Latinum

Latinum Core Development, LLC
(A Subsidiary of LifeRhythm Labs, Inc.)

Whitepaper
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Abstract

At a high level, Latinum is a cryptocurrency & blockchain based ecosystem of technologies designed to track ownership, store value, protect privacy, avoid censorship and provide an alternative payment method; while remaining transparent and fairly governed.

Latinum was initially conceptualized as a competition to current digital forms of monetary value storage & transfer, however, during a prolonged process of industry evaluation, it became clear that what the crypto industry lacked was an asset with hybrid monetary properties. An asset that serves the purposes of Cash & of Gold. Something that can be spent easily & stored easily. Something that would provide equal economic opportunity today & in a decades' time.

This was the birth of the LAT network and token. Just as time serves as the unit of account in the progression of biologic life, the LAT token serves as *the* unit of account within the Latinum ecosystem. Any participation within the system demands expenditure in the LAT token. Moreover, the token's economic model is built upon the deflationary monetary principles of austrian economics. The concrete supply side does not fluctuate from dynamic demand, rather its predictive supply side machinations act as a hedge against legacy inflationary systems.

The Entirety of the Latinum environment is secured by the same military grade cryptographic primitives that secure Bitcoin, Ethereum, and other resilient, tamper-proof distributed ledger technologies.

This paper will serve to express the Latinum Project to the general audience & technologically inclined audience.

Acknowledgments:

The Latinum Core Development team is building a technology that is classified as experimental and thus, cannot provide guarantees to any of its participants.

Latinum Core & its according technologies are designed and implemented by the Latinum team. The team will maintain control over the direction of the project until it reaches a stage which is considered mature enough to mitigate independent malicious public actors. While centralized, public statements will be published on a regular basis to inform the community members.

Once mature, Latinum will go through a process of progressive decentralization in order to establish a balanced governance.

LEGAL DISCLAIMER

The purpose of the Whitepaper is to present Latinum to potential beneficiaries of the proposed project. It is to provide relevant and reasonable information to participants and potential miners, enabling them to decide whether to undertake a thorough analysis of the project with the intent of acquiring Latinum Coin. This Whitepaper does not constitute and offer to sell or solicitation of an offer to buy a security in any jurisdiction in which it is unlawful to make such an offer or solicitation. The project is compliant with the riles of all affected jurisdictions.

Certain statements, estimates and information contained herein constitute forward-looking statements or details. Such forward-looking statements or information are known and unknown risks, which may cause actual events or results to differ materially from the estimates or the results implied or expressed in such forward-looking statements, This English-language Whitepaper is the primary official source of information about the Latinum Coin and the project as a whole.

The information contained herein may be translated into other languages from time to time or may be used in the course of written or verbal communication with existing and prospective community members, partners, ets. In the course of a translation, some of the information contained in this paper may be lost, corrupted or misrepresented. In the event of any conflicts or inconsistencies between such translations and this official English-language Whitepaper, the provisions of the original English-langiange document shall prevail.

"Any technological advance can be dangerous. Fire was dangerous from the start, and so (even more so) was speech - and both are still dangerous to this day - but human beings would not be human without them."

— **Isaac Asimov**
Writer, Scholar, Biochemist

Overview

The Purpose of this paper is to present Latinum to the general public as well as express the project's intentions and briefly introduce it's technical specifications. Additionally, through the document we touch upon some History of the nascent digital asset industry and attempt to express the magnitude of what is at hand at the macro economic as well as individual economic level. After reading this document the reader should become well acquainted with the opportunity that has been presented by the Latinum core development team. All extensive technical information & perspective will be made available through accompanying documentation at a later date.

Background

The year is 2008 and financial markets are on the brink of collapsing the world economy as we know it. Millions of people have been robbed and Trillions of dollars in value have been erased. It turns out that the last few decades of monetary policy has been extremely corrupt and now everybody must suffer. All seems lost.

Almost out of nowhere, as a response to the fiscal negligence of governments world-wide, an alternative digital economy began to sprout. A global, secure, unbiased, sovereign alternative economy known as Bitcoin.

Created by the now, famously infamous, Satoshi Nakamoto, Bitcoin was the first digital asset to boast all of the positive properties of government money while mitigating the negative properties of central control. Satoshi was able to design a superior economic model by substituting the central authorities with advance cryptographic mathematical computation. This model is often referred to as Bitcoin's consensus mechanism, Proof-of-Work.

