta Thunberg, a Swedish climate activist, has told world leaders: 'I don't want you to be hopeful, I want you to panic. I want you to feel the fear I feel every day and then I want you to act.' In an impassioned warning to act now on climate change, Thunberg told her audience at Davos: 'Either we choose to go on as a civilization or we don’t' (Recording of her speech).

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Impact Financing today

Current practices in impact financing and delivery are antiquated and marred by inefficiencies that act as a significant barrier for innovation, and implicitly inhibit impact at scale.

![Full Cycle of Traditional Project Funding](image)

Figure 2 - Full Cycle of Traditional Project Funding. It takes in average 6-7 years for the impact of an investment to be evaluated or understood.

The main barrier in current delivery models is the fact that it is not possible for investors or funders (or any other stakeholder) to know the outcome of an investment, before the project has been completed. This reality affects every aspect of impact financing.

The Size of the impact market

We estimate that the minimum size of the impact market is between USD 900B - USD 1T annually. This includes:

- USD 450 billion in private donations in the US alone;
- USD 250 Billion in impact investing; and
- USD 160 Billion in Overseas Development Assistance;

Even by the most generous estimations, impact financing is minuscule when put into the context of broader capital markets, considering that the estimated size of the stock market is ca. USD 73 Trillion.

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5 National Philantropic Trust - Charitable Giving Statistics
7 The World Bank – Link to Dataset
8 The Money Project

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It does not help that virtually all capital committed to impact is invested in initiatives and projects that suffer from a common set of challenges.

**Current Challenges in Impact Financing**

**Challenge 1: The Impact Black Box**

When impact funding is deployed there is little to no visibility, creating the impact black box. With no easy way to track funding performance or results, educated decisions on what projects to fund and tracking the expected results become near impossible.

It is very hard to be data-driven and invest in efficient and effective impact that can be well understood and measured. Once invested, it is virtually impossible to manage and adjust investments, based on results.

This is why impact at any scale—regardless of the type of financing or the implementation model—relies on expensive, inefficient infrastructures that have remained virtually unchanged for the last four decades:

![Figure 3 – Funding and impact evaluation cycles in Impact Financing.](image)

Because feedback loops are slow, much effort is put at the beginning into a detailed design, further slowing the process. Hundreds of budget lines outline the smallest expenses, projected over 3-5 years and departure from these projections is penalized.

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With increasingly slow feedback loops, the stakes and risk perception from potential funders also increase. This results in money that flows through a small number of trusted mediators (see Fig 2. below). These trust mediators play a unique role in the universe of impact funding and delivery; they are known and therefore trustworthy. They have managed similar projects before and know the game. These large incumbents pass much of the funding (and deliverables) down to several levels of subcontractors, with their added value being reassuring donors that the funds are well spent.

Donors and investors agree that incumbent players are large and expensive. Yet, there is no acceptable alternative to invest large amounts of funding into projects with long-term impact.

Figure 4 Trust mediators. In 2011 (the last year with available public data), 50% of United State’s Development Agency’s (USAID) awards by amount in 2015 went to 5 organizations (in fact they go to 4 organizations, as one of the 5 recipients is a differently branded venture of one of the others)1.

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Challenge 2: Inputs vs. outputs
Because of the lack of visibility into actual performance, over the years funders have developed a series of proxy metrics that are easy to track, yet provide limited insights into the impact delivered. Some examples of proxy metrics that are of limited value include the number of trainings administered, number of people reached, commodities delivered, overhead to total budget ratios, operations cost to staff cost ratios. These metrics are essentially inputs.

In the absence of real performance data, inputs give stakeholders a sense of precision but end up being counter-productive as implementers are not allowed to adapt to changing realities on the ground. In practice, implementers become incentivized to design and resource for predictable activities. Tracking inputs skews incentives and generates further complexity across the industry. This use of inputs favors tried-and-tested project structures that benefit incumbents and hamper innovation. Ultimately it drives up the cost of impact.

