

FinTech for financial inclusion



Intro

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Hi my name is Kirill. I was born in Kharkov - a city you probably first heard about a week ago - back when Ukraine and Russia were the same country: USSR. My family left when I was still pretty young, which in hindsight turned out to be a good idea.

We traveled around a bit and I didn't get a formal education, in fact never even finished high school. For the record ... that was not a good idea.

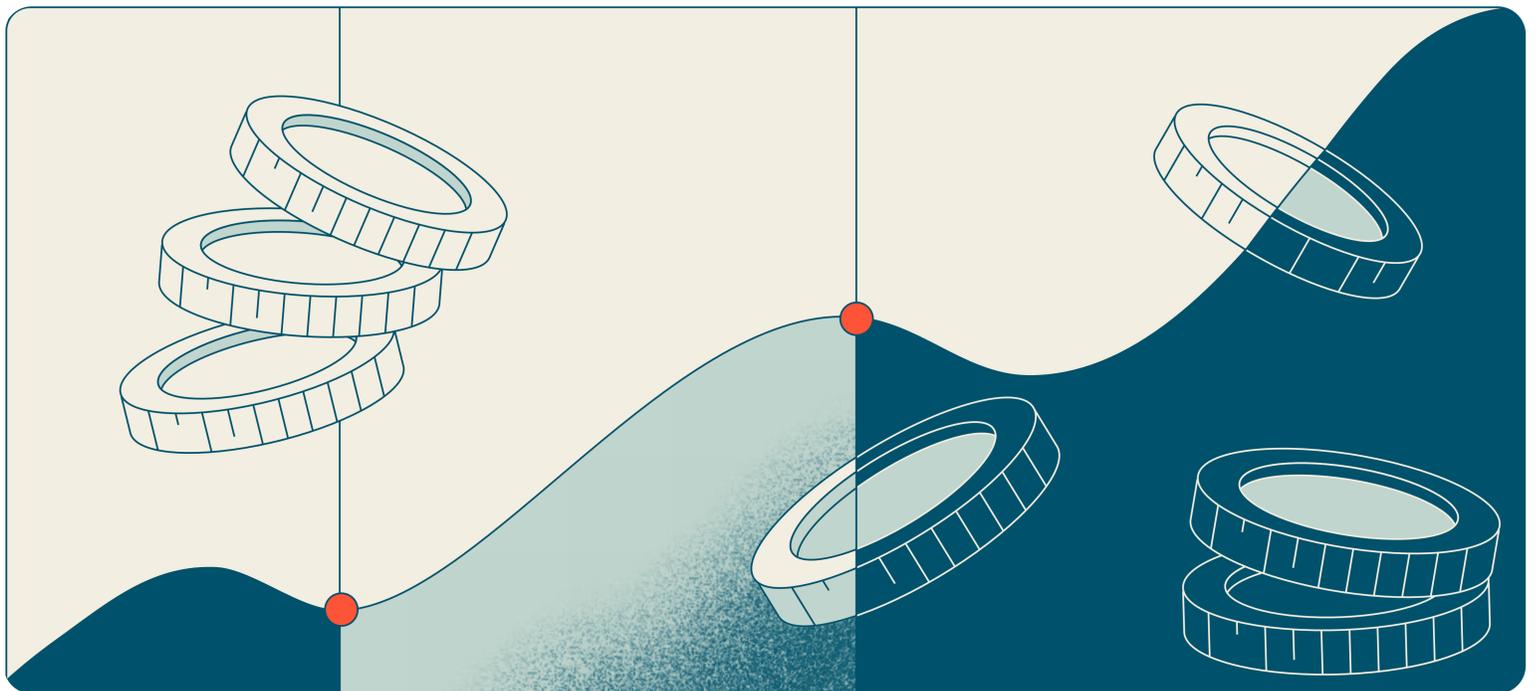
Professionally, I got my start by pirating 3D Studio for DOS and learning 3D modeling and animation. I wanted to work on visual effects and computer games because I thought I'd have an opportunity to be really creative. After getting my first job in the gaming industry and making 3D models of baseball players' heads for 10 hours a day, I realized I was wrong about that.

