

From Aid to Autonomy: The Unblocked Cash Project's Impact on Disaster Recovery Efforts

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Introduction

- Vanuatu, situated in the Pacific cyclone belt and the ring of fire, is one of the most disaster-prone countries, with about 64% of the population exposed to natural hazards annually.
- Geographic decentralization and socio-economic factors, including high poverty and limited banking infrastructure, complicate disaster response and recovery.
- Traditional aid systems, managed by the Natural Disaster Management Office (NDMO), struggle with issues like lengthy aid delivery processes, market saturation and weak infrastructure.



(Britannica: 2020)



(WorldRisk Index 2021)

Unblocked Cash Project

Launched in 2019 by Oxfam, Sempo, and Consensys, UBC is a blockchain-powered cash transfer initiative to improve aid in Vanuatu.

- Technology:** It uses the Ethereum blockchain and stable wrapped tokens worth \$1 USD each, avoiding cryptocurrency volatility.
- Operation:** Beneficiaries use NFC cards for purchases at local vendors, who use smartphones to record transactions on the distributed ledger offline (with internet access required only weekly for synchronization).

Methods

- Literature review:** Analyzed scholarly articles and reports on blockchain technology, disaster relief, socio-political context, and UBC project documentation. Noted a gap in impartial third-party sources.
- Primary Interviews:** Conducted semi-structured interviews with key stakeholders, including Oxfam, Sempo and Consensys representatives, and policymakers. Used purposive and snowball sampling methods, with interviews held online and in private settings.
- Data analysis:** Created and refined a code list with the Reach Alliance team, ensuring each transcript was reviewed by multiple team members. Themes were developed and validated through iterative reviews and comparisons with existing literature.

Acknowledgements

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Findings and Discussion

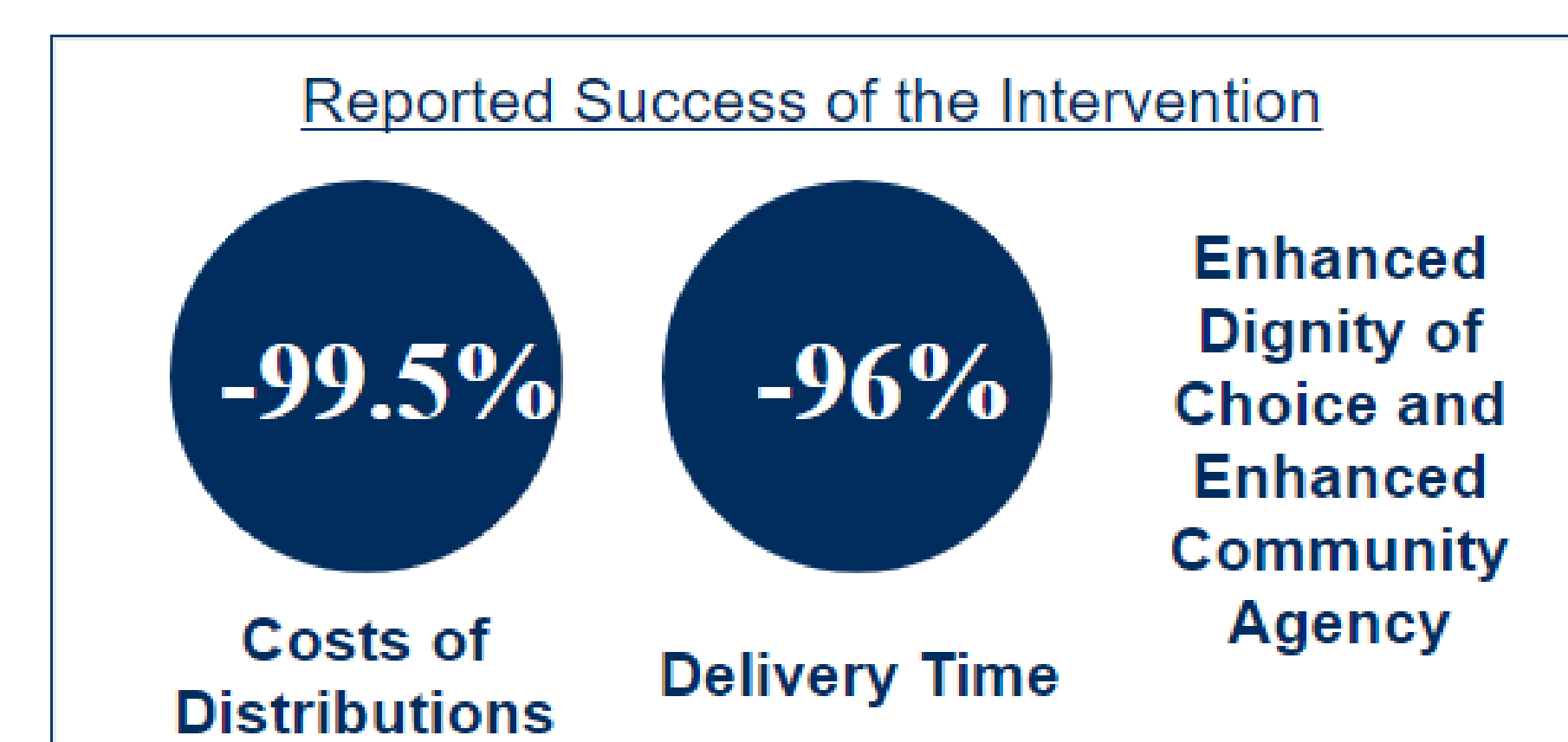
- UBC significantly impacted Vanuatu, facilitating over 200,000 transactions for 35,000 participants across 11 islands.
- UBC injected \$4.3 million USD into Vanuatu's economy and gained international recognition, including the EU Horizon 2020 Prize. Expansion to other regions like the Solomon Islands and Papua New Guinea showcases adaptability.