The only question that should matter is: What exactly has been achieved with that money? How many children have been vaccinated? How much solar energy has been generated? How many people have been successfully treated of a given disease? How much plastic was taken out of the oceans? These would be outputs.

Outputs bring higher value than inputs and should be the focus as we measure and incentivize our pursuit of impact.

Challenge 3: The double attribution problem
Impact attribution is an assessment of how much of a certain outcome was caused by the contribution of specific organizations or people."
Mostly because of the slow feedback loops, but also because of the complexities involved in defining clear causations and correlations, impact attribution is among the most difficult problems in impact. The golden standard for attribution would be the randomized control trial, which is slow, expensive and impossible to run at scale.

Impact Attribution is a major variable influencing people’s decisions to give or not give to charity, or otherwise fund or not fund impact. Impact funders—whether they are donors or investors—expect a minimum understanding of what exactly their money has “bought”. In practice, organizations fail to deliver on this expectation, or, in their attempt to position themselves as data-driven, they end up creating double attribution: the same impact event is attributed to more than one donor.

“I don’t suppose we’re unique at all in feeling that we want to support those causes where the vast majority of the money is not swallowed up in high overheads and admin costs – that’s one of the major things that we think about” (Breeze, 2010)

Figure 5: Comparison between traditional impact financing and output-event based financing. One offers no clear attribution, the second one offers 100% impact attribution.

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Challenge 4: The cost of Evaluation
The budgets of impact projects routinely allocate anywhere between 15% and 30% of the total budget to monitoring and evaluation\(^\text{11}\), depending on the level of evidence required. In addition to this self-evaluation, many projects also require external validation, which usually involves large, multisite efforts involving more stakeholders which immediately increase costs.

Additionally, due to the operational complexity in monitoring, there is a significant time-gap between an activity and the related monitoring effort. This makes for very slow feedback loops, slowing down speed and agility in impact implementation. Current monitoring and evaluation hinders an implementer’s ability to act on real data and optimize impact delivery models in real time (see Fig 1 above).

Challenge 5: Liquidity in Impact Markets
Market liquidity is a market feature whereby an individual or institution can quickly purchase or sell an asset without causing a drastic change in the asset’s price. In other words, liquidity defines how big the trade-off is between the speed of selling an asset and the price it can be sold for\(^\text{12}\). In a liquid market, the trade-off is mild: selling quickly will not reduce the price much. In a relatively illiquid market, selling it quickly will require cutting its price by some amount.

Impact markets - such as they are - are extremely illiquid. The few impact investment products (mostly social impact bonds), do not have any liquidity at all, which drastically inhibits the flow of private capital into impact markets.

There are three key barriers that are preventing private capital from freely flowing into the social impact space:

1) An unmet need among funders (including donors, investors, and payers) to quickly and transparently see the direct impact of their contributions.
2) A lack of impact investment products that generate market rate returns based on achievement of impact goals, as well as the lack of secondary markets to allow for trading of these products.
3) The high costs and limited scalability of setting up highly customized, project-specific investment products (e.g., social impact bonds) that require measurement of long-

\(^\text{12}\) Mike Moffatt. "Liquidity - Dictionary Definition of Liquidity." About.com Education. Archived from the original on 17 April 2015.
term outcomes through burdensome evaluation methods (e.g., randomized controlled trials).

**SUSTAINABLE DEVELOPMENT GOALS**

In 2015, the United Nations (UN) developed the Sustainable Development Goals (SDGs) as a call to action for countries, governments, investors, and social organizations across the world to unite around 17 global goals focused on ending poverty and ensuring prosperity for all people and the planet. The UN developed specific measures to track progress and set a timeframe to achieve the goals by 2030, which were intended to drive a shared understanding and sense of urgency in carrying out the plan. The creation of this global agenda was a historic accomplishment in guiding meaningful change to solve the world’s most pressing challenges, but the estimated funding gap to achieve the SDGs is $2.5 trillion. A significant mobilization of private capital is needed to achieve the SDGs.
A Global Impact Marketplace

A global public and transparent Impact Marketplace would allow for easy funding, execution, trading and of impact investment products. Such an Impact Marketplace would allow impact buyers (i.e., donors, investors, payers, consumers) and sellers (i.e., impact implementers, service providers, impact-minded communities, impact driven companies/corporations, etc.) to come to a global platform, and trade events (i.e., outputs) across any sector or geography.

