

Alcancía - A solution to Latin America's Mobile Money Adoption Gap

“I don't want to live in a society where we are dependent on the charity of one guy and his wife.”

- Rutger Bregman

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Abstract

Alcancía is the foundation of Latin America's Mobile Money Adoption Movement. Alcancía is a decentralized savings account that will end the paradoxical approach that Latin American financial institutions have adopted towards saving. Using the power of Decentralized Finance (DeFi) and stablecoin-based saving protocols inside different blockchain ecosystems, Alcancía aims to mitigate the lack of digitalization and accessibility towards proactive saving in Latin America. Following the primary concepts of sustainable growth and the sole goal of leaving nobody behind.

In addition to this investigation, we will discuss our service roadmap, vision and where you will see us in the next two years.

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Introduction

In this first part of our paper we will discuss the concept of mobile money and how Latin America, in comparison to other successful regions in the world, still lacks the proper tools to be part of the inevitable digital economy. In the second part, you will see how Alcancia works (including its technicalities) in its least complex terminologies.

Putting the reader in perspective

Problem Statement

Developed economies offer a wide variety of financial products and services. Yet more than 2 billion people worldwide remain unbanked, and an untold number still lack access to basic financial services.

When it comes to Latin America, more than 60% of its population still does not have access to a bank account, and in terms of mobile money, although it has seen amazing growth during the last decade, it is still fundamentally flawed, and unable to create the appropriate bridges for people in emerging markets, to access a wider range of financial services, that end up generating wealth and prosperity.

The Nuts & Bolts

Mobile Money allows people without bank accounts to store, receive and send money using a smartphone. Currently, there are more than 300 mobile money providers (almost all of them in Africa) with more than 1.2 billion registered accounts and total processing transactions of approximately 2 billion dollars a day. While these providers increase access to money and basic financial services, most of the time its systems are limited and lack constant innovation. For example, these applications preserve the fundamental usages of money, most notably doing transactions; Yet more sophisticated applications like investing and lending have just arrived to the ecosystem in their nascent forms.

For those that do allow a savings account and loans, such as Kenya's famous M-PESA, most consumers have to overcome high paywalls and loan interests that are upwards of 100%

annual percentage yield (APY). While Africa and other neighboring regions have seen an exponential adoption towards mobile money; Latin America has started to show its potential to be a telecommunications industry mogul with strong drivers for technological, social and economic growth.

Lets run the numbers, more than 51% of latin american households have access to internet connectivity, and more than 65% of its population has access to a smartphone. When it comes to mobile money, currently there are over 26 million accounts in Latin America, with an average 90-day activity rate of 48%, being the highest in the world. Still, 88% of all daily transactions are done using non-technological person-to-person methods (cash-based). And, when it comes to mobile money platforms two-thirds of those existing in Latin America are aimed towards Bulk Disbursement and Business-to-Business (B2B) approaches.

Notice how most of these mobile money services are not focused towards consumer-based practices, a 417 million people untapped gold mine that anxiously waits to be part of an inevitable wave: the digital economy and DeFi.

This is where Alcancía comes into play, we enable access to innovative and new financial services by creating accessible services that solve a financial necessity in emerging markets. This is done by developing DeFi tools that are necessary in today's mobile money ecosystem. As a core case for cryptocurrencies, DeFi has the potential to disrupt the financial services market with new concepts created on a public ledger called the blockchain, which cuts out intermediaries, increases transaction speeds by up to one-thousand times and brings down transaction costs to fractions of cents.

How do we solve it?

Alcancía is a compounding interest savings account that enables you to convert fiat currencies like the Mexican Peso, Dominican Peso and the U.S. Dollar to stablecoins. This savings account is developed inside the Solana blockchain environment using DeFi saving protocols. Unlike traditional banks which offer low interest rates (less than 1% annual interest rate), Alcancía offers an annual interest rate of 12% using various DeFi protocols in the Solana ecosystem. This interest rate is given because in DeFi, users lend a cryptocurrency to a lending pool and it collects interest, which ends up growing your savings. The interest rates in DeFi markets reflect different

supply and demand curves than the common U.S. dollar, which means higher interest rates. When you save using DeFi, your money compounds in real time (approximately every 15 seconds), meaning that the interest you just earned is now applied to your principal, and interest is now being earned of that larger amount.