Around the same time - 2000 or so - I discovered HTML and the fact that I could actually build a website, end to end, all by myself. I definitely couldn't make a computer game by myself so that idea fascinated me. I learned HTML, PHP and how to do simple things like set up a MySQL database etc., and started making websites.

This was my first career - a web designer. Going down that path eventually I became a creative director working at e-commerce companies, and managed other designers, copywriters and even photographers. That was a lot of fun actually, but left me feeling I wanted to do more.

And specifically "more" in the sense of having more impact on an organization. I wanted to understand what makes a company function, what drives revenue, and be able to make a bigger difference there.

Thinking about 'what kind of role has more of that impact but also a role where I could transfer some of my existing skills' I decided that a product manager was the right fit for me. So I became one. It was an interesting experience because back then - around 2010 - there really wasn't a clear idea of what a product manager even does (and to be honest with you, it's actually still the case), which suited me just fine actually... I liked that I could shape the role.



Focusing on financial services

Along with moving into a different role I also wanted to change the industry where I was working to one that had more impact on people's lives. I decided to get into fintech specifically for two reasons - one is that finance obviously has a huge impact on people's lives, and second is that I thought it's clearly an outdated industry with terrible products that technology is surely going to disrupt, and I wanted to be a part of that. In retrospect I was mostly right, but I absolutely hadn't realized the magnitude of that challenge. It's a slow process and one we're still going through today and will continue for a long time.

So that was my second career - product manager and then a head of product and VP product at fintech startups and actually inside of a bank where I was leading an innovation group for a while, before getting into crypto.

Moving to crypto

The reason I moved to crypto was because I realized that while we could certainly put a nicer sheen on things, the underlying products we were working with - checking accounts, savings accounts, debit cards, etc., - were very much set in "stone".

You can - and we did - create a very slick mobile experience, but you can't change how a checking account actually works.

Crypto on the other hand created an opportunity to build completely new products that worked in new ways. That was extremely exciting for me and the reason I left fintech and banking for crypto.

Initially when I got into crypto, around 2017, the main focus of the industry - if it could be called that back then - was speculation. You may remember the ICO boom which was basically all scams and thankfully died out pretty quickly.

It's really only recently, in the last couple of years with the advent of DeFi, that we're finally now able to really build practical, useful products for people.

This led me to my third and current career - an operator, building a company that enables others to create these "practical and useful" products.

You'll see what do I mean by "practical and useful" a bit later, because before I get into that, I should probably establish what DeFi actually is.



What is it?

DeFi is short for “decentralized finance,” an umbrella term for blockchain-based (initially leveraging the Ethereum network) applications aimed at disintermediating middlemen such as banks from financial transactions.

The main applications of DeFi currently supported by Conduit’s offering are:

Lending platforms: These platforms use smart contracts to replace intermediaries such as banks to manage the supply and demand for liquidity. Through those platforms, the interest paid by the borrowers is entirely distributed to the lenders, unlike in the traditional financial system, where banks capture most of the economics for facilitating this market.

Stablecoins: A cryptocurrency that’s tied to an asset outside of cryptocurrency (like the dollar, pound, or euro) and exactly matches its value at a 1:1 ratio. For example, a popular US Dollar stablecoin called USDC is redeemable for \$1 from its issuer.

Lending protocols

To generate interest on DeFi lending protocols, lenders must deposit crypto (often stablecoins) into one of the liquidity pools offered on the DeFi lending protocols website. Once that is done, a portion of assets is set aside in reserves (generally 10-20% of the pool in the case of stablecoins) to provide liquidity to users who would like to withdraw their assets - the rest of the pool becomes available to be borrowed by users in need of liquidity. When lenders deposit funds, the DeFi lending protocol creates (mints) a new yield-generating token, which represents the lenders’ claims to their principal + interest. This new token’s value is pegged to the value of the corresponding deposited asset at a 1:1 ratio, and can be safely stored, transferred or traded. All interest collected by those yield-generating tokens are distributed to token holders directly by continuously increasing their wallet balance. When lenders withdraw their funds, those yield-generating tokens are burnt and users receive an amount equivalent to principal + interest in the currency of their original deposits.

