BUILDING A MODERN U.S. DIGITAL ECONOMY INFRASTRUCTURE

Delivering a modern U.S. digital economy infrastructure - built on verified identity, transactions and financial markets - while preserving the autonomy and privacy of American citizens - and preparing our national systems for the accelerating impact of Al and quantum technologies.

April 4, 2025



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Author: Brian Foote

April 4, 2025

// Executive Summary

Abstract

"A New Era of U.S. Digital Economy Infrastructure - April 2025," discusses the need to modernize the country's digital economy infrastructure using verified identity, transactions, and financial markets, while preserving citizen privacy and preparing for AI and quantum technologies.

The white paper outlines challenges with current existing U.S. digital payments, financial and government systems; details solutions like digital wallets, blockchain technology, and tokenized assets; and emphasizes the importance of cybersecurity and national financial security.

The document also addresses past setbacks in the U.S. Web3 / Blockchain industry, recent proactive regulation and policy shifts, and the potential for domestic economic growth and global leadership through these advancements.

Executive Summary

As the U.S. enters a new era of proactive regulation, technological advancement, and blockchain innovation, we face a generational opportunity to modernize our **U.S. Digital Economy Infrastructure** - unlocking multi-trillion-dollar potential across both the public and private sectors.

The transition to verified **digital identity**, **payments**, **transactions**, **and financial markets** will establish a more secure, transparent, and efficient foundation for the U.S. digital economy.

This transformation will also strengthen the nation's financial security by improving the protection and verification of personal data, financial records, and government systems - especially in the face of emerging threats such as Artificial Intelligence (AI) and quantum computing. At the same time, it will reduce costly dependencies on intermediaries, including agents, brokers, and redundant administrative layers.

To realize this vision, the U.S. must integrate its banking, financial markets, and government systems with next-generation technologies - such as digital wallets and blockchain-tokenized forms of money, securities, and personal assets. These tools will replace legacy transaction systems and fragmented databases that currently underpin our nation's digital infrastructure.

This new digital framework will ensure improved and secure U.S. banking, payments, and financial market systems; while dramatically improving the transparency, cost savings and user experiences with government.

Through thoughtful design and implementation in areas such as selective disclosure, verifiable credentials, and decentralized identifiers, we can preserve citizen privacy, protect freedom of speech, and defend against the excessive centralization of Web2 / MegaTech corporations or government systems as we migrate to a more transparent digital economy.

As Al and quantum technologies rapidly evolve, the U.S. must also establish a secure digital infrastructure perimeter to protect our critical personal transactions, real-world asset records, financial data, and government systems.

A foundational Web3 layer of "Verified Commerce" - anchored in digital wallets, decentralized identity, blockchain registries, and programmable smart contracts - will be essential to preserving transactional integrity and securing asset ownership across both the private and public sectors vs. legacy Web2 / MegaTech and government systems.

In summary, this next-generation U.S. digital infrastructure will unlock trillions of dollars in economic growth and operational savings; strengthen citizen privacy; and safeguard our most critical transaction records and government systems.

// A New Era of U.S. Government Regulation and Policy

The U.S. Web3 / Blockchain Industry is now recovering from major setbacks during the past several years

Following a period of rapid industry growth and retail enthusiasm through early 2021, the U.S. Web3 / Blockchain technology sector faced substantial headwinds due to increasingly prohibitive U.S. government regulations from 2022 - 2024. Under the previous U.S. administration, the absence of clear legal frameworks created widespread uncertainty and stagnation within the U.S. blockchain industry.

The resulting high-profile collapses of major digital asset, banking, blockchain firms, and fintech providers such as: Signature Bank, Silvergate Bank, Silicon Valley Bank, Wyre, Bittrex, Prime Trust, Three Arrows Capital, Celsius Network, Voyager Digital, BlockFi, FTX, Genesis Global, Paxful, Nuri, Cred, CoinFlex, and Zipmex resulted in cascading failures across custody, lending, and digital asset infrastructure for the blockchain industry, along with hundreds of billions of dollars of U.S. shareholder and digital asset holder losses.

In total, this series of U.S. Web3 / Blockchain Industry events led to a dramatic contraction in the overall market capitalization of the digital asset markets, which fell from a high of over \$3 trillion in late 2021 to less than \$1 trillion by mid-2022 - erasing trillions of dollars in market value for U.S. firms and shareholders in the industry.

