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Research

Beyond prices: Institutions mingle with native crypto projects

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Introduction

There is no denying that the cryptocurrency industry has faced its most challenging year yet.

With record decentralized finance hacks, failed funds, faulty protocol token economics and misappropriation of client assets on centralized exchanges, faith in the technology has dwindled dramatically and the face value of cryptocurrencies certainly reflects that.

Yet, behind all the doom and gloom, which this year served on a silver platter, Bitcoin continues to mine a block approximately every ten minutes, regulators are building out comprehensive frameworks for crypto asset service providers, central banks and financial institutions continue to pilot DLT projects and Web 3.0 developers plod along with tasks at hand.

Zooming out just a little bit, one can quickly see how the two worlds of crypto and traditional finance are beginning to comingle, even if slightly.

"The institutions are here!" was the sentiment of the 2017 bull-run; they weren't even close. The industry did inch a little forward towards institutional adoption in 2021 when Tesla made its large purchase of Bitcoin, most of which was later sold. No other major company took such risk in their treasuries.

But behind plummeting cryptocurrency prices, major financial outfits, technology companies and consumer brands have rolled out various projects across the ecosystem.

Certainly, while this has been a difficult year for longterm investors, it has also been the year that gives a great deal of hope in real adoption of the underlying technology.

In this report we look at a few interesting developments where institutions did begin to integrate various ideas with permissionless crypto projects.

From cross-border payments to loyalty reward programs, the infrastructure that has been under development since 2017 is finally seeing real adoption. The institutions really are here.



Polygon lands major wins from Nike to Starbucks in wide-ranging use cases

Whilst the massive hype for Non-Fungible Tokens (NFT) has plummeted to unspeakable lows, this is neither the full picture nor representative of the niche use case across the board.

Major apparel brands from Nike to Adidas have opted to deploy their NFT projects on Ethereum's scaling layer Polygon this year. Sales are beginning to inch up again, and more unique users are taking stock (see table charts below).

Meanwhile, companies like Meta and Reddit are also using Polygon's chain to mint NFTs.

However, Polygon's team has expanded its efforts across various use cases and organizations beyond on-chain representations of art for the Metaverse.

Starbucks started its loyalty program to beta testers just this month. Online payments infrastructure provider Stripe has opened up pay-out rails using the Layer-2 blockchain with USDC, Circle's issued stablecoin. Trading and investment app Robinhood opened up its Polygon-based non-custodial wallet to beta testers this September. And JP Morgan executed its first DeFi trade on the network just last month.

Regardless of all the major wins, Polygon's development chapter isn't even close to finished. The community is now tackling a major scaling solution that will reduce fees further still and inherit the security of Ethereum.

NFT stats by marquee brands on Polygon

Brand	Secondary Volume	Primary Revenue	Total Royalties	Total NFT Revenue
Nike	\$1.33b	\$93.13m	\$92.72m	\$185.85m
D&G	\$20.60m	\$23.14m	\$556.48k	\$23.69m
Gucci	\$31.76m	\$10.00m	\$1.59m	\$11.59m
Adidas	\$178.02m	\$6.20m	\$4.81m	\$11.01m
Lacoste	\$3.11m	\$1.00m	\$124.24k	\$1.13m

Nike monthly transactions spike in December 2022



Source: Dune Analytics, as of 2022-12-14

Stellar & Moneygram offer 'Cash In, Cash Out' remittances

The latest figures given by the World Bank estimate that the average global cost of sending \$200 is 6.3%, more than double the 3% target set by United Nations Sustainable Development Goals.

2018 saw a narrative develop that cryptocurrencies and blockchains might be the answer to the high costs. Both major Money transfer operators (MTO) Western Union and Moneygram have developed partnerships to test the concept with Ripple and its token XRP.

Both partnerships petered out to no avail. Yet the past doesn't hold the same wisdom as today, it seems.