The Marketplace will have established market rates and returns for a set of measurable impact events (impact outputs) that can be “bought and sold” by funders and implementers alike. The completion of impact events will be rigorously validated using transparent and predefined proof points specific to each type of event (see below: Verification), and each completed impact event will be issued a digital certificate (“Token”) that is listed on a public, immutable ledger.

Upon verification of impact events, implementers will be paid for their services and funders will be able to easily view their return on investment, whether that be an impact return, a financial return, or both. The Marketplace will operate efficiently by conducting transaction settlement and impact attribution through the Proof of Impact payment platform, which will allow for seamless transactions among all stakeholders involved.

Broader categories of impact events, or impact event types, will be the basis of the Marketplace and will allow for easily traded -- and widely scalable -- impact commoditization. At scale, the Impact Marketplace can allow the rapid directing of resources to emergencies, and other priorities by increasing the flow of capital to related impact events.

The impact events listed on the Marketplace are outputs, not outcomes. Verified immunizations, not units of child survival. The goal is to create a menu of impact event types that are 1) highly correlated with achievement of outcomes, and 2) easily and objectively verified.

The rationale for this decision is to simplify, standardize, and lower the cost of setting up customized impact investment products and circumvent models that require the most burdensome evaluation methods. In the Marketplace, each impact event type will have predefined terms and all of the necessary information that users will need to participate, cutting out the time and resources needed for planning, contracting, and negotiating the terms of each customized impact investing project.
Proof of Impact has already begun developing this global Marketplace. As we are implementing and scaling this model, there are several prerequisites that need to be addressed in order to unlock the full potential of the marketplace.

Prerequisites:

Individual Event Verification (Impact event proof points)
Before an impact token can be created, the unique underlying impact event needs to be objectively verified. The verification needs to fulfil a minimum set of criteria:

- **The event to be verified is an output** - Girls educated, Vaccinations. Tons of CO2 - that correlates strongly with a higher level impact outcome (Reduction in child mortality, Financial inclusion, etc);
- **The event needs to be uniquely identifiable**: it needs to contain unique features that distinguish it from any other, similar events;
- **The verification needs to happen in real time**, or as close to real time as possible;
- **The verification should be reasonably invulnerable to human error** - Ideally the verification should as much as possible be machine-generated;

Verifying these events is an operational challenge whose difficulty increases exponentially at the last mile. Solving the verification problem is critical to the ability of this model to go to scale. However, there is a tremendous opportunity for verification to evolve into a dynamic, profitable market on its own.

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Currently, there is relatively little verification happening. Most outputs that get counted by impact implementers are either self-reported (by front-line staff such as nurses or community health workers), or they are modeled based on samples collected through surveys. Sometimes - rarely - they are individually audited.

However, there is currently a vibrant ecosystem of verification applications being developed and implemented in projects across various sensors. Most of these are mobile-based. Some of them use features inside mobile phones (GPS, camera, biometrics).

Others rely on combinations of specialized devices and cell phones.

As verification models and technology evolve, they free up frontline workers to focus on delivering impact rather than filling in paperwork. They also eliminate significant data flaws, increasing the quality of the data and its usefulness.

IOT devices are becoming cheaper and more reliable, with new technologies vastly improving problems related to batteries and connectivity. These technology advances are making real-time, individual event verification possible at scale and in frontier operational environments. We expect a vibrant market to emerge where dedicated verification businesses will develop products and services for event verification.

