



Financial Market Infrastructure

Enabling Infrastructure that Empowers

Open: Financial Market Infrastructure

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The world of finance is in one of the most disruptive periods since the establishment of banking. The convergence of tools and concepts from mainstream finance, together with fintech innovation and the technology of distributed finance, promises radical transformation.

A key innovation to this transformation is **tokenisation**, the process of representing assets digitally on a programmable platform. Tokenised assets fundamentally reshape financial transactions, increasing their speed and accuracy, while decreasing costs and risks. These new financial instruments are rapidly moving from pilot to deployment and are core to the transformation of finance.¹ The maturing of this technology will usher in a new era for money, fostering greater innovation and significantly broadening access to basic financial services.² The proliferation of stablecoins is an example of this new era.

Adding to tokenisation is the advent of the **unified ledger**. Unified ledgers provide a quantum leap over existing financial infrastructure by seamlessly integrating the current systems for messaging, clearing and settlement. Further, using tokenised money, unified ledgers enable the automation of complex sequencing of transactions, opening the door to entirely new types of economic arrangements.³ The deployment of unified ledgers is a significant step towards a more efficient, transparent, and inclusive financial system.

These transformational capabilities are being woven into exciting, ambitious financial market infrastructure (FMI) projects⁴ directed principally at wholesale systemic challenges, and led by the central and commercial banks of traditional finance (TradFi).

This paper describes an Open FMI (Open) that also utilises the innovative capabilities of tokenisation and advanced ledgers, together with original tools and concepts, to practically address systemic challenges beyond those of TradFi. Building on successful TradFi projects, Open is an FMI project that addresses a wider, more inclusive audience..

It introduces financial infrastructure, capable of delivering continuous, asynchronous, real time net settlement for wholesale and retail transactions equally, serving small and micro-value customers with the same ease and speed as wholesale institutional users.

It describes a user network that defines a user not merely as an individual, but as any economic participant, especially those constrained by barriers of access and affordability. In this context, users encompass the majority of local banks and financial institutions, millions of businesses, and billions of people, particularly in Africa and the Global South.

This paper presents Open as a uniquely regulated decentralised financial infrastructure, balancing innovation with compliance. This approach not only fosters trust and security amongst users, it also encourages the adoption of innovative technologies in mainstream financial services, paving the way for a more inclusive and resilient ecosystem.

Rather than a paper on possibilities, this paper describes an existing infrastructure that empowers businesses to deliver **direct financial market access** to their customers, today.

¹ [From Ripples to Waves, McKinsey, Jun 2024](#)

² [A New Era for Money, IMF, 2022](#)

³ [Blueprint for the Future Monetary System, BIS, Jun 2024](#)

⁴ Project Agora, Global Layer 1, Temenos, JP Morgan, to name a few

1 SILOS

Creating money has been the province of TradFi for much of modern financial history. E-money started to change this, but tokenisation is poised to usher in a new era for money.

While addressing important real world challenges, bank-led projects tend to use tokenisation technology primarily to reinforce and incrementally improve outdated TradFi infrastructure. It is an approach reminiscent of the early days of the automobile industry, when Henry Ford famously noted that if he had asked his customers what they wanted, they would have said a faster horse.

Alternative decentralised ledger technology (DLT) led systems of tokenised money range from public, permissionless assets like cryptocurrencies or stablecoins that lack transparency and oversight, to private proprietary systems that struggle with interoperability, like those of JP Morgan⁵ and Citi.⁶

An innovative approach might be to combine the structure of TradFi with functionality of decentralised systems. However, simply layering speed, transparency, and programmability onto the order of TradFi is just faster horse thinking. A better model is one that reimagines finance from the ground up, evolving away from a strictly hierarchical structure of money.

Open is financial infrastructure that provides affordable access to high quality tokenised money for payments, investments and cross border transactions through an advanced ledger that enables continuous real time settlement for any bank, asset manager, financial services provider (FSP), retailer, distributor, manufacturer, corner shop, cafe, hairdresser, trade union or remittance business - and their collective customers.

Open is a seamless, frictionless platform for financial services inclusion and innovation.