Proof-of-Work is an elegant system that allows disparate anonymous economic actors (known as Miners) to come together under one set of rules and participate equally in the network (called mining). Mining is a semantic term used to describe the rigorous process of machines competing against one another by randomly Hashing computationally intensive puzzles. The Miner whose computer finds the correct solution to the puzzle is the validator of the

activity that has happened on the Bitcoin network over the last approximately ~10 minutes. This process repeats itself chronically, immutably, and indefinitely.

At first Mining was something that anybody with a sub-standard computer could participate in. However, as more computers began to connect to the Bitcoin network and more value was being transmitted across it, mining quickly turned from a public democracy to a bottleneck power struggle. Today, for an average user to participate in the Bitcoin network, costs can run from tens to hundreds of thousands (if not millions) of dollars. This war for mining dominance pushed crypto communities out of established economies and prefer geographic locations with low electrical costs.

All of these internal pseudo-political complexities began to alter the image of Bitcoin (and the greater crypto economy) to resemble something of the legacy financial ecosystems power-struggles from which we ran.

In response to the evolving pseudo-political digital economies, still newer alternative digital assets were proposed, each with it own unique value proposition; of them few came to climb past multi-billion dollar valuation and solidify a permanent place for themselves. Namely, Ripple, Etherem, Zcash, Stellar, EOS, LiteCoin, & BitCoin Cash and so on.

What is mind boggling is that none of these crypto-currencies attempted to deal with the issues of fair governance; they all merely attempted to solve some higher level technical problems in hopes of raising money. But those core monetary issues that birthed alternative digital economies in the first place were forgotten about.

Latinum

Conceived as an socio-economic experiment, The Latinum network and its economic properties were initially intended to serve exclusively as a hedge against malicious economic central parties. It would provide the alternative financial system that has been long sought after by economists worldwide. Latinum find its roots in the disciplines of Austrian Economics, adapts some principles of hayekian economics and arrives at the belief that a true “value network” cannot exist in the presence of a central hierarchy. Latinum proposes the distribution of governance and, in turn, control of a monetary

network.

At launch, Latinum will be controlled by the Latinum Core Development team. This is done so in order to maximize the project's resilience against malicious intents & help stabilize the longer term direction of the project. Without a single authority directing a project at early stages the likelihood of mal intentioned entities disrupting network operations is amplified by orders of magnitude. However, as the Latinum network progresses and certain milestones over the course of time are satisfied, its governance will go through what is known as "Progressive Decentralization".

Progressive decentralization can materialize itself through many different models and the model chosen for Latinum is an adaptation of "Politica" the hybrid governance mechanism of Decred and will be instated as follows. PoW miners will be entitled to 60% of the network while 40% will be allocated to non-node/non-mining entities. The exact parameters will be adjusted as needed according to the state of the project during the rollout of progressive decentralization.

Miners will, already by simply participating in consensus, have some degree of control over the network (specifically the supply emission and securitization of the ledger). In recognition of their commitments with the costs of hardware alongside the running costs of electricity, miner will receive 5% governance powers via token voting. Network addresses with high levels of activity and early involvement will inherit some degree of control over Latinum; these addresses will be capped at a total of 7% control (through token governance). *Addresses below as well as above a certain balance threshold will not be receiving any control rights, these thresholds will be specified ad hoc. Small account balances express low-risk and thus low levels of care for the network, Excessive balances could indicate takeover intent and must be avoided.* Developers with the most commits will likewise receive partial ownership over the network; developer control rights will not exceed 13% and will be split throughout the developer group proportionately to their involvement. Ambassadors and other individuals with high social reputations who uphold the beliefs and expand their efforts to promote the Latinum project will be entitled up to 5% share of network control (distributed according to the level of commitment & their reputations). The remaining 10% network control will be distributed over the course of time to wallet addresses that exemplify healthy activity on-chain and uphold a positive image of the Latinum project on social media. Of the governance distribution specified above, the Latinum Founding team will retain 5% of the miner voting control and 5% of the token voting.

Implementing Progressive Decentralization:

While the economic consensus mechanism of the Latinum network operates under Proof-of-Work conditions, its evolutionary mechanism (just as in the case with other digital assets) is socially dependent. Here the role of PoS becomes prevalent. For the project as a whole to move forward participation across all entity levels is required. As a preposition to approach social consensus in a fair way, token holders will have the extended ability to register wallet addresses as a "type". A "type" is an identifier for addresses that can be one of the four, Developer, Holder, Miner or Ambassador. In order to participate in the networks governance addresses must register their type. Each address that registers itself as a "type" will be publicly listed on the Latinum Bulletin and cross checked for validity by active community members (who are rewarded for their efforts with some of the pre-mine). Entities that are found to be acting less than truthful will be blacklisted and denied the right to participate in governance. Each class of type is allotted a token pool weight, where developer is heaviest and holders/miners the lightest. This has been done so because of the crucial role developers can have on a network. The weight factor amplifies the tokens voting power.