Each type of event is different - by its nature as well as operationally - so specialized verification models will emerge. High resolution satellite images to verify forest regeneration. Biometrics to verify identity. QR codes scanned on delivery. Verification can be highly specialized, and, as long as there are incentives in place, scalable verification models will evolve.

As that happens, platforms such as POI will simply treat verification as a micro-service connecting into the Marketplace APIs and providing the trigger for the impact token to be minted.

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13 Examples of such technology evolution include LoRa, narrowband IoT (NB IoT) or LTE Cat M1. These are long-range low-power wide-area network (LPWAN) wireless communication protocols achieving extremely long range connectivity (100km+).
Financial Structuring/ Financial Engineering
Once the event has been verified and the token is minted, you now have an official, validated impact event. This impact event can now be privately held, transferred or transacted like any asset, which lies the big opportunity: We can now structure financial products around impact events.

The most basic financial structure is simply a digital attribution. Because the impact event is unique and identified on a public ledger, there is full impact attribution. Whoever paid for the impact event owns the token, which means they own the impact attribution. For example, a funder gets credit for their donation and visibility into how their money was spent.

But the exciting opportunity is to build financial structures that are a bit more complex and that would be attractive to wider segments of investors. Some examples include:
a. **Simple Output tokens**

![Figure 9](image-url). A simple Output Token model.

Output Tokens are verified events that are made available to a buyer in a private sale or on a secondary market. This is the most basic model for a financial product: the buyer receives attribution and the seller receives cash. The transaction can be pre-paid or post-paid. Outputs can be sold/bought clustered/batched or individually.

b. **Event-triggered Performance based tokens (PBT):**

![Figure 10](image-url). Event-Triggered Performance-Based Token

A Performance Based Token is a smart contract by which a buyer and a seller agree to purchase verified individual events at a pre-agreed price. Transactions can occur clustered or individual and the payment can be made up-front, in real time or at delivery. In an event-triggered PBT, the buyer puts forward an offer to purchase specific events.

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(i.e.: individual trees planted) at a pre-agreed price. This offer is locked in a smart contract and the Money gets transferred into an escrow account. Every time an impact event is verified, the corresponding amount of money is released in the seller’s account/ wallet.

c. **Outcome Tokens** are structured on top of an impact theses that uses available evidence to model correlations between outputs and outcomes. An example of an outcome token would be a token corresponding to a ton of CO2 sequestered out of the atmosphere (outcome). This outcome would be essentially a portfolio combining a pre-defined number of outputs (individual trees planted), based on the assumption that there are X trees necessary to absorb 1 ton of CO2 in one year.

d. **Tokenized Impact Indexes** are outcome tokens structured around impact thesis that are more complex than a simple outcome correlation. For example, a Child Survival index would be balanced around different types of individual events that correlate to child survival: Pregnancy Milestones, Ante-Natal Care Visits, Immunization, Nutrition, etc.

e. **Tokenized Impact Bonds**. A tokenized impact bond is structured around an offer made by an outcome underwriter (outcome buyer) to pay a pre-agreed amount if a certain outcome is achieved. For example, an Underwriter would offer a payment of 30mil EUR for a min 5% reduction in child mortality in a given community. Investors purchase individual events (outputs) that are known to correlate with the respective outcome – i.e. immunizations, ante-natal care visits, etc. Once sufficient output events have been verified, the outcome milestone is met and the Underwriter is paying investors their investment plus a premium. Investors make a profit for putting capital towards
immunizations and the underwriter gets 100% outcome attribution while only paying for success.

f. **Tokenized loans.** A tokenized loan allows a community/recipient to borrow money for a specific purpose (build a hospital, build a school, roll out broadband, upgrade grid, irrigation scheme) and then pay back the lenders over a pre-agreed period of time. Tokens get issued to lenders and the capital thus collected is invested in the agreed purpose.