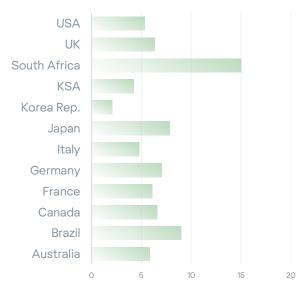
This year saw Moneygram partner with the Stellar Blockchain Network and began to operate an access program for remittance payments using major stablecoin USDC and zero fees without accounting for a forex spread.

The model is slightly different to mobile payments, however. Senders are required to visit a store and exchange cash for the USDC they plan to send. This is what Moneygram has called 'Cash In', while the receiver can 'Cash Out'.

This method removes the added costs that would be stacked on top of the fees if using digital payment and traditional banking rails.

Currently, only 13 countries support 'Cash In'. While the US is the largest sender in remittance corridors, there are plenty of other regions that would also benefit from the service in the future.

Average cost of remitting \$200 from G20 countries (\$)



Source: Worldbank, September 2022



Plaid Open Banking begins tango with Ethereum, Open Finance

Financial service decacorn Plaid unveiled its end-toend onboarding solution for Web3 developers this year.

The tool offered by the Open Banking services platform aims to allow faster development of applications that wish to connect with various self-custodial wallets and Web3 applications.

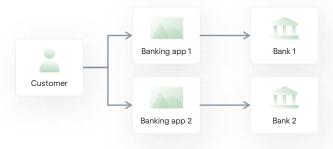
Currently, the service called 'Wallet Onboard' only supports Ethereum and EVM-compatible chains, but the organization has voiced its aim to support other blockchains such as Solana in the future.

Open Banking, which allows customers to share their financial data with third parties through APIs, has become operational across the European Union, United Kingdom and Switzerland. The US still trails behind taking a market-driven approach rather than a regulatory one.

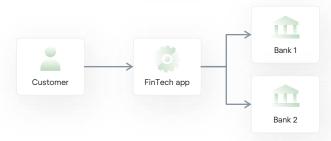
The US Consumer Financial Protection Bureau has expressed its aim to have a finalized rule on the subject matter by 2024, nearly two decades after the US Congress mandated Open Banking after the 2008 financial crisis.

The marriage of Open Banking, self-custodial wallets and tools like Plaid that offer identification and compliance services will likely appease regulators as more forms of money and assets find their way onto the blockchain.

Before Open Banking



After Open Banking



SWIFT, Chainlink partner in PoC for cross-chain interoperability

Banking cooperative and messaging service SWIFT has been quite active as of late with its goals in participating in a financial network poised to utilize the blockchain.

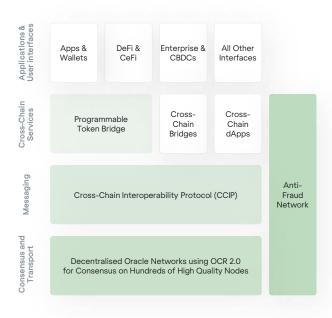
The global financial service giant recently presented its results on interlinking Central Bank Digital Currencies (CBDC) using permissioned blockchain networks Corda and Quorum.

The outfit also announced its plans for an initial proof of concept using Chainlink's Cross-Chain Interoperability Protocol (CCIP).

CCIP in effect, much like SWIFT, is a messaging layer for smart contracts and blockchains to communicate with each other and work with other network services (see diagram below).

The Chainlink network will support both public and private blockchains with the main core functions of securing highly validated data, off-chain computation where necessary and cross-chain communication.

Cross-chain operations have been a key problem for the cryptocurrency ecosystem that has faced multiple bridge hacks costing investors billions. Whether or not Chainlink might be able to resolve the security issues around interoperability will be seen. What is clearly apparent though is that major institutions are keen on expanding their potential networks with native crypto projects ushering in an era of cooperation in finding solutions.





Google Cloud streamlines node setup process for

Ethereum, Solana

At the start of 2022, Google announced a dedicated team for digital assets that would sit within its Google Cloud operations.