Enhanced Dignity of Choice - Shifting Perceptions of Independence

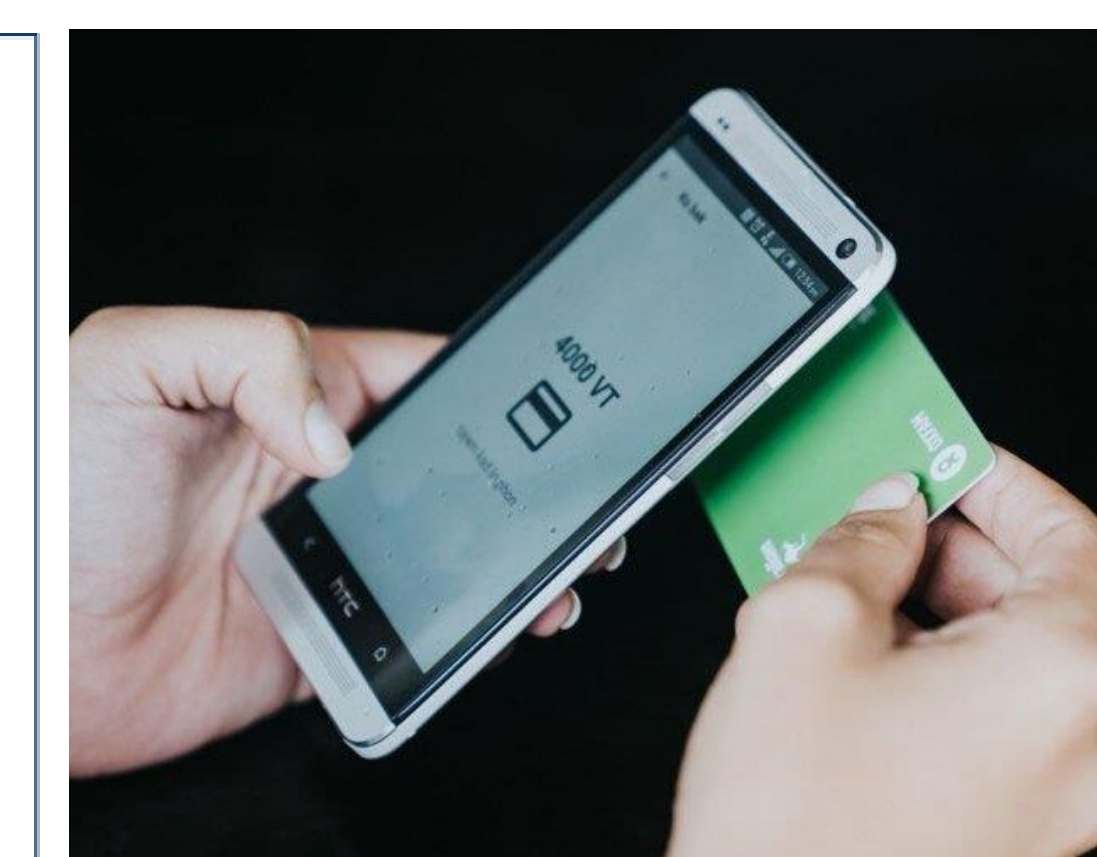
- Increased Autonomy:** 96% of participants experienced increased choice with NFC cards compared to traditional aid, leading to greater financial independence.
- Cultural Shifts:** NFC cards introduced financial empowerment, especially among traditionally unbanked populations, challenging hierarchical aid models.
- Shared Usage:** 38% of families shared NFC cards, promoting collective empowerment and reducing household conflicts.
- Empowerment of Marginalized Groups:** Vulnerable groups, such as those with disabilities, gained independence and dignity, fostering community-based resilience.