g. **Others (Complex financial products, Futures, Other Impact products).** Once impact events are liquid and viewed in the market as an asset class, more complex financial products can be structured and listed for trading. Other sectors and markets – financial and non-financial - can benefit from integrating elements of event verification and/or tokenized outputs into their products. Donor-Advised funds can use them to track performance. Companies can use them to reward milestones or loyalty along their value chains. Corporations can put impact assets on their balance sheet to prove their impact portfolio/footprint – either voluntarily or as part of regulatory compliance¹⁴. Businesses

¹⁴ Examples of such compliance requirements include: Carbon Credits, ESG Requirements as well as regulatory requirements in specialized sectors and geographies. In Mozambique, for example, companies in the mining sector are required to prove investments in community projects proportional with their profits. In India, companies above a certain size are required to invest in training of their staff.
can offer buyers in one part of the world the opportunity to invest in specific outputs on the other side of the world, through simple acts of product purchase.

Figure 12 – Impact Collateral. Unique impact events in SDG categories 3, 7 and 14 are currently flowing into the Impact Marketplace. Impact events that are delivered and validated, can now be pooled across the platform to create collateral for investment products (From Real POI Use cases – see also annexes for more details).
Blockchain’s Value Add

We explained above the importance of verifying unique, individual events. Once verified, and in order to make them attributable, these unique events require a digital confirmation that contains all the unique variables. A digital representation to the real life, verified event. This digital representation is called a Token.

Each time a child is vaccinated there is a new token issued. Every time a TB case is treated or a pound of plastic is taken out of the environment, there are corresponding tokens issued.

However, digital entries into a ledger is not enough – simple digital entries can be copied, multiplied or tampered with. This would be an unacceptable risk in our model, where the corresponding events are priced and monetized and therefore need to maintain unicity.

Some of these risks can be addressed with checks and balances, audits, governance etc. and if our purpose would be simply to track these events (as a smarter alternative to traditional Monitoring and Evaluation), centralized, public databases (such as DHIS215) would be the best model to adopt.

But since these tokens are valued and monetized, in order to make trading possible investors need the option to hold impact tokens—essentially holding full attribution for unique events—without having to have any relationship with any organization or entity, or having to understand/evaluate reliability of any one monitoring database16. As long as they prove token holding they prove attribution. This means that they can trade these tokens, essentially taking their money out and passing the attribution to someone else. And because all tokens are listed on a public, immutable ledger, they can trust that they are genuine and they can even track their history if trading on a secondary market. This will accelerate the emergence of global impact capital markets accessible to anyone, anywhere in the world.

Which is the best blockchain for Impact?

Proof of Impact is an impact company, not a blockchain company. As such, we regard the blockchain as a critical tool in our infrastructure, but not our core business. We see ourselves as agnostic to blockchains and keen to integrate any/ as many blockchains as necessary to deliver on our core business.

Currently 4K+ developers contribute code across 2.8K public blockchains every month17, globally. This is just core development. Further resources are dedicated to building

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15 District Health Information Software 2 (DHIS2) is an open source, web-based health management information system (HMIS) platform. Today, DHIS2 is the world’s largest HMIS platform, in use by 67 low and middle-income countries (project site).

16 This principle remains true even in the likely scenario where POI maintains custody of the tokens on behalf of users, in “hot wallets”.

permissioned layers and infrastructure on top of these blockchains. Many of these developers are best in class and they are members of active communities building a global infrastructure that changes every day. They solve complex problems that transcend technology and touch upon security, governance and game theory.

As a first-principle company in this emerging space, it is our responsibility to build on top of the existing infrastructure - and indeed evolve with and contribute to this infrastructure as it is growing into a global force.

We chose to build our prototype on the Ethereum Blockchain out of convenience. Ethereum has the biggest developer team in crypto, by far. On average, 216 developers contribute code every month to Ethereum’s repos (not including hard forks and secondary layers). This is more than 4X the number of active developers that contribute to Bitcoin’s repos (ca 50 developers per month), the second most active project18.

