Topic: One Chain Africa, Powering the next evolution of money in Africa.

Theme; Deploying stablecoins utilizing the existing mobile digital financial service flow, with the same user experience, to ensure continuity and ease of use for users.

Mobile money is a very popular term in Africa, especially in the Eastern part followed by the Western part of the continent where it is highly used compared to the rest. According to the report by GSMA, more than half of the global mobile money accounts are held in Sub-Sahara Africa. Mobile money services are typically offered by mobile network operators, banks, or other financial institutions and allow users to access financial services through their mobile phones without the need for a traditional bank account. This is of course expected in a region with low internet penetration and there is a high need for financial services which allow users to access mobile money services through a mobile app or by using USSD codes on their mobile phones.

The use of mobile devices for financial transactions and payments, is not as widely used in the United States as it is in other parts of the world. While there are some mobile money services available in the US, such as Venmo, Cash App, and Zelle, these services are primarily used for person-to-person payments and transfers and are not as integrated into the broader financial system as they are in other countries. One reason for the relatively slow adoption of mobile money in the US is the maturity and sophistication of the country's existing financial infrastructure, which includes a wide range of payment methods, such as credit and debit cards, checks, and bank transfers. Additionally, regulatory hurdles and concerns around security and privacy have also slowed the growth of mobile money in the US.

Mobile money is a solution to a local problem pertaining to Africa and such might be alien to most outside of the continent. There are several ways to fund a mobile money wallet, depending on the mobile money service provider and the country in which the service is offered. Here are a few examples of how mobile money wallets can be funded:

1. Cash-in at a mobile money agent: In many countries, mobile money users can fund their wallets by depositing cash at a mobile money agent. These agents can be small retail outlets or other businesses that have partnered with the mobile money service provider. Users can simply hand over cash to the agent and the agent will credit the corresponding amount to their mobile money wallet.

2. Bank transfer: In some cases, users may be able to fund their mobile money wallets by transferring funds directly from their bank accounts. This may require the user to link their mobile money account to their bank account and may be subject to certain fees or transaction limits.

3. Card payment: Some mobile money service providers allow users to fund their wallets using a debit or credit card. This may require the user to enter their card details into the mobile money app or website and may be subject to certain fees or transaction limits.

There are other ways or methods used and deployed by telcos which include but not limited to airtime transfer which enables airtime to be used as form of currency to fund mobile money wallet. When it comes to Africa, all these methods are used to fund mobile money accounts of users and subscribers. It is in many capacities the recent and most utilized form of accessing banking service in Africa.

One of the major challenges with blockchain adoption revolves around reimagining innovations rather than leveraging on existing and acclimated possibilities. This is also due to the poor act of localizing foreign solutions with the belief they can be applied and deployed for Africans. While the offering of a decentralized technology-enabled stable currencies are different from the centralized mobile money, the process of funding and utilizing can still be very closely designed and implemented in a way that the User Experience can be retained.

While there are some similarities between the processes of funding a mobile money wallet and creating a stablecoin, particularly when it comes to the role of cash or other reserve

assets. However, there are also some important differences between the two. This is especially the case when it comes to existing design, none of which was done in Africa or for Africans. As compared to mobile money where bank deposits can be used by users to fund their wallet or using bank cards, same can be deployed to create and fund user's stablecoin wallet using smart contracts to automate the process. In the case of the stablecoin, the originating funds presented for conversion is then held by the processing bank as reserves for creating the stablecoin.

Alternatively, a peer-to-peer setup can also be used to facilitate the cash-in at a mobile money agent option either digitally or via the physical OTC method. This can be facilitated by liquidity providers who have ample reserves of stablecoin and are willing to accept FIAT from users in exchange for the coins at a fee profit. This method currently being practiced is virtually the most used and available method for purchasing stablecoin in Sub-Sahara Africa and should be encouraged to become a norm. Under such possibilities, it becomes easy for users to easily fund their on-chain coin wallets and in all cases, for every successful on-chain conversion, the fiat is held in reserve providing auditing trail access while the on-chain minting is recorded in the public transparent ledger.

While these processes share some major similarities, there are also some important differences, particularly when it comes to the use of blockchain technology. Mobile money systems typically rely on centralized infrastructure and do not use blockchain technology to record transactions or manage user accounts. In contrast, stablecoin systems are often built on blockchain technology, which allows for greater transparency and decentralization.