This systemic breakdown not only impacted digital asset exchanges and service providers, but also restricted access to traditional banking and infrastructure for Web3 founders, consumers and service providers.

The disruption to Web3 / Blockchain firms in areas such as: banking, custody, and trading, which are relied upon by founders, consumers and institutional investors - created a chokepoint throttling of the entire Web3 / Blockchain ecosystem.

For U.S. blockchain companies like HUMBL - which chose to remain in the domestic markets and become one of the few SEC-reporting, fully audited public companies in the space - this period led to billions of dollars in market cap declines; significant regulatory hurdles and delays in corporate action approvals; disruptions in banking services and financial technology partners; and the discontinuation of revenue-generating product lines that were serving thousands of customers.

On a recent episode of *The Joe Rogan Experience*, Marc Andreessen - one of the most prominent venture capitalists in the U.S. and co-founder of Andreessen Horowitz - discussed this targeted de-banking and slowdown of blockchain startups, likening it to being sanctioned by one's own government during this time period.



We had a number of our companies get de-banked. Literally, they had their bank accounts get shut down, in some cases with no explanation... it was just: 'You're in crypto? We're not going to work with you.' This is in the United States. These are law-abiding companies, with all the correct licensing.

Marc Andreessen, Andreessen Horowitz

Mr. Andreessen's comments underscore the chilling effect that financial exclusion has had on blockchain innovation in the United States. His remarks reinforced the urgent need to modernize regulatory and financial frameworks to support emerging technology companies - ensuring that breakdowns in banking access, regulatory clarity, and essential services do not happen again to some of the nation's most promising innovators.

A New Era of U.S. Web3 / Blockchain Industry Policy and Regulation

President Trump, in a recent U.S. blockchain technology summit, criticized this previous era of U.S. blockchain industry policy as "Chokepoint Regulation" - arguing that the federal government had worked to actively suppress the growth of blockchain CEO's, founders and innovation by denying access to critical infrastructure.

In March 2025, President Trump also announced plans to establish the United States' first strategic cryptocurrency reserve, emphasizing the importance of digital assets for the nation's financial future, stating: "A U.S. Crypto Reserve will strengthen this crucial industry after years of attacks from the previous Administration."

The recent dismissal of lawsuits against Coinbase, Ripple, Gemini, Kraken, and Robinhood also signal a significant reduction in regulatory uncertainty around some of the key corporate leaders of the industry.



The United States must become the global capital of blockchain, not the global barrier to it.

President Donald J. Trump

Combined with President Trump's vision to "make America the undisputed Bitcoin superpower and the crypto capital of the world," the mission for the U.S. digital economy is clear, and so is the airspace.

Rapidly Scaling our U.S. Digital Economy Infrastructure in a Post-Chokepoint Era

So how do we get there? Fortunately, this isn't the first time new U.S. trading markets and industries have had to rebound after early turbulence. The stock market boom of the 1920s, and the late 1990s dot-com bubble, also saw U.S. company stocks surge and collapse.

These kinds of industry-wide setbacks didn't prevent innovative U.S. companies from bouncing back in new categories of technology and trading markets. Amazon, for example, saw its stock price fall nearly 95% during the dot-com crash - only to rise over the following two decades to become a leader in Web2 with over a \$2 trillion market cap still today.

Although many promising firms did not survive this crash period in the Web3 / blockchain industry, a select number of companies with strong leadership, practical use cases, and a bit of luck, managed to navigate the downturn. These companies are now well-positioned to help lead the next wave of blockchain innovation in the U.S. digital economy.

In fact, meaningful progress toward U.S. Web3 / blockchain regulatory clarity is already underway in cooperation with industry leaders. **The SEC's Crypto Task Force** has launched a roundtable series titled "**Spring Sprint Toward Crypto Clarity**," aimed at advancing regulatory clarity and fostering responsible innovation in the digital asset space.

Led by Acting Chair Mark Uyeda, and Commissioner Hester Peirce, the SEC Crypto Task Force is hosting a total of five roundtables this spring. The next session, titled "Between a Block and a Hard Place: Tailoring Regulation for Crypto Trading," is

scheduled for April 11. Upcoming discussions will also cover crypto custody (April 25), tokenization (May 12), and decentralized finance (DeFi) on June 6, 2025.