2 TRUST

Trust in financial markets is complex. Traditionally it comes from a combination of regulatory oversight, legal protections, intermediary services, transparency, technological support, historical reputation, and reliable clearing and settlement practices. Banks, exchanges, clearinghouses, and other central authorities act as gatekeepers, ensuring the validity and integrity of market systems. They are trusted to act honestly, safeguarding assets, processing transactions, and maintaining accurate records.

Distributed ledgers challenge this model by distributing trust among a network of users to validate and record transactions by consensus. This shift fundamentally redefines systemic trust. Trust is not placed in a central authority but embedded in technology to safeguard and process transactions through cryptographic technique, transparent protocols, and immutable records.

Distributed ledger technology operates in two primary configurations: public and private networks, each of which can be either permissioned or permissionless. The structuring of these configurations caters to different needs and philosophies within digital and financial ecosystems, representing different types of accepted trust.

⁵ [Transforming the Way Money, Information and Assets Move Around the World. JP Morgan, 2024](#)

⁶ [Introducing Citi Integrated Digital Assets Platform. Citi, July 2024](#)

Public, permissionless networks like Bitcoin and other cryptocurrencies exemplify the most open form of distributed ledger. Access is open to anyone with an internet connection, allowing users to participate in transaction validation and access the ledger without permission from any central authority. Public, permissionless networks are embraced by a staunch cryptocurrency community, but have yet to find trust in the public at large, particularly institutions. Institutions do trust peers, but not crowds.

Private, permissioned networks are favored by traditional banks, financial institutions and enterprises as they are more peer based. These networks restrict access to a select, trusted group of participants who are granted permission to join the network and validate transactions. This controlled environment allows institutions to maintain oversight and compliance, ensuring that their network operates within designated frameworks and follows specific standards. These heavily moated networks focus primarily on addressing the challenges of wholesale finance.

The hybrid configuration is a public, permissioned network, designed to strike a balance between the decentralisation of public networks and the control and security of private networks. This configuration is particularly well-suited to financial market infrastructure, where regulatory compliance, data integrity, and identity verification are paramount. This network structure is not as common. There are public ledgers that operate in this capacity, notably, Hyperledger Fabric⁷, Polymesh⁸, Hedera⁹ and Corda¹⁰.

These networks use permissioned consensus architecture. That is, participants that validate transactions in these networks are selected (permissioned) through a rigorous process that includes identity verification, reputation assessment, compliance checks, approval by governing bodies, and/or technical competence. As a result, many of the trusted, permissioned validators are highly regarded institutions. Often, they are regulated financial services firms, but not always.

Open shares this architectural philosophy, however, more than just rigorous screening, Open mandates that each permissioned validator is a fully regulated, jurisdictionally relevant, FSP. Without exception, the responsibility for maintaining regulatory standards and safeguarding network integrity in Open rests entirely with organisations that are best equipped to manage these critical functions. No other network requires this level of trust.

Moreover, Open requires every wallet to be onboarded via a fully regulated, permissioned validator. This means that every wallet in the network is immutably linked to the specific Key Individual at the onboarding licensed, permissioned validator. This unique characteristic gives regulators full transparency (and confidence) in the system, enabling a direct line to be drawn to an accountable person responsible for the Know Your Client (KYC), Anti-money Laundering (AML) Counter Terrorism Financing (CTF), Financial Action Task Force (FATF) Travel Rule, and suspicious transaction reporting (STR), along with any other regulatory requirements, for every wallet and every transaction.

Further, Open proactively enforces compliance on all transactions. The current verified KYC status of each wallet is encapsulated in a KYC non-fungible token (NFT) that resides in every wallet. It indicates the Key Individual as well as the level of compliance attained. This

⁷ [Hyperledger Fabric](#)

⁸ [Polymesh](#)

⁹ [Hedera Hashgraph](#)

¹⁰ [Corda](#)

NFT, managed via a smart contract, is integral to every transaction. Transactions that lack appropriate KYC validation are not just prohibited, they are computationally impossible.

Open's trust architecture leverages the systemic rules and standards that exist in TradFi to ensure validity, integrity and honesty in safeguarding assets, processing transactions, and maintaining accurate records without centralised oversight. It maintains confidence in a system and its transactions through decentralised cryptography, protocols and immutability.