In order to borrow, users must first lock up collateral into the DeFi lending protocol. For all protocols with which Conduit interfaces, the amount locked up must be greater than the amount borrowed, meaning that each loan is overcollateralized. Depending on the volatility and liquidity of the asset used as collateral, the loan-to-value typically ranges from 50 to 80%, which borrowers must maintain even in the event of adverse price movement of the asset they locked as collateral. When the loan-to-value drops below the pre-specified thresholds, liquidators are incentivized to buy out those undercollateralized positions for a discount, simultaneously closing out the outstanding debt of the borrower. DeFi loans typically have open terms and can be repaid at any point in time from borrowers - borrowers simply need to go back to the protocol and transfer an amount equivalent to principal + accrued interest in the protocol.



Where does DeFi borrower demand come from?

While the rationale for lending crypto via DeFi protocols is relatively straightforward (i.e., to generate 8%+ annual yields), the same cannot be said for borrowing on those platforms. As such, it is worth sharing more details on the three main use cases we see as drivers of borrowing demand:

- Institutional trading
- Retail borrowing
- Corporate borrowing

Institutional trading

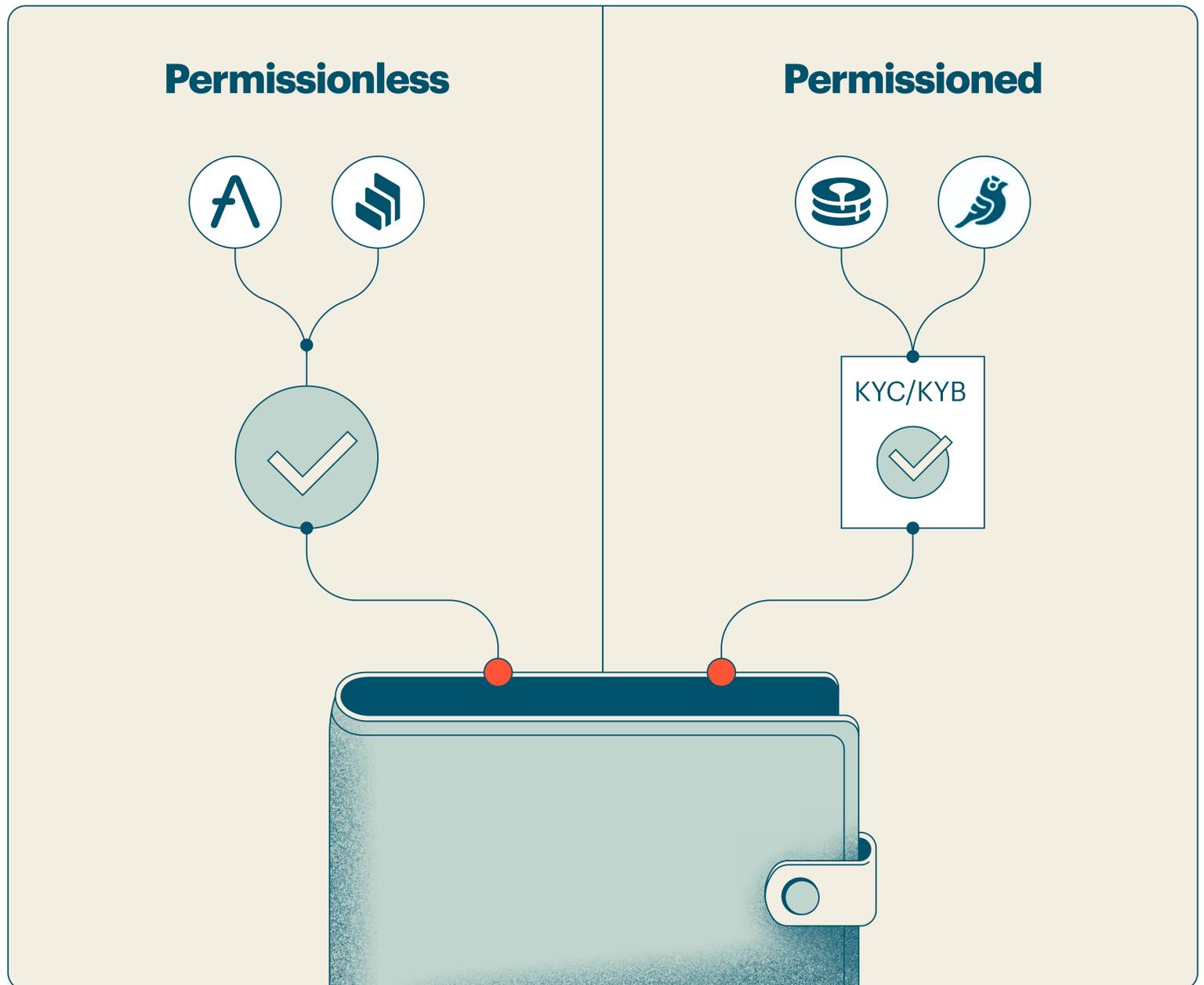
Institutional traders are the key drivers of borrowing demand for crypto. Historically, they have been willing to borrow at high interest rates given their return expectations from crypto markets. Not dissimilarly to traditional markets, arbitrage traders are borrowing to magnify what would otherwise be small basis point returns, while prop traders are using leverage to speculate on the market's direction. One common example of the latter would be to take out a loan in stablecoins by placing crypto balances as collateral and using that stablecoin to buy more crypto, creating synthetic leverage up to 2x. Similarly, traders also use those platforms to short specific crypto tokens. One example of this would be to use ETH as collateral to take out a loan in BTC if that trader believes that the price of BTC will go down. Doing so, would allow the speculator to sell that BTC for a stablecoin, wait for the price of BTC to drop, then buy back the BTC at the depreciated price to satisfy the loan.