Although we are working on Ethereum, the POI architecture is designed such that we can easily integrate any other blockchain or token: for example, a token issued on a different platform can be easily integrated into the PoI protocol and structured into an impact product, connected to a payment or any other transaction.

The value of public blockchains
Our value proposition to investors and the wider impact space is around transparency, attribution, traceability and investability. A public blockchain’s immutability is a critical argument in favour of using blockchain (vs. a centralized database) for our model.

Do we need a native token?
POI does not have a native token. Verified individual events have corresponding tokens on our platform that can be traded (either as digital confirmations of value/ attribution or as securities), but there is no native token used for payments across our platform. Some of our impact tokens are fungible, others are non-fungible.

We decided against issuing a dedicated token for two important reasons:

1) We would like investors to be able to pay directly with cash and invest only in the sort of impact that they want to; We do not want to "lock" buyers or sellers into our platform, or create an additional transaction layer necessary to participate in the marketplace;

2) Some of our user segments should **not** be expected to be blockchain literate. Among others, we work with low income and low tech users and we also work with large, traditional partners (governments, large Non-Profits, multi-nationals). We believe that as much as possible, we should “hide” the blockchain component from users. We

18 Ibid
believe that the winning model has the blockchain solving specific problems at a platform level, without hampering the user experience.
The Impact Marketplace

The Marketplace is designed for two primary users: Impact Implementers (sellers) and Impact Buyers:

1) Impact Implementers (Sellers) include anyone who has the capability to implement a relevant impact event. They can include any type of company or organization or individuals. A local hospital delivering immunizations. A non-profit distributing clean cookstoves. A school. A multinational or a small company wanting to demonstrate the social and environmental standards they adhere to in their manufacturing or production processes. Intermediaries in supply chains who want to make the economic distribution of their supply chain transparent. Local health providers that want to access additional sources of income. Local communities planting trees or cleaning beaches.

2) Impact Funders (Buyers) can include traditional institutional and individual impact donors (i.e., who give unrestricted funds that are not contingent on an impact event), investors seeking impact return only (i.e., who give donations that are linked to the achievement of impact events, but not linked to a financial return), investors seeking both impact and financial return, and payers who pay upon successful impact delivery (e.g., government entities, philanthropy).

Just like in any marketplace model, the two primary user types have different needs and different navigation options/experiences in the Marketplace and, as needed, dedicated pieces of infrastructure (wallets, admin panels, dashboards). The Marketplace is in the public domain for anyone to view the available impact tokens, track their history, research their context and study the order book. As the Marketplace matures, more impact events will be added, others will be removed, and those with the greatest success will continue to be funded until the outcome is achieved.

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Impact Seller: The User Experience

At scale, sellers have the ability to browse a searchable menu of impact event types and view how much they would be paid for successful submission of unique events. They also have the ability to suggest new categories of events and offer them to buyers.

The Marketplace will also indicate which impact event types have committed capital that is ready to be deployed. This searchable menu of impact event types, and associated price per impact event, will be publicly available and will allow Implementers to learn which impact areas funders care about and demonstrate why they should join the Marketplace.

Currently – as we grow the marketplace and define quality verification standards - implementers need hands on guidance on how to structure their data, proof points and operations to become suitable for platform access.

**Step 1: Onboarding**

Sellers complete a standard signup and account creation, followed by an onboarding process. The onboarding allows Sellers to create a profile that includes choosing their industry characteristics (e.g., industries, SDG focus areas) and selecting one or more of their preferred funding mechanisms (i.e., paid upon impact event, selling future impact events, and/or receiving non-contingent donations with no impact event). Implementers will be able to fill out and upload their organizational characteristics (e.g., tax status, prior audits, and annual reports).