These SEC roundtables are proactively shaping U.S. frameworks for digital asset policy, investor protections, and blockchain industry innovations, laying the groundwork for broader public-private collaboration and mainstream adoption of blockchain technologies. Under a more supportive regulatory climate, the U.S. blockchain industry is poised to experience renewed, and durable, industry momentum.

The focus on next-generation regulatory frameworks is well timed. Our core U.S. digital economy infrastructure - including personal identity, digital payments, stock markets, real-world asset registries and government systems - remains largely siloed on legacy technology systems and fragmented databases.

Without proactive government regulation of the Web3 / Blockchain industry, and tamper-proof, distributed infrastructure to support our U.S. digital economy in areas such as personal identity, digital payments, and real world asset recordkeeping, both citizens and institutions remain exposed to rapidly advancing computational threats.

The U.S. must face its legacy public and private sector technology challenges head-on in key areas of potential growth and vulnerability:

- a) Financial Markets The majority of global financial infrastructure still runs on decades-old technology. These legacy systems, often patched rather than rebuilt, lack the programmability, interoperability, and resilience required for real-time verification and settlement in a digitized global economy. As new asset classes emerge - blockchain-tokenized money, securities, stablecoins, and real-world digital assets - our legacy technology rails will increasingly become chokepoints for innovation, security, and scalability.
- b) Government Systems and Databases Most government data systems remain siloed, fragmented and opaque relying on outdated architectures that lack verifiable audit trails or redundancy. Without decentralized blockchain ledgers to secure and synchronize critical records such as payments, asset transfers, and identity credentials, these systems are vulnerable to tampering, fraud, data loss, and unauthorized access. This fragmentation undermines public trust and exposes critical infrastructure to both internal errors and external attacks.
- c) Artificial Intelligence (AI) Poses Systemic Risk to Financial Infrastructure Al is amazing technology that will change the way we work and live but it is also
 rapidly advancing beyond productivity tools into a threat vector for financial
 systems. It will likely also be used to automate market manipulation, generate

synthetic identities, and execute real-time fraud at a scale legacy systems were never designed to defend against. Existing KYC/AML protocols, banking platforms, and trading infrastructure lack the algorithmic detection capabilities required to counter these high-speed, adaptive threats - posing a systemic risk to both financial institutions and the markets they support.

d) Quantum Computing is a Direct Threat to Global Asset Security - Quantum computing has the potential to unlock vast levels of discovery and innovation. However, it also represents an existential threat to the cryptographic foundations of the global financial system. The same protocols - such as RSA and ECC - that secure banking logins, digital wallets, asset custody, and recordkeeping could be rendered obsolete by sufficiently advanced quantum algorithms. Malicious actors will be able to decrypt private keys, forge digital signatures, and manipulate registries, allowing unauthorized asset transfers and falsified ownership of land, securities, or other high-value holdings.

U.S. Digital Infrastructure is Therefore Not Just a Commercial Opportunity, But a National Security Imperative

With favorable U.S. leadership now in place regarding Web3 / blockchain technology, the opportunity exists to move into widely scaled U.S. digital transformation.

As Elon Musk, head of the Department of Governmental Efficiency (DOGE) mentioned on March 25, 2025, despite trillions of dollars in annual government spending, his agency is finding that most government systems are running on disparate IT systems and fragmented databases.



Most government systems are shockingly primitive.

- Elon Musk, DOGE

Today's disconnected infrastructure drives up costs, weakens security, and slows progress in critical sectors such as banking, healthcare, and technology. For example, on March 27, 2025, key members of the DOGE team, in an interview on Fox News, reported that the NIH operates nearly 700 separate IT systems - many of which are generally not interoperable.

This type of fragmentation leads to excessive costs, limited visibility and insights, and operational inefficiencies. Addressing these gaps is key to supporting DOGE's mission to cut waste and improve performance.

// Modernizing our U.S. Digital Economy Infrastructure

An opportunity for national economic growth and cyber-resilience

A stronger, unified technology foundation will allow both government and private entities to better track spending, manage programs, and reduce fraud. All can be used to generate insights from large datasets, while blockchain ensures tamper-proof records, programmable payments, and verified audit trails - driving down costs and improving service delivery nationwide.