If party A is a regular holder & voting on a proposal requires 1,000 tokens; then in order to vote they will have to stake the full 1,000 tokens. On the other hand, party B is a developer and wants to vote on the proposal. They will need some amount less (930 tokens) in order to participate in the voting. Developers need to have more tokens available as they use them for testing on the network.

Latinum Core

Latinum Core is a software in the form of a distributed value network built on the same cryptographic primitives that hold hundreds of billions of dollars in Bitcoin value secure. The Latinum Core code repository will be openly available for inspection and developer involvement on GitHub. As stated earlier on, initially only trusted entities (specified by the Latinum Core Development LLC. team) will be able to join in order to participate. As the amount of contributors grows the code will become more easily accessible for

the broader public; until the Latinum Core team is almost entirely pushed out and replaced by the community.

The constituent software technologies of the Latinum Project can be defined through the following 3 fundamental elements:

/- Ledger (Distribution)
/- Token (Economic)
/- Security (Governance & Consensus)

/-Ledger

The Latinum Ledger can be interpreted as a Public Bulletin Board. This bulletin board records absolutely any and all on-chain interactions with the Latinum network; this includes transactions, HTLC's (Multi-Party Wallets & Send Layer solutions), wallet address "type" registry, bounty activity, among other things. As in the case with Bitcoin & other alternative digital asset projects, the ledger is the mechanition acting as the "source of truth". Moreover, a ledger acts as a neutral, trusted, unbiased, autonomous third party.

The Latinum ledger is accessible at any given moment in time, by any party in order to verify & validate any transactions. However, it must be noted that the Latinum Ledger is Pseudo-Anonymous, there are no identifiers as to the "real-world" identity of any Latinum participants. However, just as in the case with other pseudo-anonymous digital assets, deep forensic inspection will allow for military grade entities to trace network activity off-chain. This is crucial in providing a secure and comfortable environment for any LAT users while upholding the enforcement properties of regulatory bodies.

Progression of the Latinum ledger is accounted for in blocks, veils and epochs. The block time targets are set for ~45 second intervals. A veil is the measure of 8 blocks, the point at which finality on those transactions is considered buried deep enough in the network for irreversibility. Each block that is mined will reward the miner with a certain amount of LAT tokens and every epoch will reward the entire miner node community with a small bonus extraction. Epochs take place every 13,440 blocks (approximately once every week). After an Epoch is closed there is no mechanical method to rollback

beyond the close of it. Once the epoch is closed, all previous network activity is pushed to the top of the stack and condensed into a single final state.

/-Token (LAT)

The Latinum network comes with its own native token, the LAT token. The LAT token is implemented as a tool for the transference of value between two parties on the network. The entirety of the system is accounted for in the value units of LAT token; meaning all on-chain activity is denominated in LAT. In order to participate in the greater Latinum ecosystem, one must pay fees that are denominated in the LAT token.

The LAT token does not only act as a monetary tool for the network but also as a part of its governance structure. Whenever the community must come to a decision on how to move the project forward or somebody would like to propose some change in the project's operations they must vote for it with their tokens. For proposal submittance the users will have to lock in a predetermined amount of coins. By doing so, malicious activity is deterred because every proposal must pass judgment by the community and if a proposal is deemed unhealthy or otherwise dangerous the locked amount of tokens are forever confiscated from the user and distributed out to the community. For voting on proposals, users will have to do so by backing their votes with tokens. Every proposal will vary in its voting weight, simple document proposals might need a single token to vote while changes to the codebase may require at least 100. After the proposal's time has run its course the voters whom voted on the resultant outcome will receive the full amount of stake they locked behind their votes, whereas voters who chose the opposite side of the vote will only be entitled to a return of 50% from their voting stake. The remaining 50% will be allocated for the progression of the proposal and given to the proposals leader (in a tactile, goals based, batch manner).

/- Tokenomics

The LAT token's economic model has been defined as a deflationary one, meaning that the total supply of LAT tokens in existence is eternally bound to 23,500,000, of which 21,000,000 LAT tokens that will be extractible via mining. No more can ever be created.

The token's deflationary model will include a pre-mine by the launching team. That pre-mine will consist of 2,500,000 LAT tokens, or approximately 10.63% of the total supply. That will be allocated as follows:

1. Improvement of the Latinum ecosystem
1.1 Bounties
1.2 Developer Incentive
2. Foundation
2.1 Founding Team
3. Economic Bootstrapping
3.1 Provided to Exchanges for Liquidity Purposes

The token wallet addresses and the spending associated with each will be made public for inspection.