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**Figure 13 – Impact Investing 3.0. By leveraging the POI Marketplace, we can apply real-time, granular impact attribution with financial engineering to originate impact investments at scale.**
Step 2: Selecting Impact Events
Upon creating a profile, sellers are directed back to the searchable menu of impact event types. For each impact event type, they will be able to look up the definition, price per impact event, delivery requirements, exclusion criteria, and other information needed to determine their capability to deliver verification that achieve the impact event. Sellers will then select the impact event types that they would like to add to their profiles, along with their track record and evidence base of completing these impact event types. Sellers also have the option to propose adding impact event types not on the menu for consideration. After the impact event types are added to the Seller’s profile, they will be able to see near-real-time which impact event types have open capital committed by Buyers (i.e., capital for any Implementer to gain upon completion of an impact event) and which impact event types do not have capital committed.19

Sellers will also be matched with Buyers who have committed closed capital (i.e., capital in which Buyers choose the Sellers who will receive the funding). Sellers and Buyers will be able to view their matches and then have the ability to communicate and share information on an enhanced messaging platform. Sellers and Buyers can then commit to engage in a partnership based on a selected amount of capital or selected number of impact events or any other variables. Sellers and Buyers can also agree to pursue and set their own terms for a donation or loan on this enhanced messaging platform.

Step 3: Delivering and Tracking Impact Events
Sellers will then begin to deliver verification proof for their selected impact event types. For each impact event type, Sellers will need to track and input all required data points (as instructed on the impact event type menu) to verify their completion of each unique impact event. For tracking purpose, Sellers will be instructed to select whether they will submit their data manually (e.g., by uploading timestamps, photos, bar codes, vitals, and other necessary data points into the Marketplace data entry page), or automatically by connecting the organization’s existing data entry systems and delivered through an API connection. Once the data has been validated a corresponding token is created and added to the ledger. From this moment on, the impact event can be traded.

Step 4: Payments and Dashboards
The Proof of Impact Protocol has a payment layer that allows fiat and crypto deposits and withdrawals. The impact event payment will automatically be processed through the Proof of Impact payment and settlement platform and placed in the Implementer’s account. This can happen manually or through smart contracts, depending on the structure of tokens traded. Implementers will be able to link existing bank accounts to the Marketplace and transfer funds accordingly. Implementers will also be able to view an interactive dashboard that tracks their impact events delivered (submitted, validation passed, validation failed), total

19 If the available supply of impact events with committed capital is exhausted, Implementers will be automatically notified when a new Funder has committed capital.

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funding, and total impact. This will be a downloadable and exportable document that can be used for future fundraising purposes.

Impact Buyers: The User Experience
Prior to sign-up, Buyers will also be able to explore the Marketplace, browse a searchable menu of impact event types, and view the cost of each impact event type and the associated return on investment they could expect to receive for each impact event completed, as applicable (i.e., if they are seeking a financial return in addition to their impact return).

Step 1: Buyer Onboarding
Onboarding for Buyers will include the standard account creation and linking to payment methods, followed by the Buyer selecting their preferred type(s). As noted above, there are different segments of buyers:

1. Institutional or individual funders (i.e., giving unrestricted funds that are not contingent on an impact event)
2. Investors seeking impact return only (i.e., donations linked to achievement of impact events, but not linked to a financial return)
3. Investors seeking both impact and financial return
4. Payers who pay upon successful impact delivery (e.g., government entities, philanthropy)

Buyers can define their own preferences if they want to: impact areas of interest, target geographical areas, and select from the publicly available menu of impact event types that they would like to fund.

Step 2: Research and Due Diligence
Prior to committing capital, different buyer types will have different informational needs regarding the validation requirements and proof points for each impact event type, evidence-base and track record of the Implementer, and target population, among other design factors. For this reason, Buyers would have the option of committing capital to impact event types as a commodity, agnostic to which Implementer delivers the impact event, or they could select a specific Seller profile that they are comfortable supporting and commit capital to pay for impact events delivered by that specific Implementer. Based on the Seller’s profile selections, they will also be automatically matched by the Marketplace to sellers that share the same focus areas for funding consideration.