Retail borrowing

Retail demand for crypto credit markets is typically used to generate liquidity without moving assets out of the crypto markets – this is mostly relevant for those bullish about crypto price appreciation and/or that want to avoid taxable events from previous capital gains. For instance, an investor which saw a US\$ 5K investment in BTC a few years ago transform into US\$ 100K might want to use those assets as collateral to take out a loan to buy a car without potentially missing the next bull run.

Corporate borrowing

Crypto companies with large digital asset holdings, such as the most prominent mining operations, have historically leveraged DeFi credit markets to fund capital expenditure. Most traditional financial institutions have refused to serve crypto-related businesses, forcing them to look for alternative sources of funding.



Permissionless vs permissioned protocols

I want to touch briefly on two different types of lending protocols: permissionless and permissioned. Permissionless protocols allow any wallet to connect thus are pseudonymous - there is no KYC or KYB, the counterparties are essentially unknown. Most well known examples are Aave and Compound.

Permissioned protocols require the wallet address to be listed in a 'whitelist' in order to be able to participate in either lending or borrowing. The whitelist is maintained usually by a centralized party which does require KYC / KYB in order to get on the list. A couple of example of these protocols are Maple and Goldfinch.



The promise of DeFi

Better economics for market participants

Crypto lending allows for a peer-to-peer model, which provides better economics to lenders and borrowers by removing the costs associated with financial intermediaries. In DeFi, the total interest paid by the borrower is roughly equal to the interest received by lenders, which is very different from the traditional banking model, where depositors get close to 0% interest rate on their deposits, while banks generate highly attractive returns on equity (ROE).