3 ACCESS

Affordable access to capital is often perceived as an issue for the poor. In reality, it is a systemic problem rooted in TradFi systems that trickle down to impact the poor. These systems, shaped by global regulatory biases and risk-averse policies, disproportionately limit the flow of capital to the entire structure of capital distribution, reducing access to global markets, impeding cross border trade, shifting flows to informal channels and ultimately having a negative impact on financial inclusion. Access is as much an issue of the banks in Africa and the Global South as it is an issue of the individual on the street.

Most of the ambitious FMI projects of TradFi focus on the wholesale clearing and settlement challenges on the basis that solving for global wholesale issues will trickle down to solutions for affordable access throughout the economy. As an enabling infrastructure, Open is designed to address challenges across the full spectrum of market participants from spaza shops to regional banks and even to global market participants.

Open effectively operates as an interoperable platform of platforms. Each of the regulated permissioned validators plays a key role in maintaining order and integrity in the system, but also serves as a platform owner. As a platform owner, they can expand their reach to additional market participants who they incentivise to fulfil specific roles. Multiple regulated permissioned validators means multiple platforms of market participants.

Regulated permissioned validators fulfill the role of Settlement Partner (Partner) in Open. They are called Partners because they participate in legal partnerships that enable the tokenisation of money in Open. In addition to this function, they also serve a settlement function by participating in the consensus validation of transactions. As regulated entities, Partners onboard and are responsible for the compliance of every user on their platform with respect to regulatory enforcement requirements (KYC, AML, CTF, STR).

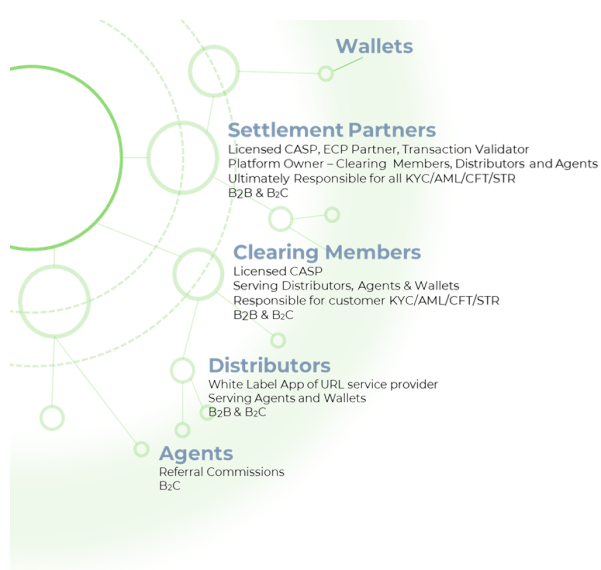
Partners are appropriately licensed and regulated entities, but typically are banks, asset managers or large size FSPs and Payment Services Providers (PSP) that have the capacity and willingness to validate transactions, take on compliance responsibilities and have a desire to actively extend their reach to a greater number of customers through a regulated digital FMI. Partners attract users to the system directly through products and services, but also by recruiting other entities to work with them to provide products and services.

Clearing Members (Members) are also fully regulated licensed entities that access Open through an economic relationship with a specific Partner. Members can also onboard users, taking on the responsibility for their conduct and compliance in the network. They are effectively minority owners in a Partners platform with an ability to issue tokens through their Partner, but have no legal standing in the underlying issuance partnership.

Members, made up of banks, FSPs and other appropriately licensed and regulated entities such as Authorised Dealers (AD), Authorised Dealers in Foreign Exchange with Limited Authority (ADLA), International Money Transfer Operators (IMTO) or Crypto Asset Service

Providers (CASP). They do not participate in consensus validation for network transactions but they do own their relationship with customers and can extend their own influence in the network by recruiting distributors and agents to bring them users.

Distributors are providers of products and services directly to customers, either physical or virtual. Ranging from mobility to payroll, construction to investment, manufacturing to lending, these businesses benefit from financial market infrastructure that gives them access to high quality digital money, enhancing their product and service offering to their customers. They operate through direct economic relationships with either Partners or Members in the network who retain responsibility for compliance, monitoring and reporting. Distributors can also recruit agents to support their businesses.



Agents maintain an economic relationship with Partners, Members, or Distributors and earn commission for referring users into the network. They have no network responsibilities but have trusted relationships with their customers. They are spazas, kiosks, hair salons, cafes, gyms, repair shops, or any other small business or business group in the economy.