Paradox of Independence

- Debate on Resilience:** UBC promotes short-term independence but raises concerns about long-term dependence on foreign aid and technology.
- Tensions with National Authorities:** Miscommunication and lack of coordination led to strained relations with national disaster response officials.
- Impact on Community-Led Solutions:** Shift towards immediate cash transfers reduced participation in long-term community resilience programs, raising sustainability questions.



(Oxfam 2019)



(Oxfam 2019)

Building Digital Literacy - A Path to Enhanced Resilience

- Opportunities for Growth:** Initial distrust and confusion around NFC cards transformed into pride and digital literacy, especially in remote communities.
- Trust:** Effective communication of technical concepts and collaboration with local networks-built trust and acceptance of the technology.
- User-Friendly Design:** Despite knowledge gaps, 91% of beneficiaries were satisfied, and 95% trusted the NFC card system, highlighting the convergence of digital and financial literacy.

Limitations to Local Adoption - Complexities of Blockchain Technology

- Complexity and Profit Motive:** Blockchain has attracted international praise but risks creating long-term dependence on foreign technology providers in developing countries like Vanuatu.
- Infrastructure Gaps:** Vanuatu's lack of infrastructure and high blockchain energy demands necessitate reliance on Australian servers for data storage, limiting local control and increasing dependence on external entities.
- Security Concerns:** Stakeholders noted that data is safer stored in Australia, given Vanuatu's vulnerability to cyber-attacks, which further complicates local adoption.

Localization - Tapping into Aspects of Local Culture

- Collective Resilience:** Vanuatu's culture of collectivism amplifies the impact of aid programs like UBC, where benefits extend beyond individual recipients to entire communities.
- Traditional Structures:** Oxfam leveraged local leadership, such as chiefs and elders, to integrate UBC into existing cultural frameworks, enhancing community acceptance and trust.
- Decolonization and Autonomy:** UBC supports decolonization efforts by empowering local communities to manage disaster responses, challenging traditional top-down aid models.

Key Learnings

- Localization and Efficiency:** UBC's use of localized staff and materials streamlined aid distribution, demonstrating the importance of cultural sensitivity and efficiency.
- Empowerment Through Technology:** Blockchain enhanced aid distribution, transparency, and beneficiary choice in Vanuatu.
- Challenges and Limitations:** Issues with data ownership and technology complexity highlight the need for balancing innovation with local control.