Financial inclusion

One of the benefits of the new economic paradigm possible when removing costly intermediaries from financial transactions is that it is no longer cost-prohibitive to service lower-income individuals. In a financial world governed by software rather than traditional bank branches, fixed costs are minimal and access is universal.

Elimination of human errors and mismanagement

Many financial crises occurred as a result of the mismanagement of central banks and third-party intermediaries. Thanks to smart contracts, human errors on a day-to-day basis are removed from the process; unless the contracts themselves were poorly written. In order to protect users against those software failures, DeFi protocols typically undergo very rigorous audits and reviews, which are all publicly available.

Increased transparency

The use of Blockchain Solution technology provides a new level of transparency and security. In DeFi, every user can see where their digital assets are stored and how they are used. Transaction-securing smart contracts, once implemented, are permanently recorded and cannot be tampered with. In practice, this means that transactions are only executed if both parties comply with the terms of the contract.

Quick and permanent access

Before DeFi, the retail segment needed to interact with banks to access credit, which proved to be a time-consuming and frustrating process. With DeFi, those same users can access loans in just a few clicks, even in the middle of the night. This market is accessible from anywhere and at any time so long as users are connected to the internet.

Innovation speed

Changes in traditional finance take up to decades, and all decisions affecting users are made behind closed doors. In DeFi, innovations are made in real-time, and the very ethos of this movement reflects the idea of democratizing finance. Because of its open-source nature, DeFi is often referred to as “money Legos”, whereby innovation can be leveraged across the whole ecosystem rather than remaining proprietary to a single entity.



Why Conduit?

Solving our own pain

Back at the first fintech startup I joined in 2010, there was one vendor that we could build on top of - Yodlee. They're still around, and maybe they're good now, but back then it was trash.

Plaid didn't exist, Marqeta didn't exist, none of the fintech infrastructure stack that's in place today was around. I saw that getting built however, both from the fintech side and also from the banking side - when I was at Eastern we were one of the first banks to talk to Plaid, I got them in there because I understood the problem they were solving very well.

Now fast forward to 2020 and I was building crypto products - was VP or product at BRD (which got acquired by Coinbase) and then head of product at Eco (where I met my now co-founder & CTO Mike who was the head of engineering over there) and having done it a couple of times, I realized well damn, it's pretty hard!

No one can accuse me of being too quick witted that's for sure.