Every Open Partner creates a platform of Members, Distributors and Agents that reach users across the economy from businesses to individuals of all sizes. With multiple Partners, there are multiple platforms in the Open network. Regulatory responsibilities for all wallets in a Partner network roll up to a specific Partner.

However, the multiple platforms operate on the same interconnected, interoperable Open infrastructure in a standardised, uniform manner. Open introduces this as a Regulated User Network (RUN). A RUN is a user-centric network that enables direct financial market access to every participant. Citi and other institutions describe a Regulated Liability Network (RLN)¹¹ emphasising regulated liabilities that serve as reserves in a network of select institutions. A RUN similarly requires that reserves against digital money are regulated instruments. However, as a more expansive network, a RUN also requires that all network validators are regulated and all user wallets are compliant.

Bank to bank transactions of any size have the same standing in the network, with the same protections and speed, as an individual's micro-payment to purchase a loaf of bread or hold their savings in a hard currency.

Open is not designed to solve for the challenges of TradFi in hopes that benefits will trickle down to the rest of the economy. It is user-centric infrastructure that levels the playing field for all, providing **direct access to digital money** and all the benefits it brings. It is a regulated network of platforms, designed to empower any user across the economy.

¹¹ [Regulated Liability Network, Nov 2022](#)

4 MONEY

Money today exists in a dynamic hierarchy¹² flowing from central banks to various levels of commercial banks and asset managers, through non-bank financial institutions and businesses to individuals. Each level's liabilities serve as assets for the level below, creating a complex, fluctuating web of cascading credit quality.

Tokenised money involves converting rights to the liabilities that exist on the hierarchy into digital tokens, with central banks at the apex. Central banks issue cash and coins, as rights to a liability of the government, i.e., to stand behind that currency. Retail Central Bank Digital Currency (rCBDC) is intended to be the digital equivalent. The vast majority of the world's central banks have run experiments with both retail and wholesale Central Bank Digital Currencies (wCBDC)¹³ to assess the potential of digital money.

Banks also create money by issuing loans that exist as liabilities on their balance sheets. This form of money represents 90% of money in use today.¹⁴ Some of the larger banks are experimenting with tokenising these liabilities to create deposit tokens. However, most of these projects use tokenised 'trusted promises to pay'¹⁵ to solve for wholesale settlements, much like wCBDCs.

Stablecoins are relatively new DLT tokens, introduced as a safe haven for crypto markets. They are generally tied directly or programmatically to a fiat currency. Spectacular failures have highlighted some of the transparency and regulatory challenges, but several stablecoin projects are being used as tokenised money. The two largest, Tether (USDT) and Circle (USDC) actively appear in the movement of money through payment systems, supporting payment service providers, merchant acquirers and e-commerce.¹⁶

Tokenised funds are also appearing, creating a new and very interesting dynamic. BUIDL¹⁷ is a token that represents fractionalised ownership in a Blackrock fund made up of cash, repos and US treasury bills, effectively a Money Market Fund (MMF). Franklin Templeton is a pioneer in the tokenisation of money market funds, launching their Onchain US Government Money Fund in tokenised form.¹⁸ Hamilton Lane has tokenised a short term private credit fund that targets floating-rate, senior secured private loans;¹⁹ not the same quality as US treasuries, but high quality liabilities. Tokenised funds and other Real World Assets (RWAs) are expected to explode to trillions of dollars this decade.²⁰

Interestingly, while BUIDL targets institutions with its \$5million minimum investment, it is being used as collateral for the issuance of smaller investment tokens. MMFs have often been used as collateral in financial markets as regulators often consider them as 'cash equivalent' cash management tools.²¹ They are abundant and accessible in multiple currencies, actively traded in most financial markets around the world, and yield returns similar to central bank short term paper. More importantly, as a cash equivalent instrument, liquidation is not necessarily required for settlement of obligations.