Even though they are distinct financial tools with their own unique characteristics and use cases, their deployment can be achieved in very similar ways. Expectedly, this would make the presentation of cases and possibility of obtaining licenses much easier. This paper was written to provide more understanding on the African-based on-chain stablecoin deployment initiative as related to the One Chain Africa project.

While there exists several types of stablecoins ranging from the gold-backed, crypto-asset backed, fiat backed, algorithm based stablecoins, OCA will be implementing the FIAT backed stablecoin for each African countries. A gold-backed coin is in-view to be deployed years into the project with approval from African governments to be a universal currency on the platform across all countries.

The FIAT backed stablecoins are also of different types and these will be a subject of discussion with each banking partner for each country in selecting the type to be implemented. These include:

1. Collateralized stablecoins: These stablecoins are backed by a reserve of assets that are held in custody to ensure that the stablecoin can be redeemed for its underlying fiat currency at any time. The reserve assets can include fiat currencies, cryptocurrencies, or other assets such as gold or real estate. The value of the reserve assets is typically held in excess of the total supply of the stablecoin, to ensure that the stablecoin can maintain its peg.

2. Algorithmic stablecoins: These stablecoins are designed to maintain their peg through the use of an algorithm that adjusts the supply of the stablecoin in response to changes in demand. For example, if the price of the stablecoin rises above its peg, the algorithm would create new stablecoins to bring the price back down.

3. Centralized stablecoins: These stablecoins are issued and backed by a centralized organization, such as a financial institution or a technology company. The issuer maintains a reserve of assets to ensure that the stablecoin can be redeemed for its underlying fiat currency, and may also use other methods, such as market making or arbitrage, to maintain the stablecoin's peg.

4. Decentralized stablecoins: These stablecoins are created and managed by decentralized networks, typically using blockchain technology. The stablecoin may be collateralized by a reserve of assets, or may use other mechanisms, such as over-collateralization or algorithmic stabilization, to maintain its peg.

The ideal and most advised implementation to offer transparency and decentralized utility for projects while still allowing the central authorities to maintain a certain degree of control over the money supply would be a synergy of the lots. This allows all involved parties to enjoy the best of both worlds. In this case, the central authority have the total say on minting the stablecoins into the and holding the reserves as collateral assets ensuring the coins are redeemable at any time for the fiat value.

As it is possible for the implementation of P2P fiat to stablecoin demand to create a surge that might make it possible for the value to lose its peg, liquidity provider's funds can come in handy at this point to create a balance by providing instant supply managed by the algorithm without the need to instantly mint more coins without the due process demands. The liquidity providers will be rewarded for providing excess liquidity in cash and in coins to meet excess demands and supply when need arises to ensure that the coin maintain its pegged value.

While it can get a bit confusing when comparing CBDCs to the term centralized stablecoin, it might introduce a thought that perhaps they are the same. No, centralized stablecoins and Central Bank Digital Currencies (CBDCs) are not the same thing, although they share some similarities. While both centralized stablecoins and CBDCs are digital currencies, the key difference between them is the entity responsible for issuing and managing them. Centralized stablecoins are issued by private entities such as a financial institution or a technology company, while CBDCs are issued by central banks. Additionally, CBDCs are designed to replace or supplement physical cash in a country's economy, while centralized stablecoins are primarily used for payments and transfers within a specific network or ecosystem.

While CBDCs are different from stablecoins, it is entirely possible to generate stablecoins for the market using CBDCs as reserved assets. The process simply would include the issuance of the CBDC by the central authority then having a trusted custodian to hold the CBDCs in reserve which can either be a private entity such as financial institution or a commercial bank. Using the custodied asset as reserve, the stablecoin can then be minted, pegged at the unit value of the subject CBDC and can then be used for all

purposes a stablecoin is designed for. Facilities will be made available for this case and all other cases on the OCA platform in support of African countries that have successfully deployed their CBDCs and those that haven't.

In conclusion, the purpose of this paper was to provide support and enlightenment for the African blockchain-based project called One Chain Africa, with the goal of facilitating stablecoin deployment for every African country. Through a comprehensive review of existing literature and an analysis of the potential benefits and challenges associated with stablecoin deployment with more focus on Africa, we have demonstrated the solid feasibility to enhance financial inclusion in Africa. Our research has shown that OCA has the potential to be a transformative initiative for the African continent by allowing the deployment of several possible designs each retaining familiar user experience to existing mobile money infrastructures.