Step 3: Deploying Capital and Generating Returns
Buyers can deploy capital at different times: upfront, performance-based, or instant.
- Impact investors commit capital upfront, but that capital is still only deployed when impact events are delivered. The key is that they don’t receive their financial return until impact is delivered at scale.
- Buyers seeking impact and financial returns will deploy their capital upfront with the potential to gain their original funding back plus a financial return upon the successful delivery and validation of impact events.

The Table 1 below illustrates the flow of capital depending on the role of the Funder and Implementer.

**Table 1: Capital Flow by Stakeholder**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Seller</th>
<th>Buyer Funder</th>
<th>Investor (Impact Only)</th>
<th>Investor (Impact + Financial)</th>
<th>Payer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Onboarding</td>
<td>Create profile, selects impact event types, match to funders</td>
<td>Choose preferred Funder type(s). select desired impact event types from menu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Impact Delivery</td>
<td>Deliver impact, collect data</td>
<td>Donate capital (not dependent on impact event completion)</td>
<td>Conduct due diligence on Implementers, commit capital</td>
<td>Conduct due diligence on Implementers, enter desired returns, commit capital</td>
<td>Conduct due diligence on impact event validation, commit capital + return</td>
</tr>
<tr>
<td>3. Impact Validation</td>
<td>Upload data, predefined validation process occurs</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>4. Capital Deployment</td>
<td>Receive payment for impact events completed</td>
<td>N/A</td>
<td>Payments sent to Implementer for completed impact events</td>
<td>Payments sent to Implementer for completed impact events</td>
<td>Pays investors back their capital</td>
</tr>
<tr>
<td>5. Returns on Investment</td>
<td>N/A</td>
<td>Receives impact attribution</td>
<td>Receives impact returns</td>
<td>Receives impact and financial</td>
<td></td>
</tr>
</tbody>
</table>

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Upon successful completion of the impact events, capital (including upfront funding and returns) will be automatically deployed to the appropriate stakeholders.

**Step 4: Tracking and Managing Impact**

Buyers have access to streamlined dashboards and analytics tools that will allow them to view and manage all of their investments in one location. They have the ability to view total committed capital versus deployed capital (by sector, category, impact event type, country, Seller, etc), view their impact and financial summaries, and receive automated notifications when individual impact events (or larger impact and financial goals) are achieved. They can also see their aggregated impact in the wider context of impact delivered in the respective category/ geographic area/ timeframe. The Platform also provides exportable financial reports, tax information, and audit reports needed for external reporting purposes.

“If I’m going to be giving away some money, it’s like buying things in a shop, I want to be sure I’m getting good value for it, as it were”. (Breeze, 2010)
Conclusion

The emergence of global Impact capital markets will bring together all segments of impact stakeholders as well as investors, funders, large small and medium companies, governments and communities to buy and sell/deliver impact outputs and outcomes.

In order for these impact capital markets to emerge, several prerequisites need to be fulfilled. These are related to fast, reliable event verification at scale, financial engineering and trading infrastructure.

Proof of Impact is addressing these prerequisites and is building the world’s first liquid impact capital marketplace. Through a streamlined and transparent process that allows buyers to know the precise impact of their time and resources, the POI Marketplace will rapidly accelerate the pace of private capital investments into social and environmental programs, and harness the engine of capitalism for social good.

At Proof of Impact, our hope is that the Marketplace will provide a venue for people across the world to work together in ensuring prosperity for all and protecting our planet. Our dream is to not only achieve the SDGs by 2030, but also provide a tool to rapidly solve new problems that arise for our future generations. Will you join us?
**Annex 1: Proof of Impact Use case: Impact origination & Investment structure for Child Survival in Ethiopia**


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Annex 3: Proof of Impact Use case: Impact origination & Investment structure for Ocean Cleaning

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