Blockchain for Social Impact
Your Presenters:

Damian Hajda - Socialsuite

Joyce Zhang - ixo
Technology for Measuring Social Impact
The Blockchain for IMPACT

Agenda

• Technology for Measuring Impact: About Socialsuite
• Socialsuite + ixo: Blockchain for Measuring Social Impact
• Blockchain 101
• Blockchain for Social Impact Case Studies
• Discussion and Q&A
Over 1 trillion US dollars is invested every year on social impact projects supporting the United Nations 17 Sustainable Development Goals:
Billions of dollars are wasted funding inefficient programs and services.

Measuring their impact allows organisations to improve services and secure funding.
The Problem

Funders want Social Impact reports on their investments but don’t know what to measure

External Consultants are engaged to design tailored social impact measurement metrics for once off usage

Service Providers are given these metrics and burdened with long term data collection

How do you trust the Data

How do you share the knowledge
The Solution

Socialsuite is a data collection platform and mobile app with an online marketplace of validated impact measurement metrics to report effectiveness of solutions to social problems.

- Save Time
- Improve Services
- Secure Funding
How Does Socialsuite Work

**Online Marketplace**
Choose a validated impact measurement framework from hundreds on our impact marketplace.

**SaaS Platform with Mobile App**
Frontline staff easily collect impact data from multiple sources over time using our SaaS platform and mobile app.

**Dashboards & AI**
Our Dashboards show impact achieved in real time with artificial intelligence benchmarks against similar investments.

**Smart Contracts for funding**
Data collected in Socialsuite combined with the ixo blockchain protocol allows smart contracts to release funding based on verified social impact. Share the knowledge.
Who Uses Socialsuite

Funders
Government, Philanthropic and Corporate funders

Community Services
Not-for profits and community service organisations

Impact Measurement Consultants
Anyone who designs impact measurement metrics and frameworks
Who Uses Socialsuite

[Logos of various organizations]
Socialsuite + IXO: Blockchain for Social Impact
Blockchain smart contracts could shape future of impact investing

Blockchain smart contracts for funding based on verified social impact could shape the future of impact investing and social impact bonds, according to the founders of a tech company launching an Australian smart contracts pilot program.

Herald Sun

Socialsuite partners with IXO

Melbourne-based technology platform Socialsuite has partnered with IXO, a blockchain protocol to deliver some of the world's first blockchain smart contracts for funding based on verified social impact.

Socialsuite is a SaaS platform with a digital marketplace of validated impact measurement metrics that assists not-for-profits and community service organizations measure and report on the outcomes and impacts of their services, improving their service delivery and ability to obtain further funding.

It also provides solutions for government, philanthropic and corporate funders to report on the effectiveness of their investments in social programs and community partnerships.

IXO has created the world's first blockchain protocol for impact measurement and leverages blockchain technology to optimize sustainable development impact. It has partnered with UNICEF, Innovation Edge and Singularity University Ventures.

Integrating smart contracts with impact measurement, Socialsuite is currently running a trial impact verified smart contract pilot in Australia, one of the first in the world.
A blockchain is a distributed database that solves the problem of trust, transparency, and accountability during a transaction between two parties. Using advanced cryptography, each block of data is stored on the chain across a network of computers, or nodes. Thus, the information is not only decentralized but also distributed, which means no single person or entity controls the system, yet everyone can use and help run it. Distributed ledger technology frameworks eliminate the need for and reliance on central authorities such as banks and governments.
THE SOLUTION

PROOF OF IMPACT

Impact
Investors
Impact data
CARBON TOKEN
HEALTH TOKEN
WATER TOKEN
Protocol
Data Evaluation
Global Impact Ledger
Impact marketplace
P2P trading
Impact Investors
Mobile DApp for early childhood development practitioners in South Africa used to take attendance.

Amply is being used to replace an existing paper-based system to register children for government funded pre-school subsidy.

**Claim capture:** Each child’s attendance

**Impact Evaluation:** Verification of attendance
In South Africa, the Department of Social Development (DSD) provides a per-child-per-day subsidy for children to access Early Childhood Development (ECD) services (R15 in the Western Cape).

These subsidies are given to children who qualify as low-income through an income means test (<R7000/month per family) for each day attended at a registered ECD centre.

Meet Nomsa, owner of Sinako Educare in Gugulethu.

She, like many other ECD centre owners, must submit monthly or quarterly forms to report child attendance to the DSD. However, this process is not streamlined and can be drastically improved.
THE CHALLENGE

1. The entire system is paper-based, creating an administrative burden
2. Many schools are not receiving an accurate amount in subsidies
3. NDP Vision 2030 intends to increase the amount of subsidies granted, furthering the backlog
4. Children without ID numbers are unidentified, leaving room for double-counting and inefficient allocation of funds
Amply strives to revolutionize early childhood development in South Africa

The vision is to completely replace the existing paper-based system to register children for a government funded pre-school subsidy in South Africa.

With funding from Innovation Edge and UNICEF, we ran our Amply Pilot 1.0 between November 2016 – November 2017.