¹² [The Inherent Hierarchy of Money, Mehrling, 2012](#)

¹³ [CBD Tracker, Atlantic Council](#)

¹⁴ [Token Deposits, Oliver Wyman, 2023](#)

¹⁵ [Regulated Liability Network, Whitepaper, 2022](#)

¹⁶ [Digital Currency Comes to Visa's Settlement Platform, Visa, 2021](#)

¹⁷ BUIDL stands for "BlackRock US dollar Institutional Digital Liquidity"

¹⁸ [Franklin Onchain US Government Money Fund, Franklin Templeton, 2023](#)

¹⁹ [Tokenised SCOPE, Hamilton Lane, May 2023](#)

²⁰ [From Ripples to Waves, McKinsey, 2024](#)

²¹ [Updating the Regime for Money Market Funds, FCA, Dec 2023](#)

Tokenised MMFs as cash equivalent collateral is groundbreaking. The inherent quality of underlying investment pools suggests that tokenised MMFs should be seen as High Quality Liquid Assets (HQLAs) in and of themselves.²² As such, tokenised MMFs are one of, if not the closest assets to CBDCs available to the private market. They are closer in overall quality to CBDCs than any of the liabilities that back deposit tokens while providing greater transparency.

Open embraces this innovative collateral approach, using tokenised MMFs as common reserve instruments (Reserves) for issuing Open Money (e-Currency). The significance of this is profound. **The hierarchy of cascading quality of money is dissolved** if every individual has access to a safe, secure, digital equivalent of the highest form of money in an economy and can use it electronically in any denomination down to fractions of a unit to buy, sell, send, receive, borrow, lend, invest and save. It is even more profound that every financial institution or business constrained by limited correspondent banking suddenly has access to high-quality, regulated, tokenised hard-currency money. Moreover, with the hierarchy dissolved, **every participant has direct access to the yield on reserves** that underpin the money they hold. Beyond profound, this is compelling.

Stablecoin issuers, like those behind opaque and unregulated USDT and USDC, generate the majority of their earnings by failing to share the billions that are generated every quarter from their underlying reserves. Tether made over \$4billion in the first half of 2024, principally from return on reserves.²³

Now Open, the platform of platforms that enables direct access to digital money, gives Partners that issue e-Currency stablecoins access yield on the reserves and an ability to share it with their Members, Distributors, Agents and customers. Moreover, Open empowers any enterprise in a network to issue fully backed, regulated e-Currency through their network Partner, creating interoperable, tailored, yield bearing digital money. Adoption becomes more than just convenience, cost saving and security; it is a highly competitive, lucrative proposition.

Customers are able to transact their digital money peer-to-peer with any Open wallet. Transactions are free and instant. Settlement between wallets issued by the same Partner are internal. The Reserves remain on the account of the issuing Partner. Settlement between wallets issued by different Partners means that the claim to the underlying collateral, the Reserves, together with the returns they generate move to the Partner of the receiving wallet. In TradFi systems, this is a T+n netting process. In Open, Reserves transfer seamlessly and simultaneously with the transaction.

Every token that resides on Open can easily and frictionlessly be swapped for another token or off-ramped into fiat or payment channels. Interfacing with traditional money requires licensing and regulatory enforcement. Open embeds this requirement across all of its token transactions. As a result an Open wallet can be used to make purchases or withdraw cash at hundreds of thousands points of sale, ATMs or e-commerce sites in South Africa, today.

The first e-Currency was introduced as a follow-on experiment by leading banks participating in Project Khokha 2, the South African Reserve Bank (SARB) CBDC project. It is a South African Rand token, widely known as eZAR.²⁴ During the Project, eZAR was backed by CBDC, but with the further development of Open, eZAR is now fully and

