UNBLOCKED CASH

Harnessing the Power of Blockchain Technology to Revolutionise Humanitarian Cash Transfers

Australasian Aid Conference 2020
Panel 5J – Humanitarian Aid and Technology

Joshua Hallwright, Humanitarian Lead
1:30pm to 3:00pm, Wed 19th Feb 2020
RESEARCH FINDINGS FROM PILOTING ACCELERATED CASH TRANSFER DELIVERY IN VANUATU
CASH AND VOUCHER ASSISTANCE (CVA)

WHY CVA?
- Cost effectiveness
- Best practice
- Private sector partnerships
- Local economic recovery
- Entry points for financial inclusion, market-based programs, social protection

CVA IN THE PACIFIC
- Pacific cash preparedness partnership
- Feasibility assessments in Fiji, Vanuatu and Solomon Islands
- $2 million multi-purpose cash transfer program for Ambae volcano evacuees in Vanuatu
- CaLP core skills training
- Prime opportunity for innovation

*CVA process is slow and complex
- Tracking & reconciliation of financial transactions time consuming and expensive
- Requires significant agency effort*
DISTRIBUTED LEDGER TECHNOLOGY (DLT)

- Existing e-voucher solutions never used in Pacific, and banks unable to provide alternative (ex. Debit cards) – why not “leapfrog”?

- DLT solutions are well adapted to situations where:
  - Multiple entities need to access and add information at the same time (decentralised, distributed database)
  - Need for quality assurance – that data is accurate and traceable (each “block” is linked to the next)
  - Need for validation and proof of origin – that information is coming from and being accessed by the right users (authenticity and verification)
  - Multiple, interdependent transactions are being entered and need to be reconciled and automated
  - The leading “use cases” today are in financial transactions and supply chain traceability → very compatible with aid delivered in the form of individual payments

Are DLTs faster, cheaper, more transparent?
UNBLOCKED CASH PILOT APPROACH

✓ 2 communities in peri-urban Port Vila
✓ 187 recipients (1209 total, families incl.)
✓ 29 vendors – small shops, schools, fresh foods
✓ Single mothers, widows, people with a disability and LGBTQI+
✓ 4,000 Vatu each = $ 50 AUD
✓ 1 week to shop
✓ Over 1,500 transactions
What's being bought

By who, where, when
RESEARCH METHODS

RESEARCH OBJECTIVES

- Demonstrate the capabilities of the Sempo platform
- Understand existing transfer mechanisms and processes within Oxfam
- Time and cost comparison of DLT-based solutions with existing transfer mechanisms
- Comparison of stakeholders’ ratings concerning transparency, security, and user experience between DLT-based and existing solution
- Develop an understanding of potential risks and mitigation measures
- Develop an understanding of DLT infrastructure and deployment considerations
- Evaluation of platform endpoints

DATA COLLECTION

- Total of 520 surveys from:
  - Recipient and vendor registration
  - Real-time onsite monitoring
  - Post distribution monitoring
  - 6 key informant interviews
  - 4 focus group discussions
  - Staff interviews
RESEARCH FINDINGS

Register & Receive
Before: > 1 hour
Now: < 6 minutes

Satisfaction
Before: 92%
Now: 98%

Set-Up time
Before: 1.5 months
Now: 2 weeks

Transaction fees: >2% → 60%+ reduction

Australian Aid

OXFAM
**Benefits of the Unblocked Cash Model**

- An embedded approach (community preparedness)
- Community economic empowerment through small vendor support
- Advanced tech designed for localization → inclusive, robust community-based development of a blockchain solution
- Unique, flexible, user-centred design, open source Digital payments “beyond the branch” (FSP)
- Fast vendor payments (weekly)
- Engaged youth in the pilot → youth employment and empowerment
- Works offline and in low infrastructure settings
- Simple and smooth user experience + digital inclusion opportunity
- Live dashboard enabled real-time transparency
## CHALLENGES AND LESSONS LEARNED

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<th>CHALLENGE</th>
<th>LESSON LEARNED</th>
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<tr>
<td>Card Authentication and Security</td>
<td><strong>Community Trust</strong></td>
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<td>Use existing trust networks.</td>
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<td>People trust each other more than institutions</td>
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<td>Repayment of smallest vendors</td>
<td><strong>The Super Vendor</strong></td>
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<td>Leverage larger vendors to facilitate “cash out” for all. More empowering, more accessible, and less costly</td>
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<td>Community familiarity with technology</td>
<td><strong>Digital Access</strong></td>
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<td>“Learning by doing” improves capacities, digital inclusion &amp; literacy</td>
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NEXT STEPS FOR SCALE UP

• Horizon 2020 Blockchains for social good EU prize nomination

• Tanna, Vanuatu roll-out with new partners Save the Children and World Vision

• Scoping for Sri Lanka and Venezuela

• Researching legal, regulatory and compliance implications for multi-actor and multi-donor use in emergencies

• Solomon Islands and PNG replication – standby capacity for use in emergency responses
Unblocked Cash Project Lead: Sandra Uwantege Hart


Research Report Author: Björn Rust

Pilot Partners: Gov’t of Vanuatu in Shefa province, Sempo, ConsenSys & Australian Aid

Website: https://consensys.net/social-impact/project-unblocked-cash-case-study/