Is my money safe?

Yes, when your hard earned cash goes to Alcancía's lending partners the risk is mitigated in the form of a collateral, which provides coverage for user's invested funds. For example, other protocols like Compound require a collateral from borrowers to take out a loan. Collateralization means that in the case of a bank-run, Alcancía is able to correct supply and demand, providing funds from lenders (you) to withdraw. All of our partners have insured a coverage of over 125%, so your deposit and the interest that gets generated is backed by the blockchain and overcollateralization.

Current skepticisms of mass Blockchain adoption

Digital money is a topic we are all skeptical of in one way or the other. Each country reacts differently to cryptocurrencies, blockchain and its technology. For example, China has banned the mining and use of cryptocurrency, yet the Chinese government is the third biggest Bitcoin holder in the world. Countries in Africa and Latin America have started using a parallel economy, enabling a legal pathway for the use of stablecoins such as (USDT, USDC, etc...) to avoid the exchange rate inflation from their national currencies. As you know, these countries' inhabitants are unbanked and cryptocurrencies are the best alternatives at times to do international payments such as remittances. In the end, these payments done in stablecoins safeguard the economy against runaway inflation.

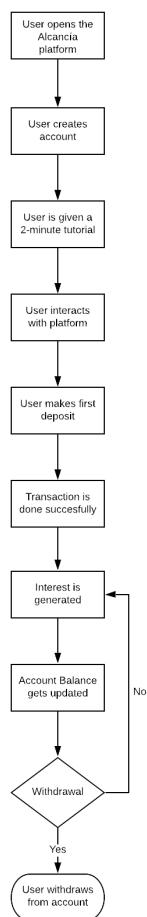
Throughout the last two decades, governments have established a reign of fear for cryptocurrencies. Why? Simply because cryptocurrencies are decentralized. Thus, it can not be controlled by a government's central bank hence no taxing. In the end, whatever countries do with their crypto-related regulations one thing is sure, there will always be another country ready to provide cryptocurrency investors, traders and businesses the incentives to do business in their countries (take a look at El Salvador, Paraguay, Portugal, and Brazil).

Getting down to business

Service Map

Alcancía's magic starts with an ease-of-access platform, by using technologies that we use on a daily basis such as a smartphone or a computer. The first phase of our service enables a fiat-to-stablecoin exchange where it is directly deposited to your neo-savings account. Users can withdraw their money whenever they want, in fiat (Mexican Peso and Dominican Peso) or in Bitcoin.

Here is a flowchart of how Alcancía works:



Roadmap

Q4 2021

- Develop a bridge application that enables fiat-to-stablecoin exchange for Mexican Peso, Dominican Peso and Bitcoin.
- First 50 user batch to join the deployment phase of Alcancía.
- Prepare a blockchain migration strategy that moves Alcancía and its users from the Solana ecosystem to the Cardano blockchain.
- Qualify for the Mastercard Center for Financial Access, Inclusion and Research 2021-2022 Batch.

Q1 2022

- Successfully finish the Mastercard Center for Financial Access, Inclusion and Research programme.
- Raise our Seed Capital round.
- Deploy and test Alcancía's social business model for refugees.

Q2 2022

- Partner with Cardano's Lending Protocol "Marlowe". This will enable non-predatory loans for our users.
- Develop Alcancía's Savings DeFi Protocol inside the Cardano Blockchain.
- Launch our first stakepool inside the Cardano blockchain.

Q3 2022

- Deploy Alcancia's blockchain migration strategy to the Cardano Blockchain.
- Alcancia's update to Cardano's Basho Era. Scaling our product to other regions of the world and leaving nobody behind.
- First 3000 users on the platform.
- Qualify for Startup Chile's Acceleration program.