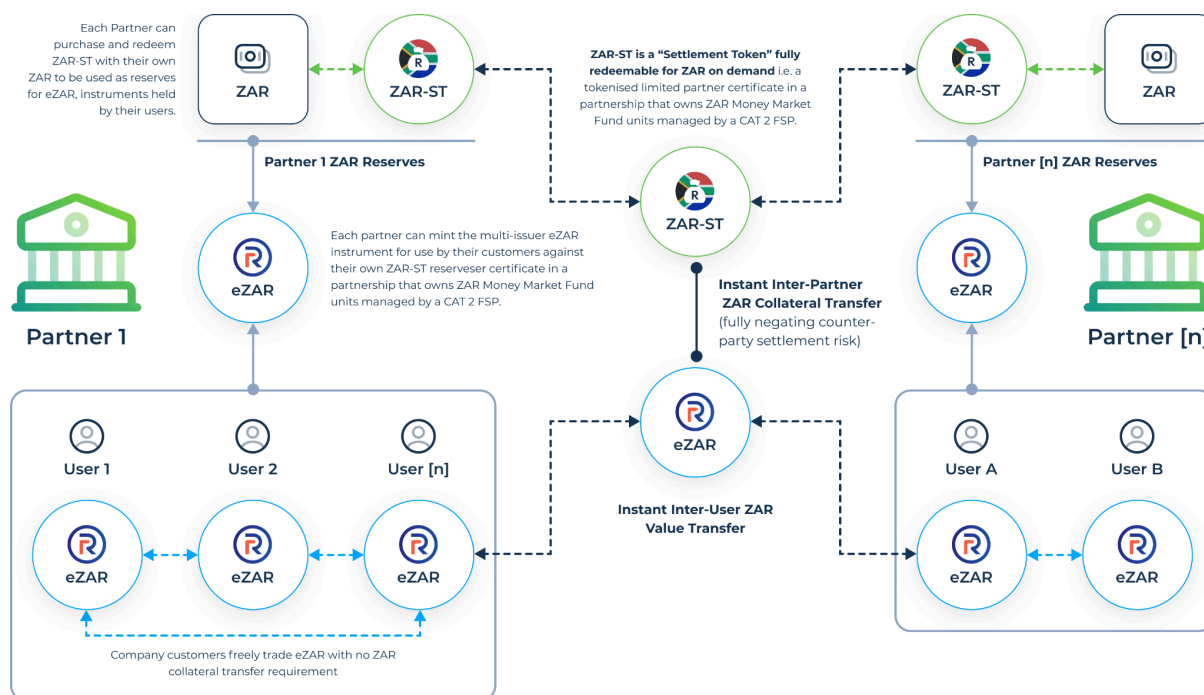
²² [Collateral Opportunities, The Investment Association, March, 2024](#)

²³ [Tether First Half Returns 2024, Tether.io](#)

²⁴ Block Markets Africa, the developer of the Open Network, was an implementation partner to Project Khokha 2

transparently backed by a high quality Rand MMF, holding it in transparent, provable 1:1 parity with the Rand at all times.

The diagram below describes both internal and external transactions for an eZAR. Note that Open is not the issuer of eZAR. **Open is enabling infrastructure that empowers a network Partner to issue eZAR on behalf of any validated entity on the network.**



Moreover, non-network stablecoin issuers and/or holders that adhere to the rules and standards of the network can participate in the network with access to all Open has to offer. Any bank or non-bank financial institution, including existing stablecoin issuing institutions, can create compliant, regulated tokens on the network. Equally, standards compliant product and services providers can offer new and innovative payment solutions to Open customers. In that, **Open delivers the closest thing to regulated digital cash.**

In fact, the SARBs Digital Payments Roadmap for South Africa presents 17 specific actions to accelerate the pace of adoption and use of digital payments in South Africa.²⁵ Open provides the infrastructure for bonafide service providers to build products that contribute to fulfilling 13 of the roadmap actions on Open immediately.

More, Open enables Partners to issue any fiat denomination of e-Currency by holding tokenised MMFs in that currency as Reserve. eUSD is available today in the same form and function as eZAR. Like eZAR, Partners can offer rewards to wallet holders on their balances, similar to and greater than most other forms of holding cash. What's more, Open automates compliance and reporting with respect to cross border implications to comply with jurisdictional regulations, including exchange controls, withholding taxes and reverse VAT. This means that Open wallets can easily and rapidly swap between e-Currency tokens.

Open enables **multiple platforms to issue multiple tokensied assets** through multiple enterprises across a regulated user network, and all of these tokens are fully interoperable.

²⁵ [Digital Payments Roadmap, SARB, Apr 2024](#)

5 INFRASTRUCTURE

Traditional FMI consists of five separate but deeply intertwined systems - payments, central securities depositories, central counterparties, securities settlements, and trade repositories - each depending on the others to ensure that transactions are cleared, settled, and recorded accurately and efficiently. These systems operate through a complex network of banks, stock exchanges, forex companies, clearinghouses, and governmental bodies to support the stability and integrity of financial systems. Tokenisation presents an opportunity to simplify and unite these discrete systems and their complicated networks.

Currently, there are over 100 central bank projects focused on enhancing FMI through DLT. Commercial banks, including JPMorgan, HSBC, Credit Suisse, and Standard Chartered, are exploring, and in some cases implementing, DLT solutions to improve various aspects of financial transactions, including clearing and settlement for both domestic and cross-border payments. Concurrently, financial messaging systems like SWIFT are working on ways to integrate with DLT platforms to ensure interoperability with existing systems.

