

Digital currency adoption

by Douglas Tan

Introduction

Before attending the Blockchain Talent Development course, I watched the documentary on “Banking on Africa – The Bitcoin Revolution¹”. It talked about how cryptocurrency has helped Africa to leapfrog problems and live a better global financial system. After learning what blockchain, distributed digital ledger and digital assets are all about, I wonder what are the challenges that any country in the world will face in adopting it. If an under-developed country like Africa can harness the benefit of cryptocurrency that blockchain technology can bring, surely any country in world should be able to fairly adopt it easily, right?

According to the WorldBank, 74% of the world population does not have access to basic financial services and in US, according to the Federal Reserve, 22% of American household is under-bank². Will digital currency be an opportunity to address the financial inclusion as Africa has? After watching the discussion videos of the panelists in Singapore Blockchain Week 2020, I now have a better appreciation of the challenges that hinder the global adoption of digital currency.

Structure of this report

I would like to discuss the insights that I have gathered on the topic of adoption in two broad categories. Part 1 of this report approaches the adoption at the community level i.e. what are the concerns of users in digital currency adoption, and Part 2 approaches the adoption from the national level i.e. what are the challenges that are hindering CBDC (Central Bank Digital Currency) and local government from digital currency adoption. Having watched all the videos, I believed adoption is both a push and pull effort. If successfully implemented, the push come from the national level by creating an inclusion environment can result in the consumption needs by the community i.e. pull.

Part 1

The incentives to digitalize

The user community comprises two groups of consumers. The first group is the tech-savvy, who could easily understand the blockchain and digital ledger technology, would embraces and advocates the adoption of digital currency. The second group is the late followers, who is either debating the adoption or totally has no clue what is digital currency and the impact it will have on them in this digital economy era. The video panelists discussed the following challenges face by the second group of late followers which allow me to appreciate the reasons for the pushing back of adoption.

- Affordability – Most users assumed gmail and facebook account is free. Comparatively, they felt that digital currency running on blockchain should also be likewise. They do not understand that in fact, they are the product of these “free” companies who are selling their data for targeted marketing. In blockchain, if we wanted to enjoy privacy protection and do not wish our data information to be exploited by marketers, we do need to incentivize miners to keep the chain secured. It is therefore an education process to change mindset about data privacy versus trading personal data for free services. Nevertheless, the fee involved in transacting digital

currency, unlike most stablecoins currently in circulation, should be minimum to encourage adoption.

- Simplicity – Some users can feel intimidated when introduced to the complexity and technology beneath digital currency. The long hash addresses of private and public keys can be a discouragement for those who have trouble of even remembering or keeping their email password securely. Most people are not interested in how email works besides the ease of login on and simply send an email. The owning of digital currency and transacting them should be as easily as using their email. Therefore, a simple and yet secured way would be a less hindrance to onboard new adopters.
- Unlike fiat currency which banks can use deposit as credit to regenerate more monies and payback as interests to the depositor, digital currency as currently represented by stablecoins, does not generate interests but on the contrary, its value can be volatile and fluctuate without regulatory control. There is a perceived risk of adoption.
- There is also a concern on the ability to reverse transaction if digital currency is erroneously transacted. If a B2B entity has difficulty recovering from a wrongly sent transaction³, how much more difficult it is for an individual to recover his/her digital monies?

While there are gaps that the community needs to close, the panelist suggested that perhaps the best approach is a shared responsibility of the central authority with the commercial institutions to develop digital currency solutions for different sectors. First, businesses could take the lead by understanding the underlying technology which their digital currency solutions are build upon. It then shields the complexity and yet maintain the security and simplicity when educating the community in transiting into the adoption of their solutions.

The ability of Africa leapfrogging into the adoption of digital currency in the Bitcoin Revolution¹ is because of China's huge investment since 2018 (11 years ago)⁵. There are rural cities in some developing countries in the world where people still do not have access to broadband network and/or mobile hardware devices⁴. So even institutions and businesses can create the solutions that generate pull-effect needs of the community, there is still a need for proper infrastructure before digital currency can be build upon. These are huge investment that the local government needs to consider before institutions and businesses around the world would explore the opportunities that encourage community adoption.

Appendices

¹ True Story Documentary Channel, “[Banking On Africa – The Bitcoin Revolution \(full documentary\) – True Story](#)”, Oct 1 (2020)

² Perianne Boring, Chris Banbury, Pradyumna Agrawal, Prof Andreas Park, Prof David Lee, “Panel – From Fiat to Crypto – Central Bank Evolution of Money Technology and Power”, Singapore Blockchain Week 2020, Nov 22 (2019)

³ Chris Dolmetsch, Katherine Dhoerty, “<https://www.bloomberg.com/news/articles/2020-09-29/citi-can-see-info-it-says-it-needs-in-suing-over-revlon-payout>”, Sep 30 (2020)

⁴ Matt Sorum, John Probandt, Farah Jaafar-crossby, Mai Fujimoto, “Panel – Blockchain for Good – Tackling Global Challenges Pre- and Post-Pandemic from sgfintech on”, Singapore Blockchain Week 2020, Nov 22 (2019)

⁵ IDE-JETRO report, “China’s Infrastructure Footprint in Africa”, https://www.ide.go.jp/English/Data/Africa_file/Manualreport/cia_10.html, Oct 1 (2020)