



Blockchain for development

By Josh Hallwright

The world is undergoing continuous change, with peaks of dramatic leaps. Ignoring for a moment significant trends in [political populism](#), [demographic changes](#), and [environmental risks](#), these changes may best be summarised under the heading of a 'distributed political economy'. The distributed nature is due to traditional industries and organisations becoming much less centralised, with individuals and communities having much greater access to and control of the means of production and participation. Examples of this distributed political economy include [3D printing](#), [the Web 3.0](#), [machine learning and artificial intelligence](#), [renewable energy production](#), [ridesharing](#), and [accommodation](#).

The rapid uptake of blockchain technology is having an impact on almost all of the

above global trends, among others, and has profound consequences for our global society. Its impact is already being felt in supply chains ([Traseable](#)), ridesharing ([Arcade City](#)), energy distribution and management ([PowerLedger](#)), stock markets ([ASX](#)), finance and banking ([OmiseGO](#)), land titling ([ChromaWay](#)), governance ([Aragon](#) and [Civic](#)), and many other areas. Furthermore, it is being used to give people back control over their identity data through the emerging [self-sovereignty movement](#). Blockchain technology (and other distributed ledger technologies) is here to stay; its use will only increase in the coming years, with broad societal implications.

Australian NGOs are also actively exploring the technology (as it may enable different supporting options) and trying to understand how it may impact society more broadly. At the [2019 Australasian Aid Conference](#), some of these pilot projects were presented to demonstrate the extent to which Australian NGOs are taking blockchain technology seriously. World Vision has been testing a smart card system, built on a blockchain, to distribute cash to rural agricultural workers in Timor-Leste. This is proving an interesting way to support farmers in low-fi contexts where traditional financial inclusion projects have struggled. Oxfam is testing a smart donations application to diversify its fundraising model and base. This is piloting a new way of supporting development and humanitarian work through conditional giving. The application is built on the ethereum blockchain and is a partnership with the [OxChain](#) research initiative. The Australian Red Cross is working with private sector partners and Oxfam to test a blockchain-based volunteer identity management system, enabling volunteers to be on-boarded more easily and for them to take their identity credentials with them from organisation to organisation.

These pilot projects are broadening traditional partnering models and opening up interesting collaborations. The Australian Red Cross Identity Alliance is a good case in point - it includes Oxfam as well as [TypeHuman](#), a private sector blockchain company committed to ensuring that the technology works in the service of humanity. The Oxfam work with smart donations is with a multi-institution research project in the UK, but with global reach. These collaborations

are ensuring that the testing and learning from each of the pilots are shared within the development sector as well as with the nascent blockchain for social good sector, contributing to the broader development of the technology and its use.

This is an important point to make - the collaborations between international civil society and the private sector (including start-ups and software developers) is fundamentally shaping how the emerging blockchain technology develops and is used. The specialised knowledge of Australian NGOs in supporting communities around the world is brought to bear in conversations about use cases of the technology, its limits, and the opportunities it enables. Oxfam and others in the [Start Network](#) have piloted use cases that focus on internal funds transfers and ensuring these are both transparent and auditable in real-time. The [International Civil Society Centre](#) (owned by many of the largest global NGOs), amongst many other think-tanks and universities, is bringing together non-traditional partners to explore the many issues in using blockchain technology with disadvantaged groups, including data ownership and privacy concerns, governance questions, ethical standards and sustainability implications.

The changing context in which we operate and the experience we have had to date with the pilot projects outlined above, suggest that the work of the humanitarian and international development sector with communities in a world in which blockchain is pervasive, will have to reflect on our role within it. The role of NGOs may shift to becoming: trusted validators and verifiers of information; facilitators of partners to deliver projects; and to advocates for the continuing development of the technology and for the rights and needs of the communities with whom we work.

In the near future, Australian NGOs will likely be incorporating the technology into many aspects of our work without necessarily becoming specialists in the coding required to incorporate it into our organisations. We will be engaging with blockchain technology and the communities it touches and thus it is imperative that we continue the collaborative discussion to ensure the technology works in

service of humanity.

This blog is based on a [panel on blockchain technology field pilots](#) at the [2019 Australasian Aid Conference](#).

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