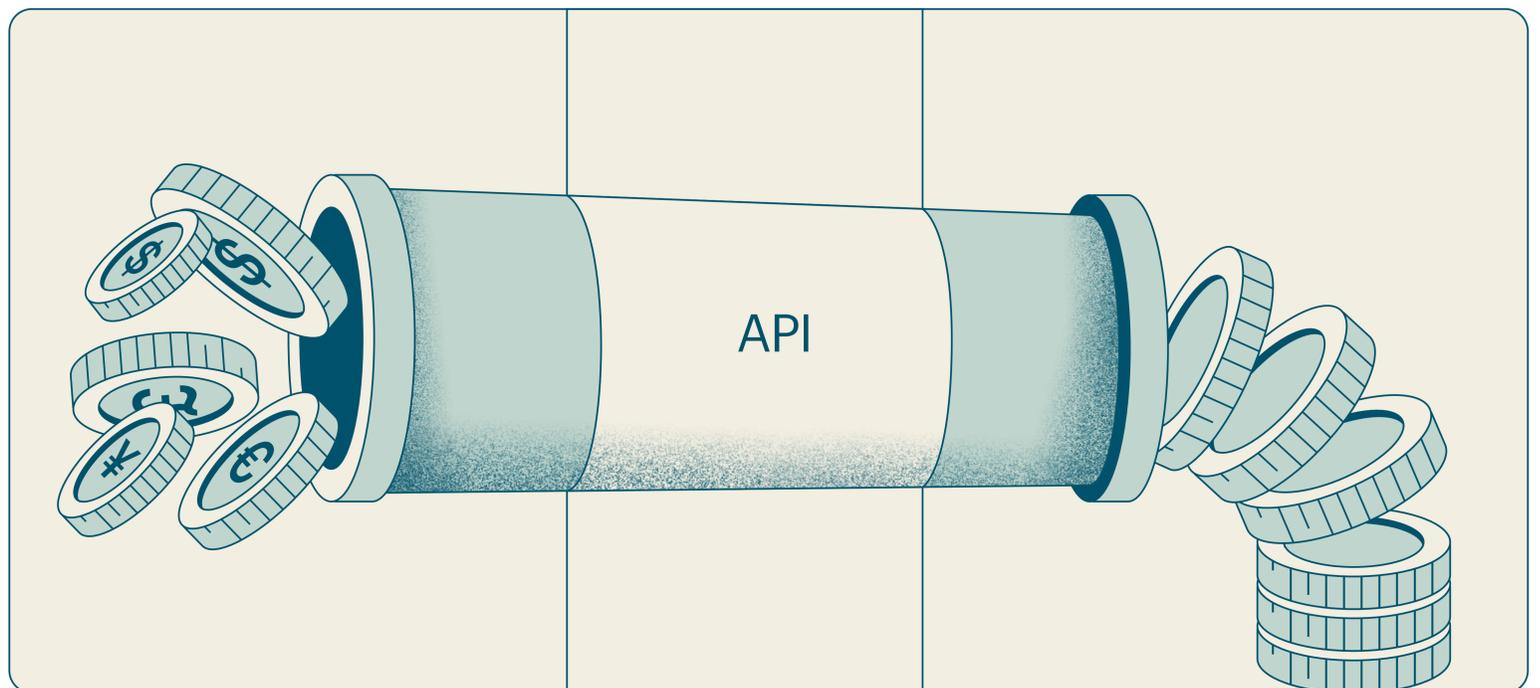
Anyway, one of the reasons it's harder in crypto is because all the infrastructure is still missing.

When Mike and I were at Eco we spent probably a good 6 months looking for a vendor that would be able to handle the process for going from fiat to a stablecoin and deploying that stablecoin in a seamless and scalable way - and didn't find one.

If Conduit existed a year ago, I wouldn't be here talking to you about it today - we'd be happily using it at Eco and I'd probably still be leading product over there.

I saw it being built on the fintech side and so now decided to take the opportunity to build it myself on the crypto side.

We started the company in June of last year, with a small pre-seed round of \$1M and almost immediately raised a larger seed, totaling \$17M from Portage, Jump crypto, Gemini, Gradient (Google), Fin Capital and a few other VS, also with some notable angels including Asiff, Rex, Nik, Simon, Mark Britto, etc.,



API

Conduit is a B2B2C platform that provides a single API for neobanks, fintechs and crypto exchanges to connect to DeFi protocols and CeFi lenders in days rather than months.

In other words, we create a seamless way to go from fiat - dollars, pesos, reals, naira, shillings - into a stablecoin, then deploying those stablecoins into a number of DeFi protocols and lenders.

So as a customer, you don't have to figure out how to convert your currency into cryptocurrency, you don't have to then figure out how to deposit that crypto into a protocol and which protocol you should choose, how to track the interest rates, where and how to hold the tokens that you get back, how to convert it all back into fiat when you want to withdraw...

In essence, our customers and their users get access to a dollar pegged balance and interest rate.

For the end users, it means access to a more stable currency than their local fiat, higher returns, and a way to build wealth that is not risk free, but is less volatile than crypto or stock market.

What does it mean for the customers? With a single integration into Conduit's API, our clients benefit:

New revenue stream: monetizing their users' deposits

Lower customer acquisition cost: differentiating by integrating higher yield into their products

Higher lifetime value: users no longer need to withdraw their assets to access DeFi



Corporate treasury

The CFO of our very first customer got me on Zoom and said:

“I know the API we’re integrating into, and that sounds great, but I’m an accountant - I can’t use it. Can you give me something I can click on? I’m sitting on a bunch of liquidity and would like to get yield on it”.

