

Chapter 87

Can Blockchain Really Help the Poor? If So, Who Is Trying To?

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ABSTRACT

It is the firm belief of the authors that Blockchain and other frontier technologies will be an important tool for social impact globally. It is now possible, with technology, to envision a world where everyone has an identity, where everyone can be connected to the economic system, where farmers get fair deals for their crops, and land registration is incorruptible. Advances in solar, battery, and digital commerce make it possible to imagine even the smallest village in Africa being able to produce and trade small amounts of energy. The Sustainable Development Goals (SDGs) were a visionary leap to a future state where the world can be a better place for humankind. However, they will not be achieved without harnessing the potential of technology. Nor will they be reached alone. In this chapter, the authors profile innovative case studies in Blockchain, which, if brought to scale, may realise the technology's potential. It is through this learning and experimentation that we will learn how to deploy this technology globally for social impact.

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INTRODUCTION

One of the great criticisms – and frustrations - for social entrepreneurs, researchers and technologists alike, is the observation that Blockchain has so much potential but so few proven and scalable use cases.

Blockchain is an emergent technology, and many of the social impact projects only started in 2017 (Stanford Graduate School of Business, 2018), so there very few – if any - that are at scale. This means that a case study approach is the most suitable way of understanding how Blockchains can be used.

Through the authors' networks and knowledge, and by expert consultation, we have identified a selection of potential high-impact projects. Specific companies were invited to participate, by email and personal contact. A template tool was designed and presented to each organisation for completion. Data was received, analysed, presented, compared and mapped to the B4SC model identified in Chapter One.

Deployed at scale, there are infinite possibilities for Blockchain to ameliorate challenges faced by the poor and marginalised; providing safe access to critical resources and employment, financial inclusion, health care and education amongst many others. Such opportunity allows us to envision a world where the poor, with an identity on the Blockchain, can secure finance, where the two billion unbanked poor, can access the global financial system through a mobile phone and digital currencies, and where people who live on customary land, have the title secured on a Blockchain and can leverage that title to access finance. Blockchain could resolve complexities in the distribution of foreign aid; ensuring it is delivered directly to targeted beneficiaries using a smart contract, without using a middleman. While the potential for social impact is yet to be fully realised – for there are few use cases at scale in developing countries - those that do exist provide an exciting glimmer of the developments yet to follow and instil hope in the authors that Blockchain could be a revolutionary technology.

Many of the Blockchain applications that have been built in the West are built for smart phones and high infrastructure settings. However, many hard to reach populations have, at best, 2G networks (GSMA, 2018), they live in areas of unreliable mobile service or have limited access to electricity.

In this chapter, we profile two innovative case studies, Hiveonline and IDBox, in which the founders are building for low infrastructure settings in Niger and Papua New Guinea. These projects demonstrate that even in low connectivity settings, it is possible to deploy life changing technology.

The endeavour in this chapter is to profile innovative case studies in Blockchain solutions which may realise the technology's potential if brought to scale. It is thus, through the learning and experimentation of these pioneers that a solution for significant social impact could be developed.

Table 1 outlines the problems being addressed by the 10 case studies.

The vision of the New World is clearly demonstrated through the use cases detailed below, and provide rich evidence of seeking to fulfill the Empowerment, New Data Economy and Global Economics blocks of the B4SC Model and this working to achieve the New World Vision.

It is freely acknowledged, however, that despite these use cases, there remain many practical questions to be answered in settings with little internet access and electricity and that there is yet more to come as capacity, interoperability and scalability limitations are addressed. The case studies below have been purposefully chosen for their application to emerging markets, as argued in Chapter 4, where the greatest number of early adopters will be.

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