Chapter 101
Emerging Markets:
The Innovative First Movers

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ABSTRACT

While most of the development and implementation of Blockchains has taken place in Western countries, arguably its greatest potential resides in emerging markets: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Qatar, Peru, Philippines, Poland, Russia, South Africa, South Korea, Taiwan, Thailand, Turkey, and United Arab Emirates – all countries that are evolving and disrupting traditional methods of production like agriculture and the export of raw materials to invest in modern manners of productive capacity. This chapter examines the sectors in which Blockchain is being used to innovate in emerging markets to enable financial inclusion, improved asset and supply chain management, education, and healthcare.

INTRODUCTION

Implementing new technology systems in advanced economies requires massive amounts of change of legacy systems at institutional and structural levels. Change, therefore, typically takes years or even decades. In emerging economies, however, the lack of trusted and effective infrastructure means new

technologies are a welcome arrival because they do not mean change to the status quo but the arrival of a functional resolution to a problem.

While much of the development and implementation of blockchains thus far has taken place in Western countries, arguably its greatest potential for social impact lies in emerging markets.

An emerging market is an economy in a newly-industrialized country which has not yet fully matured but has, in macroeconomic terms, already outpaced their developing market counterparts by making high levels of investment in commercial productivity capabilities. They could be characterized by indicators of;

- Low income per capita
- Rapid growth
- High volatility
- Low trust in the national government
- Receptivity to innovation

Emerging economies are almost exclusively cash-based (nearly 90% of economic activity occurs by traditional means due to poor trust in local financial institutions and an average of forty percent of residents do not have bank accounts) (Down, 2018).

Most people and small businesses in emerging economies today do not fully participate in the formal financial system; 2 billion individuals and 200 million small businesses lack access to formal savings and credit (Osafo-Kwaako, et al, 2018). Thus, emerging markets are constantly innovating in the field of payments, promoting an increasing shift to digital services (Reuters, 2018; PWC, 2018). The lack of trust in local financial institutions means, however, that the preference for cash prevails, and, indeed continues to increase. The amount of cash in circulation has increased to 9 percent of GDP in 2016 from 7 percent in 2000 yet digital payments are expected to reach a record 726 billion by 2020 with emerging markets leading this trend, at a rate three times that of developed economies. Digital payments in developing markets grew 21.6 percent between 2014 and 2015, compared to a 6.8 percent rise in mature markets. Non-cash payments in Asian emerging markets are projected to grow by almost a third (30.9 percent), led by China and India (Brown, 2017). Accordingly, over the next 10 years or so we are likely to see rapid change in the payments landscape, building on accelerating growth in electronic payments and the advent of new and disruptive market-players, as Blockchains enable smaller operators to take advantage of more open financial environments.

The emerging markets will be at the forefront of this transformation for they are currently in a sweet spot where demand meets the ability to supply: Millennials respond well to digital-first service delivery and desire financial inclusion, and the legislative environment supports the introduction of a wider array of financial services. Concerted efforts are being directed towards introducing and promoting innovative retail e-payment instruments and systems including e-wallets, mobile payments and one-click payments. For example, in Nigeria, use of mobile-based payment systems has increased due to widespread access to mobile phones both for customer and merchant processes. In India, the central ATM switch that processes all retail ATM transactions has been revamped in preparation for expected demand increase (Osafo-Kwaako et al, 2018).

Providing that technology is efficient, effective and scalable, it is likely emerging markets will see rising numbers of decentralized applications (dApps), blockchains, social media payment platforms (such as Venmo) NFC technology and bluetooth low energy. This is represented in the B4SC Model

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