A DeFi-nite improvement: Programmable custodianship is described as a paradigm shift

IT'S ALL A QUESTION OF TRUST

We talk to **Alex Batlin**, founder and CEO of **Trustology**, about the crypto space, Facebook's Libra platform and building faith in decentralised finance

THE FINTECH MAGAZINE: Where do you think we are now with blockchain-based decentralised finance?

ALEX BATLIN: Decentralised finance (DeFi) is evolving quickly. What we're seeing is the first wave of service platforms and providers interacting with decentralised currencies like Bitcoin and Ethereum.

A whole landscape has developed, with ways to onboard consumers from fiat currencies to crypto, to exchange between cryptocurrencies or create borrowing mechanisms. That's crucial to extend the advantages of decentralisation and capture the full lifecycle and potential of this asset class – from issuance, through transfer, and then into lending, as well as creating algorithmic stablecoins like MakerDAO.

So, it's closing up the loop. All the activities needed for centralised financial services have emerging equivalents in decentralised finance now.

TFM: We know from our Payments Races that awareness of DeFi is growing rapidly, so what do you think the next challenge is going to be?

AB: Changing perceptions. A lot of institutional players are still a little bit nervous about coming into DeFi, because of know your customer (KYC) and anti-money laundering (AML). DeFi needs to have a proven approach on this to build confidence.

There's still a view that Bitcoin is mainly used by criminals, when by far the biggest currency used for drug trading and money laundering is still the US dollar! I think it would be pretty nonsensical and short-sighted to use Bitcoin for any sort of money laundering or extortion. Every single transaction and the paths for that transaction are recorded.

It's only a matter of time before systems and regulation mean it's possible to identify everyone who was part of the chain. Soon, it will be much easier and far more effective to perform money laundering investigations on blockchain than via conventional finance.

TFM: And that's at the heart of what you're doing with Trustology?

AB: Right. We've implemented full KYC in TrustVault, our custodial wallet platform. We can perform deep KYC when a user joins us; for every new key, wallet, or account we create for them we know exactly how that maps across to other currencies, fiat or crypto.

And for we track every inbound or outbound transaction from those accounts in our Know Your Transaction system, by looking at the verified blocks on the chain.

We can look at the number of hops and how exactly that transaction hops away, and if it ends up being sent to potentially a suspicious IP address. We can configure the number of hops we look at and see whether a destination address is linked to money laundering, or even terrorist financing. We have the ability to trace those transactions to a depth that's not even possible in the conventional banking system. This gives you a reliable global view for AML purposes.

I think that, when the conventional banking world catches up with what we're doing on cryptocurrencies, this approach will be adopted as the de facto technology standard for fiat currencies in the future.

TFM: So, what's the premise that's driving Trustology?

AB: We believe that crypto assets are going to provide new wealth creation opportunities for everyone, and we want to help drive the world towards that.

Blockchain reduces the cost of trust for financial transactions. And, once you reduce the cost of trust, you increase the velocity of trade and transactions, and you are able to provide support for more niche, underserved use cases, which have previously been considered too expensive to get into.

You make it easier for people to participate in the ecosystem and create greater wealth. It's about creating wealth for everyone, especially those underserved by conventional systems.

To build that, we need to make sure we've got the basics in place. To use cryptocurrency, you need to be able to see your account, send and receive transactions and assets and manage your money. Think of Trustology as the equivalent of a web browser for the blockchain. There are a few out there at present, but we wanted to create a solution that is a step up, removing all the previous compromises. One that's super secure, super easy to use and very fast, and we've done exactly that. So, we have a custodial wallet platform with an adaptable end-user experience.

Initially, we're going to market with a mobile wallet solution, the TrustVault app. We're also adding desktop user interfaces very soon for more institutional use cases. We're integrating advanced hardware security modules and biometrics, alongside programmable custodial rules, to really keep user data safe. And we've got a simultaneous sign a transaction processing time of about 350 milliseconds. That makes it feasible for institutional clients to use the platform at pace. Plus, we are one of the first in the crypto space to be fully insured.

We now support all major crypto assets, from Bitcoin and Ether to ERC-20 tokens, and we're also expecting to launch support for signing any decentralised finance transaction, through integration with MetaMask's secure identity vault tech.

The most interesting idea we're showcasing at Sibos in 2019 is our programmable custodian, where our clients can create their own rules, but let us execute those rules, so they don't have to wait on us to enforce the rules for them.

> "We have the ability to trace transactions to a depth that's not possible with conventional banking… when the world catches up with what we're doing on cryptocurrencies, this approach will be adopted as the de facto technology standard for fiat currencies in the future

That turns us from a service to a platform, which means we can then manage identity and transaction processing at a much lower cost than would have ever been possible with traditional custody. This is a genuine paradigm shift.

TFM: We have to ask you about Facebook and its headline-grabbing move into the crypto space. What are your thoughts?

AB: I think it's positive. Essentially, it's educating over a billion people about the benefits of cryptocurrency. When a serious technology player like Facebook sees value in this, and promotes it to all those folks who may or may not have previously heard of blockchain technology, that's a good thing.

What it has prompted, though, and quite rightly, are some concerns around how centralised the Facebook solution will be. There's always going to be a spectrum between full decentralisation and high centralisation. I think we will see how different approaches will play out, and I think we should welcome that. In some use cases, full decentralisation is useful, especially in a very international space, where there's no obvious adjudicator. But in other use cases, a consortium of trusted enterprises might be good enough to create the right trust approach.

Also, Facebook's scale can make it easier to track transactions for KYC and AML purposes, and provide a focus point for developing regulation. That's only to be welcomed, I think, because it can create solutions which improve the way we protect our society.

TFM: To round off, what is your take on the future for blockchain?

AB: One of the things I believe we lost as a society when we moved to processing fiat money electronically, was the ability to have anonymous transactions at the lower value end.

That was a valuable and worthwhile capability for cash money. With blockchain, we can restore that by setting a transaction threshold, beneath which it's possible to maintain complete anonymity for what's on the blockchain, while, for higher value transactions, there can be a regulatory requirement to pay for KYC and AML, either individually or by outsourcing it to a third-party provider, such as a custodial wallet provider, like Trustology.

And we'll start to see a real shift towards DeFi when the cost differentials start to kick in. That will happen pretty soon, as the number of dominant interfaces and mechanisms drops off and platforms like Trustology can highly optimise the service that's offered. The cost per transaction will drop to a fraction of what it is while a provider has to support a wider range of different instruction channels and mechanisms.

So, over time, economics dictate that the old model will die, but it might take a long time before it does.