So we gave him something to click on.

And now we’re basically developing a second product out of it. It’s based on the same API, same backend - but has a front-end where users are able to deposit funds, see their balances, see their transactions, withdraw and so on.

Initially the same customers would be using both - but in the future the customer bases may diverge. Obviously you don’t need to be a fintech to be using corporate treasury, any company with cash on their balance sheet could do it.

There’s a point to be made here about time to value. Faster time to value shortens the sales cycle and gets stakeholders excited. Even the best, easiest to use API takes at the very least a few days to set up, usually longer. In most cases you need to get this into an engineering sprint which probably starts in a week or two and is already full, so you get it into a backlog, you get it prioritized, by the time you’re actually plugged in and testing a few weeks have passed.

With a dashboard that can demonstrate your capabilities in minutes rather than days, you shorten your time to value.



Bigger picture

Our goal is to solve the problem of DeFi accessibility by essentially abstracting it away, hiding it from the end user. In order for DeFi to gain true mainstream adoption, it must become “invisible” - we are working to remove the barriers of needing to have a computer science degree in order to be able to access it.

And our primary focus is doing this in the developing world. I think there’s an opportunity now to enable a new financial system in emerging markets. Similarly to how China for example “skipped” credit cards altogether and went to super apps and QR codes for payments, and in Africa the wired telephone network never fully developed - instead went directly to cellular.

Following the same analogy, the opportunity here is to bypass the legacy financial institutions and enable access to a new system, built on top of crypto rails.

This mission is not just an ideological one, it’s also practical, for two reasons: regulatory landscape and demand.

First, the regulatory environment: we have done extensive research, working with local legal and compliance experts, to understand the conditions and requirements in every country where we now operate.

The second reason however is more important, and that is demand. While the US dollar is certainly devaluating - right now inflation is supposedly at 7.5%? Realistically probably more like 8.5-9% - but the situation in many countries around the world is much worse. Argentina is experiencing near 50% inflation, Brazil in the 20% range and so on.

This creates a lot of demand from both individuals and businesses to move into a more stable currency - meanwhile most of these countries have fairly strict FX restrictions and people simply don’t have access to US dollars.

A stablecoin can create a viable alternative, being pegged to the dollar but not considered an actual currency in most places. The opportunity to get into the dollar and get yield on top of it is a great hedge against local inflation.



Our bets

Big seed round

We raised a large round upfront - \$17M at \$50M valuation - why? It is the most expensive money we'll ever raise.

Primarily because we were pretty confident that we'll be able to achieve product market fit quickly. This isn't always the case and in fact usually isn't the case. Our confidence came from our own experience, and also the fact that a similar business model already exists and is successful in fintech.

Because of that, it was an opportunity cost vs speed consideration. The additional money allowed us to grow faster and not have to spend a lot of time raising. We were also able to spend on lawyers and understand where we can operate.

Downsides: obviously dilution, but also higher pressure, less room to experiment, less flexibility to pivot.

International focus

One of the other decisions we made very early on, is to focus internationally - specifically on Latin America first - and not go to market in the US. This was back in November / December of last year, and now with the BlockFi settlement has proven to be a good decision.

Regulatory landscape

So expanding on that a little bit, we deliberately avoided launching the product in the United State, despite having very strong demand here - we literally have a waitlist of companies who want to work with us - because we believed the regulatory landscape will be changing.

It is happening right now - the BlockFi / SEC settlement clearly shows that a lot of the DeFi products

I think there are changes to regulation around stablecoin that are coming as well, and the issuers of stablecoins will likely be regulated more like banks.

I do believe there's a path forward for us in the States but it will take time to get through the necessary licensing.



Risks

This is a good segway into the risks we're facing - and how we're mitigating them.

Regulatory

I mentioned the US regulatory changes, but obviously the other countries where we operate will have regulation regarding crypto.