To build a secure, scalable digital economy, the U.S. should implement digital wallets and blockchain-based systems across identity, payments, financial markets, and government operations. This will unlock trillions in economic growth while protecting personal data, strengthening national security, and enabling verified ownership of digital and real-world assets.

When fully integrated, these U.S. digital infrastructure upgrades will modernize national systems at scale - empowering citizens, enhancing trust in commerce, and positioning the U.S. as a global leader in the next era of digital transformation.

Collaborating Across Public, Private, and Institutional Sectors

A successful digital transition requires unified action across banks, trading platforms, regulatory agencies, and elected government. Public, private, and institutional stakeholders must work together to dismantle legacy silos and converge traditional systems with blockchain infrastructure.

Any attempt to isolate traditional markets from the Web3 transition - or to preserve outdated Web2 frameworks - will only prolong inefficiencies and delay innovation. HUMBL proposes a unified Web3 architecture capable of delivering scalable, interoperable solutions across sectors, driving efficiency, transparency, and trust.

On March 25, 2025, President Donald Trump issued an executive order titled "Modernizing Payments To and From America's Bank Account," aiming to transition all federal government payments and receipts from paper-based methods to electronic transactions by September 30, 2025.

Key directives of the executive order include:

- Transition to Electronic Payments: Mandates that all federal disbursements such as benefits, vendor payments, and tax refunds be made via electronic
 funds transfer (EFT) methods, including direct deposit, prepaid cards, and digital
 wallets. Similarly, all payments to the federal government, like fees and taxes, are
 to be collected electronically.
- **Public Awareness Campaign:** The Department of the Treasury is tasked with launching a comprehensive campaign to inform recipients about the shift to electronic payments and provide guidance on setting up digital payment options.
- Exceptions and Accommodations: Provisions are made for individuals without access to banking services, certain emergency payments, and specific national security or law enforcement activities where electronic transactions may not be feasible. Alternative payment options will be provided in these cases.

The move addresses inefficiencies and security risks associated with paper-based payments, such as higher susceptibility to fraud, lost payments, and theft. Historically, Treasury checks are 16 times more likely to be reported lost or stolen compared to electronic transfers. Additionally, maintaining the infrastructure for paper transactions cost taxpayers over \$657 million in Fiscal Year 2024. This initiative is part of a broader effort to modernize government operations, enhance efficiency, and reduce wasteful spending.

A Next-Generation Framework for the U.S. Digital Economy

This directive for a U.S. shift from fragmented paper-based, and legacy technology systems, to digital wallets, connected payments and, ideally, a blockchain-verified infrastructure, is more than a technical upgrade, it's a multi-trillion-dollar opportunity.

The migration to digitally-verified payments, financial markets, real-world assets, and identity systems represents one of the greatest U.S. economic opportunities of the modern era.

As we accomplish this as a country, HUMBL proposes a new **U.S. digital infrastructure** layer of "**Verified Commerce,**" built on provable digital identities, programmable payments, and transparent transactions. This will reduce fraud, lower the cost of trust, and make both public and private markets more efficient and resilient. Even with existing digital systems, current systems expose Americans to cybersecurity threats and financial losses.

Building a U.S. Digital System of "Verified Commerce"

Companies like HUMBL are developing a fully integrated product stack: digital wallets, verifiable credentials, blockchain registries, tokenized assets, and smart contract automation - all within a unified architecture designed to eliminate complexity, cut costs, and reduce fraud. By digitizing and verifying core systems such as identity, payments, and government spending, the U.S. can:

- Unlock trillions in new, potential economic growth
- Empower citizens to control their digital lives
- Offer institutions faster, lower-cost programmable financial systems
- Deliver post-Web2 global confidence in U.S. technological leadership

This is about more than blockchain - it's about securing the next generation of internet infrastructure and ensuring the U.S. leads its development.

Web2 / MegaTech is Not Built for a Verified, Transactional Web

Web2 was built primarily for sharing information - not for trusted identity, secure transactions, or verified asset ownership. As a result, digital commerce today is built on a dated set of transactional rails that are fragmented, opaque, and vulnerable to fraud, exposing consumers and businesses to unnecessary risk.