The Token's emission schedule is structured to undergo a process known as halvening. Halvening will be implemented on a bi-Annual basis with dynamic reward adjustments. Every 2 years the reward mechanism associated with mining will reduce by ½ until the reward constitutes less than 0.01 of a LAT token. Once the emission schedule has run its course, miners will be rewarded for their efforts to secure the network with alternative means such as transaction fees, community engagement & grant rewards.

The LAT token will be divisible by up to a factor of 1/18. The smallest unit of measurement is denominated as 0.000000000000000001 and called a Lyt.

/- Security (Governance & Consensus)

The Latinum network implements the highest level of encryption to all of its according activity by utilizing the core mathematical prerogatives that secure government level material as well as current international computational standards. The core prerogatives are as follows:

/-SHA3-256

In order to establish a truly pseudonymous architecture that is capable of avoiding data collisions, while maximizing data redundancy & immutability, the Latinum network leverages the hashing standards of SHA3-256. SHA3-256 is the current global enterprise standard for the encryption of data in purposes of hashing. Hashing in relation to

blockchain and cryptocurrency is the establishment of unique identifiers necessary for account management and other more advanced abstract digital ownership features. With the implementation of this algorithm, the Latinum network is capable of sustaining (256n) ^ (256-1) unique accounts.

Moreover, by implementing the SHA-256 algorithm for mining, Latinum becomes able to participate in what is known as Merged Mining (via the AuXPoW algorithm). Latinum will bootstrap by leveraging merged mining until a satisfactory amount of tokens are extracted, at which point merged mining will be shut off and pure SHA-256 mining will take precedence. For purposes of brevity and coherence more information about AuXPoW & merged mining can be found here.

/-PoW Mining

In establishing a sovereign monetary system there is the need for a satisfactory system underpinning the validity of the system. When in dealing with distributed digital governance systems there exist 2 general proven subsections of general monetary policy: Proof-of-Work & Proof-of-Stake. The latter has proven itself to be highly susceptible to issues of unequal distribution of the networks control. Newer more radical system of PoS have been distributing voter power according to monetary investment. The same issues that plagued legacy financial systems proceed in PoS systems, where the rich displacing the poor in orders of magnitudes.

Henceforth, Latinum Core & Latinum Network have decided on implementing a PoW consensus algorithm in a permissionless environment for a fair game approach. The PoW algorithm that underpins Bitcoin will be the same algorithm that underpins the Latinum network. In this scenario all participants are subject to a “one machine - one vote” environment. From genesis, the Latinum environment will be ASIC (Application Specific Integrated Circuitry) friendly. By doing so, Latinum hopes to empower a more widespread approach to energy computation hardware, namely ASIC’s, by the general public. The open energy money principles in a 51% defiant environment provides systemic stability through predictive resilience and provides the most mathematically fair competitive environment. SHA-256 is the most widespread ASIC implementation, thus poisingthe

Latinum Network as a beneficiary of advanced hardware. Activity will be monitored by observation of power contribution to the network.

Conclusion

Latinum Core & Latinum hopes to be providing the necessary infrastructure for a public monetary value capture and transfer system. This system will be leveraged and built around for extended monetary involvement, namely with second layer scaling capabilities such as the Lightning network. Unlike post 2nd generation crypto networks that support smart contracts, LAT will not. Latinum will run scripts to ensure the absolute minimal amount of manual human involvement. While there are definitely already solid competitive alternative currencies such as ZenCash, Beam, Grin, Icon, etc; that are already existent, they lack the proper systems for equal governance. Through the successes and failure of its predecessor digital assets, Latinum was able to be designed appropriately. Latinum is looking to take advantage of Last movers advantage. Through the lens of governance, the Latinum network seeks to empower individuals to enter the crypto industry from the ground floor. Thereby, allowing healthy market states and reducing disparity between those whom have entered long before mass market adoption.

Latinum Vocabulary

Progressive Decentralization	An approach to diluting power evenly throughout a community of independent actors over time.
ASIC'S	Application Specific Integrated Circuitry
SHA3-256	Secure Hashing Algorithm (#3) - 256 bit length
Censorship Resistant	Resilient to any attempts of denying usage
Genesis Block	The first block of a blockchain
PoW	Proof-Of-Work
Pre-mine	Allocating a portion of the total asset's supply to an internally governed team.
LAT	The native digital asset of the Latinum Network
Lyt	The smallest fractional unit of a LAT token
Pseudo-Anonymous	Privacy preservation for Identity that is not entirely random
Second Layer	Technologies for improvements in blockchain scalability