Also, many of the world's major stock exchanges along with trade processors like Euroclear and Clearstream are looking to DLT to improve trading structure, securities settlement and custody. While these examples of enhancements could contribute to greater resilience in the financial system,²⁶ Henry Ford might recognise the faster horse ambitions driving them. That is, most are trying to enhance existing systems in order to retain their position in an improved traditional FMI status quo.

On the other side of the fence, of more than 10,000 cryptocurrencies in the world, a handful like Bitcoin and Ethereum are increasingly being used as payment instruments with several crypto firms acting as payment processors to form an alternative decentralised payment system. USDT and USDC operate in that world, but stablecoins are becoming more of a bridge that connects decentralised and traditional FMI.

As an alternate approach, the Bank for International Settlements (BIS) proposes a 'unified ledger' as a common programmable platform that seamlessly connects CBDCs, deposit tokens, stablecoins and other tokenized assets. The BIS suggests that unified ledgers can significantly enhance the efficiency and resilience of FMI, offering a more cohesive and streamlined infrastructure that aligns with the evolving demands of the digital economy.²⁷

Beyond traditional FMI, the consolidation of the core systems into a common platform is a reimagining of FMI from the ground up. It enables the seamless interaction between different forms of money and assets, allowing for atomic settlement and real-time processing, eliminating the need for manual interventions and third-party messaging systems. It leverages smart contracts to enable programmability and composability, expanding the universe of possible economic arrangements and transactions.

First to market with a product in this configuration is a company called Partior. Partior has its origins in a Monetary Authority of Singapore based project, called Ubin. They operate a private, permissioned distributed ledger made up of settlement banks, commercial banks, and liquidity providers to improve and enhance cross border settlement and payments.²⁸

²⁶ [Digital Assets and DLT, WEF, 2021](#)

²⁷ [Blueprint for the Future Monetary System, BIS, June 2024](#)

²⁸ [Partior Sets its Sights on the Future of Global Money Movement, Fintech News, Feb 2023](#)

Open operates an institutional calibre unified ledger as a *public*, permissioned RUN. It empowers every business, doing away with hierarchical structures that limit participation in financial services. It is a platform that enables banks that have scarce access to hard currency to participate in wholesale financial services. It provides access to corporations that rely on banks to access hard currency financial services. Most importantly, it provides equal affordable access to financial services for small businesses and individuals.

Additionally, Open caters specifically to the high-volume demands of financial markets. It is fully compatible with the underlying technology standards of most permissionless blockchains (EVM), while using a more sophisticated Directed Acyclic Graph (DAG) consensus algorithm that is better suited to permissioned configurations. It can handle complex interconnections and parallel transactions more effectively. It enhances transparency, reduces the risk of conflicts, and provides for faster processing times, ensuring that all operations are completed in the correct sequence, without the need for resource intensive verifications, contributing to a robust and resilient financial system.

6 VISION

Open proposes a vision for a future that enables regulated compliant direct access to global financial markets for every business. This is an ambitious vision, likely shared by a large number of ambitious organisations trying to solve similar challenges. However, in many ways Open is unique.

Open is a multi-issuer, multi-asset platform of platforms, serving the needs of all customers equally. It is the product of a central bank CBDC project, embedded with inputs and learnings from a substantial, international collaborative cohort. It is a public, permissioned network that requires licensed, regulated financial services entities as consensus validators, forming a bridge of trust between traditional and decentralised worlds. It embraces a collateral approach to the issuance of digital money through tokenised MMFs and allows for the sharing of returns on the MMF reserves. Open is able to deliver continuous, asynchronous real time net settlement of both high and low value transactions for large and small intermediaries and customers, equally.

Open is not a competitor to central or commercial banks, asset managers, insurance companies, or financial services providers. It is enabling infrastructure that empowers all market participants, traditional, alternative and decentralised, to actively engage in a technologically advanced level playing field with enforced regulatory compliance.

The BIS suggests that it's time for a 'Neil Armstrong moment'. Perhaps the first step, and giant leap, enables equal, affordable interconnected access to all levels of the money hierarchy, to the benefit of all levels of the social and financial hierarchy.