Corporate Social Responsibility

Alcancía is an advocate for the United Nations Sustainable Development Goals (SDGs). Creating social impact is one of our key goals. Our service guidelines for the best eco-efficiency blockchain can offer while creating radical ways to change people's financial habits and lives.

Our service is helping solve SDGs: 1 (no poverty), 8 (decent work and economic growth), 9 (industry, innovation and infrastructure), 10 (reduced inequalities) and 17 (partnership for the goals).

How? Let's break it down into a dimensional analysis:

Dimensional Analysis

- Economic:
 - Financial empowerment through DeFi.
 - Cost to operate our technology is extremely low (<1\$ per 50 users)
 - Financial inclusion is considered as an enabler of UN Sustainable Development Goals.
- Environmental:
 - Saving Protocols running on the Solana and Cardano Blockchain are 500x more energy efficient than those in the traditional banking system.
 - Every physical dollar that is repurposed into digital money removes 1 kilogram of CO₂ equivalent emissions of our atmosphere.
- Social:
 - Users from all over the world can easily participate in DeFi irrespective of their social status or physical location.
 - Access to DeFi is directly correlated to the reduction of poverty.
 - DeFi eliminates limitations of geographical location and time of centralized systems.

- Time-based:
 - With access to all of the same services as a bank at an extremely low cost through blockchain technology and DeFi, the unbanked can become banked with just a cellphone and access to the internet.

Looking forward

Legacy problems from the last century have exacerbated poverty and inequality. We can most agree that there should be an equal access to opportunity: people should be able to have the same financial services despite their socioeconomic position. Maybe the implications we put out on this whitepaper are far-reaching and, by any calculus, there is a bigger list of more serious problems that are endemic to the current livelihoods of our system. Yet, while we live in the digital era, our current financial infrastructure has failed to respond. Have you tried to open a savings account recently? The technology and methodology is no different from 30 years ago.

DeFi offers the solution to five core problems: centralized control, limited access, inefficiency, lack of interoperability and opacity that arise from the current system of centralized finance. DeFi offers new opportunities. The technology is nascent but the upside is promising.

Conclusion

We know we are building an amazing service. However, Alcancía's true potential lies in getting the users in charge of their financial freedom. Thus, helping all of us decide what best serves us for financial accessibility and economic prosperity in Latin America. And hopefully someday, all corners of our planet.

References

1. DeFi and the Future of Finance. (2021). Retrieved 2 October 2021, from
<https://corpgov.law.harvard.edu/2021/01/14/defi-and-the-future-of-finance/>
2. The Fable of the Dragon-Tyrant. (2021). Retrieved 3 October 2021, from
<https://www.nickbostrom.com/fable/dragon.html>
3. I'm Earning 250x More Interest With A DeFi App Than With Bank of America. (2021). Retrieved 2 October 2021, from
<https://rickieticklez.medium.com/im-earning-250x-more-interest-with-a-defi-app-than-with-bank-of-america-894ebae69831#:~:text=In%20DeFi%2C%20users%20lend%20a,which%20means%20higher%20interest%20rates.>
4. Anchor Protocol - Whitepaper (2021). Retrieved 2 October 2021, from
<https://anchorprotocol.com/docs/anchor-v1.1.pdf>
5. Solana - Whitepaper (2021). Retrieved 2 October 2021, from
<https://solana.com/solana-whitepaper.pdf>
6. Latin America & the Caribbean | Global Findex. (2021). Retrieved 2 October 2021, from
<https://globalindex.worldbank.org/archives/latin-america-caribbean>
7. Basho - Cardano Roadmap. (2021). Retrieved 2 October 2021, from
<https://roadmap.cardano.org/en/basho/>
8. State of the Mobile Money industry in Latin America (2021). Retrieved 2 October 2021, from
https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2020/10/GSMA_State-of-the-mobile-money-industry-in-LatAm.pdf

