## Multi-tier Blockchain Technology

Cryptocurrency still has a few speed bumps to smooth out. Ideally, customers want cryptocurrencies to mimic the value of cashless payments: fast, secure, and virtually transparent.

However, traditional cashless payments involve certain inefficiencies: Exchange rates, transaction delays, and other factors increase cost. Meanwhile, cryptocurrencies have come close to fixing these issues, but single-tier cryptos such as Bitcoin, Litecoin, and others have issues of scalability and accountability.

That's where Liquineq has created an advantage in running a multi-tiered blockchain that satisfies the needs of local governments to regulate their economies, but adds the decentralized efficiencies of the blockchain with transaction speeds that meet customer needs.

First let's talk about speed of transaction, the elephant in the room when it comes to cryptocurrency. There have been some novel approaches to this in the past, but Liquineq exceeds those expectations as it looks at the real-world needs of financial transactions across the globe.

Visa, PayPal, and others can support thousands of transactions per second (TPS) on each of hundreds of Blockchains, while Bitcoin and Ethereum support transaction rates of 3 - 20 TPS and can take minutes to hours to validate and approve transactions. That's unacceptable in a world where we're used to swiping a card or clicking "Buy Now" and within seconds a transaction has been completed.

So, while there are some unique technologies involved (you better believe there are patents), Liquineq's solution is a dual-tier architecture. In brief, Liquineq uses an upper-tier global payment token, called Liquideum, which facilitates the efficient transfer of funds in and out of lower-tier local token-based solutions which are generated and managed by Liquineq's banking partners.

Local tokens are made in the local currency that is supported by the Liquineq platform. What you get is the speed of local transactions using local tokens (in the tens of thousands of TPS) plus the security and authority of the upper-tier token, Liquideum.

It's important to note that Liquideum, will be generated and sold in an ICO to support the movement of value between different Local Tokens in strict accordance with all regulations that local partners are required to observe as well as meeting international anti-money- laundering (AML) and Know-Your-Customer (KYC) requirements.

Local tokens may vary, and will likely be created and retired as needed, but Liquideum are unlikely to be sold to the general public after the TGE. Thus, local tokens will reflect funds within the local token blockchain, which are transferred through the pool of global tokens (Liquideum). This combines speed with security.

By partnering with local banking institutions, Liquineq will not directly issue the Local Tokens; operate the local payment system/platform; hold any deposited funds; or be a counterparty to any consumer transaction. Instead, Liquineq will provide software and services to local financial institutions to operate this infrastructure.

Issues around local regulations, valuation, and other concerns are largely alleviated by using this multi-tier approach. As each country retains its own banking rules and regulations, compliance is managed at the local level by partners using Local Tokens. Liquineq's plan is for local banks and other financial institutions licensed by Liquineq to issue Local Tokens for deposits made to and held by the local bank in the applicable local currency using Liquineq's software and services. The amount of money deposited by customers should be reflected precisely by those Local Tokens.

Liquideum is a payment token, and the Liquideum Global Token will be generated and limited to a fixed number of Global Tokens in circulation. Not only does this eliminate the need for mining (which uses a significant amount of energy), the method Liquineq uses to transfer funds from different regions (Local Tokens) should dramatically inhibit money laundering. Also, transaction fees for the transfer of funds via Global Tokens are expected to be substantially less than current global currency exchange fees.

To provide the liquidity needed at the local level, and to ensure funds match token use, Local Tokens will be created only when funds or Global Tokens are converted to Local Tokens, and each Local Token will be destroyed when it leaves the Local Token blockchain, unless other rules are provided by the local central bank.

Thus, typically, the total number of Local Tokens reflected in each Local Token blockchain should represent the exact amount of funds deposited and won't be devalued by the creation of additional Local Tokens.

Liquideum is a payment token, and the Liquideum Global Token will be generated and limited to a fixed number of Global Tokens in circulation. Not only does this eliminate the need for mining (which uses a significant amount of energy), the method Liquineq uses to transfer funds from different regions (Local Tokens) should dramatically inhibit money laundering. Also, transaction fees for the transfer of funds via Global Tokens are expected to be substantially less than current global currency exchange fees.

To provide the liquidity needed at the local level, and to ensure funds match token use, Local Tokens will be created only when funds or Global Tokens are converted to Local Tokens, and each Local Token will be destroyed when it leaves the Local Token blockchain, unless other rules are provided by the local central bank.

Thus, typically, the total number of Local Tokens reflected in each Local Token blockchain should represent the exact amount of funds deposited and won't be devalued by the creation of additional Local Tokens.

Both Local and Global Token blockchains will be designed to be auditable and available for inspection by 3rd-parties, subject to specific agreements to protect user confidentiality. Again, the key is to provide local accountability and security while connecting to a global utility token that does much of the heavy lifting.

This is really only possible by using this multi-tier approach. Ultimately, it means that multiple networks (local entities) are able to connect to a single network (Liquideum Tokens), but keep the integrity of the data and maintain network consensus at all levels, without sacrificing speed.

This federated model of integration allows blockchain transactions at the local level to operate as required, for each country individually. It maintains a central authority that is strictly and separately controlled. This results in speed plus authority and security while allowing smaller transaction fees than before, using traditional banking methods.

Again, Liquineq provides the service layer and facilitates the transactions without needing to resort to banking in a traditional sense. As the pass-through is so fast, there needn't be worries about fluctuating rates or holding money for a transaction. This also enables many of the benefits of previous cryptocurrencies, like microtransactions, while increasing the speed of operations and the compliance required by merchants and customers.

-end-