Verified Commerce changes that. By integrating digital wallets, verifiable credentials, and blockchain registries, every user, product, and transaction can be cryptographically authenticated and traced. This transforms the web from a vulnerable platform into a secure, trusted commercial ecosystem.

HUMBL is helping architect this new system - where search, identity, payments, and records are seamlessly connected, enabling a marriage of Al-driven discovery and real-world trust. Verified commerce is more than an upgrade - it's the foundation for a next-generation digital economy that is secure, inclusive, and intelligent.

// HUMBL - A New, Digital Platform For Verified Commerce

HUMBL is building a U.S. based, verified digital commerce platform that is being architected to deliver products for verified personal identity, digital wallets, blockchain-tokenized transactions, financial markets and government applications.

The following sections outline existing U.S. digital infrastructure problems, as well as proposed solutions that companies like HUMBL are building, that will shape the future of

Web3, digital wallets and blockchain; as well as our forward-looking vision for the HUMBL product roadmap and modernization of U.S. digital economy infrastructure.

- **Digital Wallets**: Secure, decentralized credentials and verified identity reduce fraud and streamline payments, investments and communications.
- **Digital Payments**: Peer-to-peer, cross-border, and programmable payments lower costs and speed settlement.
- **Blockchain-Tokenized Financial Markets**: Immutable records enable secure financial markets tokenization, ownership, and exchange of real world assets.
- **Blockchain Registry & Distributed Ledgers**: A unified infrastructure for citizen autonomy, asset verification, and auditability across sectors.
- **Government Systems:** Digital wallets and blockchain-registry integrations with legacy systems and fragmented databases.

How We Are Architecting the HUMBL Platform

At the center of the consumer, corporate, and government technology stack is the digital wallet. It will serve as the primary access point for digital identity, payments, transactions, and asset ownership.

Digital wallets are expected to replace traditional Web2 transaction tools such as usernames, passwords, online shopping carts, and email receipts - simplifying the user experience while enhancing verification, security and transparency.

While AI will help consumers navigate the web more efficiently, it is essential that these digital wallets are connected to verified sources of transactional data - including search engines, marketplaces, financial platforms, trading markets, and government systems. This stands in contrast to legacy Web2 and MegaTech platforms, which often rely on non-verified, indexed content from external websites and siloed databases.

Digital wallets will connect us to the use of blockchain-tokenized money, stocks, and other financial assets, combined with blockchain-based registries of record keeping and government systems, which can establish more reliable, real-time databases and enable faster, more transparent transactions and settlement. These technologies eliminate the need for multiple layers of reconciliation, reducing errors, delays, and costs across both public and private sector systems.

In place of outdated systems, **HUMBL** is building a Verified Commerce layer for our most important digital transactions, with the goal of supporting secure personal

identity, global payments, asset transactions and seamless integration with banking, financial markets and government systems across the global web.



Digital Wallets & Identity

Simplifying and securing verified digital identity, payments, personal assets, financial services, verified transactions and government systems.

Market Problems

In the U.S., individuals must navigate a fragmented system of physical ID cards, ATM and credit/debit cards, insurance documents, Social Security papers, cash, checks, and dozens of usernames and passwords - just to access everyday services across banks, employers, merchants, utilities, and government agencies.

There is currently no unified or secure way to verify identity or complete transactions across U.S. private and public sector technology platforms, making digital life slow, repetitive, and vulnerable to fraud and service delays.



Al-powered digital wallets will become the most valuable part of the consumer technology stack, representing a multi-trillion-dollar opportunity as they absorb banking, identity, payments, and commerce.

- Cathie Wood, CEO of ARK Invest

The lack of digital wallet adoption in the U.S. results in massive economic inefficiencies and fraud. Merchants pay over \$160 billion annually in credit card fees, while businesses spend \$200–300 billion managing cash operations.

Identity theft led to over \$43 billion in losses in 2023, credit card fraud exceeds \$12 billion annually, and real estate and vehicle title fraud costs victims hundreds of millions each year. More than 25 million Americans remain unbanked or underbanked, lacking access to modern financial tools.

Without a unified, secure digital wallet system, the U.S. will continue to operate on fragmented, vulnerable infrastructure - undermining economic efficiency, citizen trust, and national security.