Since November 2016, the project has grown to operate in over 85 centres at those centres - registered 111 service providers and has recorded more than 61408 attendances with over 3122 children enrolled in the Western Cape.
First Pilot Results:

- Created a mobile app that ECD centres could use to take attendance instead of using a paper-based system

- Proved that attendance claims could be ledgered to a blockchain (Ethereum)
Amply Pilot 2.0 (currently in progress)

Amply Pilot 2.0
ECD Centres in Vrygrond, Western Cape
- 4 Registered
- 3 Unregistered

Implementation: April 1 – June 30, 2018

Objectives:
- Auto-generate Schedule B form
- For unregistered centres, possibility for funding from an external funder
- Capture/store the raw data for DSD to access automatically
- Continue to improve app functionality and usability through input and conversation with ECD centres and service providers
THE AMPLY APP

How it Works

Every morning, a service provider (teacher or principal) logs each child’s attendance in the app.

Underlying the app is blockchain infrastructure and smart contracts, through which a third-party evaluator can verify the claim of attendances made by the service provider.

Upon approval by an evaluator, the service provider will receive a verified record (digital or printed) that he/she can then show to the government, NGOs, and/or other parties for funding and subsidies.
This is shared with the DSD every quarter to secure the subsidy.
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The system generates trustworthy, rich transactional data. By encrypting the data and storing all personally identifiable information within an individual’s own personal data store, a detailed record can be built up over time for each person.

Valuable data assets can be derived from this personal information, to benefit the individual and population-based data analysis can benefit ECD programmes.

- Self-Sovereign Identifiers
- Common Standard Global Identifiers
- Data Assets become Verifiable Claims

A3512X41BZ3X159

schema.org/person

Self-Sovereign Identifiers
Turning invisible children into invincible children
Traction
Use Cases

Development Impact Bond (India)
Smart Impact Bonds for improving educational outcomes for primary school children in India.

Claim capture: Improved performance in English, Hindi and mathematics

Impact Evaluation: Sample selection measured across these subjects, 3x per year by way of a standardised test
The mechanism will be implemented in the context of a new Education Development Impact Bond Fund (EDIBF) in India - the latest fundraising initiative by the British Asian Trust (BAT), set up 10 years ago to combat poverty in South Asia.

This new Development Impact Bond (DIB) is a performance-based fund that supports education providers across India through mentorship, courses and other initiatives. Our project will track the improved learning outcomes of primary school children across 190 schools in Delhi & Rajasthan.

Further Reading:

- [Investment where profit means better schools](http://www.bbc.com) *BBC News*
- [Prince Charles launches education impact bond for India](http://www.economictimes.indiatimes.com) *Economic Times*
To demonstrate how existing Development Impact Bond (DIB) financing instruments can be implemented as Smart Impact Bonds using the ixo protocol.

That impact bond instruments can be implemented in ways that can be:

- Automated
- Highly-replicable
- Cost-effective
- Optimized to deliver better development outcomes & higher financial returns
GOALS

- Accelerate the formation of capital that is more effectively distributed to deliver impacts relevant to the Global Goals for sustainable development.

- Increase financial flows to high quality programs that deliver improvements in learning outcomes.

- Contribute to a systemic change in the Indian educational system, by improving the coordination, performance & financing of educational interventions using lower-cost & scalable Smart Impact Bond mechanisms.
Impact Investors use the ixo portal to set up the Impact Projects that will be underwritten by a Development Bond.

1. Impact Investors

2. Impact data

Educators create digital registries of children, using self-sovereign digital identifiers. Information about education results are recorded for each child, using a smartphone application. This gets compiled as Impact Claims. Each claim is digitally signed.

3. Evaluation Agents

Evaluation Agents independently evaluate the Impact Claims, assisted by automated software that processes and validates the claim data. This provides Proof of Impact.
HOW IT WILL WORK


5. Investors exchange Impact Tokens for pre-agreed Bond payouts, as Performance Targets are met.

6. The education Impact Tokens are recorded in a Global Impact Ledger. These Impacts can be seen by everyone & visualized in performance dashboards. This is great for accountability and transparency.
The data on school performance becomes a resource for the world that contributes to a growing Big Impact Data commons governed by the Ocean Protocol. This is a powerful planning resource that calibrates the financing and evaluation algorithms to optimize investments into educational impacts.
WHAT WE VALUE
Impact Optimization

Blockchain offers:
• Provenance of impact data over time
• Transparency of funding
• Accountability for performance
• Attribution of results
• Data sharing marketplace
• A new asset class for the Impact Economy
THE FUTURE
Tokens for Impact

Utility Token to access the ixo Network hosting services
Payment Token for the fees of evaluation services
Staking Token for Proof of Stake, Project Sponsorship & governance

IXO tokens are used to generate Impact Tokens with Proof of Impact
JOIN THE MOVEMENT

COUNT WHAT MATTERS. VALUE WHAT COUNTS.

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Seeking Expressions of Interest

Five Organisation to Pilot
Socialsuite + IXO: Blockchain for Social Impact