We specifically chose countries based on an ROI calculation of regulatory burden vs market size vs demand. Meaning low regulatory overhead, large market and high demand = win for us, which is why we started in Brazil, where crypto and specifically crypto custody is not yet a regulated activity.

It will be, and maybe even already this year, but that's fine. An inverse example is Mexico, which is also a large market with high demand but a very difficult regulatory environment for crypto, so we don't operate there. Once Mexico introduced the FTI regulation, companies that were already in market were given a grace period of two years to apply for the new license. We expect the same will happen in Brazil, which is another reason why it was important for us to begin operating there as soon as possible.

Volatility

Much of the borrowing from crypto protocols is driven by crypto trading - which is volatile of course, and creates spikes and valleys in the rates.

This is actually one of the reasons why I'm a huge fan of Goldfinch and other permissioned protocols - because they enable access beyond traders, to real world businesses (that, in some cases, can also use real world assets as collateral). Of course lending to SMB's is volatile as well, but spread across many businesses and many protocols, I believe that working with partners like that we can get to more stable rates.

Rising interest rates

Both in the US and elsewhere, there's a high likelihood of central banks / the Fed increasing rates this year, and I often get asked: "do you see this as a risk?"

I actually don't.

If the Fed increases rates this will likely strengthen the dollar, which in turn will have a negative impact on developing economies since most of their debt (even to countries other than the US) is denominated in dollars, and a stronger dollar means higher cost of servicing that debt. Very often this leads to inflation as the affected countries print more local currency to pay for the higher debt costs. This of course is not a good thing by any means, but does drive demand for products that help people move away from local fiat.

In case of countries in Latin America and elsewhere increasing their rates - for example interest on deposits in Argentina is now I think close to 20% - this isn't an issue either, because 20% interest rate at nearly 50% inflation, you're still at a loss and again, you want to move into a more stable currency.

Execution

In all honestly, this is what I believe to be the biggest risk for us. The opportunity is clear, but can we deliver? This goes back to people at the end of the day - in other words, hiring.



Future

Let's not shoot ourselves in the foot

One of the obvious things that occurs to most people after they think about our business model for a little bit, is "aren't you going to drive yourself out of business if you're really successful?"

Meaning in other words, we're driving supply into these protocols to generate yield for our customers. If we oversupply the supply side, we'll squeeze in the rates. So the more successful we are, the more supply we'll bring, the lower we'll drive the rate and end up hurting ourselves.

I don't know if there's a Forbes prize for 'best business model of the year' but this probably wouldn't win it.

So what do we do? We have to drive not only supply, but also demand.

Meaning we must enable not just lending into the protocols but also borrowing from them. And that's exactly what we're going to do. The customers for this will be similar but not exactly the same as the customers who are looking for yield. Right now we're thinking the best audience for this will be fintech enabled lenders in the developing world. Think of the various "Brex for LatAm" type plays - they want to lend to their users, small and medium sized businesses. The problem is that their cost of capital is very high - in the teens - and they are forced to pass it on to their end users.

If we can enable the Brex of Brazil to borrow from a decentralized pool at even 10% or say 8-9%, it would be a huge improvement to their cost of capital.

There are of course very significant challenges here, primarily in underwriting. In my opinion we shouldn't be getting into underwriting the end users - that's simply too difficult and too far out of our core expertise - but we may well end up underwriting our customers.



Platform

So now, maybe a year or two from today, we'll end up with an equivalent of a deposit type account with the yield product. If we add a lending product, we're starting to get the basic assembling blocks of a... bank. Right? You can deposit, you can borrow. That's what banks do at the most basic level.

Except that it won't be built on top of the legacy infrastructure. It will be built on top of a new decentralized and global infrastructure. That's our 'final form' - to build a platform on top of which people anywhere in the world will be able to build a 'neobank' in the true sense of the term - and actually new type of bank, not just a better UX on top of an existing bank.

This is what in my personal opinion will enable DeFi to actually fulfill its promise of better access for millions of people around the world.

Learn more and connect with our team

www.conduit.financial/blog

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