This comes as little surprise as Alphabet, the parent company of Google, sits on the top of the table for investments made into Blockchain companies, according to Blockdata.

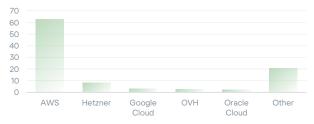
The search engine giant recently announced its Blockchain Node Engine with Ethereum being the first blockchain supported that would allow developers to reduce the operational setup time by using Google's fully managed node-hosting service.

In October, Google Cloud also announced that it will bring the same service for the Solana blockchain, as well as confirming that it will be a validator for the network. Solana unveiled a mobile device this year that will run the Android operating system which is heavily developed by Google itself.

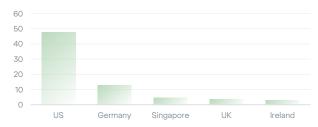
This is a clear opportunity for Google Cloud services. Its competitor, Amazon Web Services, (AWS) accounts for running over 60% of Ethereum nodes while Google Cloud accounts for just 3%.

Reliance on AWS has proven to be problematic at times with outages affecting not only centralized exchanges, but decentralized exchanges as well. Google's foray into streamlining the node service will prove to be an important factor to disperse the infrastructure risks involved, a welcomed development.

Nodes by hosting service (%)



Nodes by country (%)



Source: ethernodes.org, as of 2022-12-14

Modified versions of Aave, Uniswap used in pilot by JP Morgan

Fairly large ambitions have been set by the two major participants of Project Guardian, JP Morgan and Singapore's DBS.

"The overall goal is to bring these trillions of dollars of assets into DeFi, so that we can use these new mechanisms for trading, borrowing [and] lending, but with the scale of institutional assets" said head of Onyx Digital Assets at JPMorgan.

DBS believes that "blockchain will power world's back office in five to 10 years".

Project Guardian which tokenized the Singapore Dollar, Japanese Yen, Singapore Government Securities, and Japanese Government Bonds used modified version of popular DeFi applications Aave and Uniswap and were executed on the Polygon chain. For good measure, the report noted that this was not an endorsement of the protocols.

Be that as it may, the reality is that open source projects pinned the very technological stack that major financial institutions tested for the tokenization and settlement of assets and securities.

One of the pilot's aims was to establish the parameters and design that would entail for 'Institutional DeFi'.

Notably, the conclusion was not around the viability of the technology itself which has historically been a key roadblock most Proof-of-Concept projects face.

Project Guardian participants concluded that legal and regulatory uncertainties, establishing shared standards, and envisioning a target market structure are key points that need to be addressed for institutional scale and adoption of blockchain-based financial services. The benefits of DeFi have been made clear (see table).

- A Atomic settlement reduces risk by providing a secure way to deliver securities for payment
- B Mutualized and transparent ledgers facilitate real-time value movement, cheaper settlement
- C Composable nature (ability to interact with one another) of DeFi protocols allows for seamless collaboration across multiple services
- D Interoperability across asset classes and markets aggregates liquidity and enables a more globally integrated finance industry
- Programmable logic allows automation of multi-party operational activities and thus reduces middle- or back-office overhead such as transfers and post-trade reconciliation
- F Transparent and automated business logic enables new product features, such as liquidations for collaterals and new product offerings
- G Innovative DeFi solutions amplify liquidity of tokens and tokenized realworld assets given lower participation threshold, such as decentralized exchanges



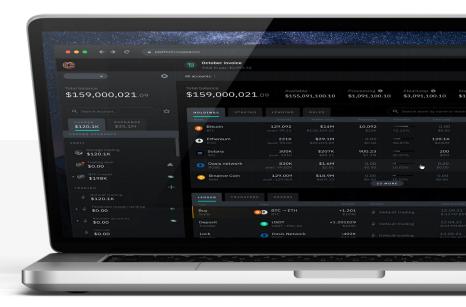
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