In the private sector, outdated systems slow down digital payments, complicate financial market settlements, and raise compliance costs - estimated at over \$270 billion annually for U.S. financial institutions. Consumers must repeatedly upload the same documents and complete redundant KYC checks for basic services like loans or job verification, while businesses spend billions each year on fraud prevention and user onboarding.

In the public sector, disconnected systems across agencies prevent real-time communication and interoperability. Identity records, benefits, licenses, and voting systems are siloed, resulting in duplicated records, security risks, and inefficiencies that cost federal and state governments an estimated \$38 billion annually in administrative overhead, fraud, and service delays.

For example, unemployment insurance fraud alone resulted in over \$45 billion in improper payments during the COVID-19 pandemic, largely due to weak identity verification. Citizens are often forced to prove their identity again and again for each public service, including Social Security, Medicaid, and tax filings. The government, in turn, lacks the infrastructure to deliver fast, secure, and connected digital services at scale.

A modern U.S. digital wallet system facilitated by private sector corporations, and tied to major identity, banking, financial services and government systems - would consolidate today's fragmented processes into a single, secure interface.

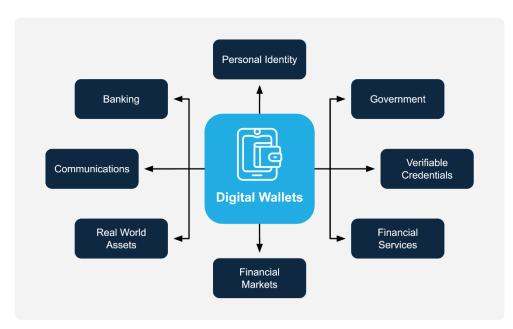
This new digital wallet system would create a trusted, interoperable foundation for accessing banking, financial markets, and government services - not just for transactions, but also for critical functions like verified-identity voting and elections, secure digital communications, and the efficient delivery of public benefits.

Without digital wallet modernization, the U.S. will continue to operate on outdated and vulnerable systems, undermining financial markets efficiency, government spending and national security.

Market Solutions

The **HUMBL Wallet** is being developed as a digital identity and transaction hub that will enable individuals to securely manage personal data, payments, and verifiable credentials - all from one unified platform. Using decentralized identifiers (DIDs) and verifiable credentials (VCs), the HUMBL Wallet aims to ultimately:

- Store digital versions of government-issued IDs and official credentials, replacing the need for physical cards and paperwork.
- Send and receive verified digital payments peer-to-peer, cross-border, or consumer-to-business - without relying on third-party payment processors.
- Verify user identity, income, or licensing through cryptographic attestations, eliminating repeated manual verification.
- Sign and record transactions or digital agreements using blockchain-secured authentication.
- Track ownership and transfer of tokenized real-world assets such as real estate, vehicles, or intellectual property.
- Access government services, permits, and programs through wallet-based ID verification.
- Control personal data sharing using selective disclosure, revealing only what's necessary for an interaction.
- Replace multiple cards, accounts, and platforms with a single, authenticated wallet that functions across sectors.



This infrastructure empowers individuals to participate in the digital economy with greater security, autonomy, and efficiency - while giving institutions a trusted interface for onboarding, compliance, and service delivery.

Digital wallets should be device-agnostic and universally accessible, enabling individuals to securely interact with banking, financial markets, and government services - regardless of the hardware or operating system they use.

To serve as foundational infrastructure, these wallets must seamlessly connect to both public and private systems, including banks, payment networks, identity registries, benefits platforms, and government agencies.

A truly interoperable digital wallet ensures that users can verify identity, send payments, access benefits, and manage assets from any device - without being locked into proprietary ecosystems, fragmented service portals or a lack of decentralized individual controls over their own personal data and financial transactions.

Market Applications

- Digital banking and financial access
- Government ID issuance and benefits programs
- Real estate, vehicle registration, and title transfer
- Education, licensing, and certification verification
- Employment background checks and onboarding
- Tax filings, voter ID, and document notarization

The **HUMBL Wallet** is being developed to provide scalable solutions for unifying identity, payment, asset and transaction layers across industries and government systems.

Market Impact

The total addressable market for digital wallets and verifiable identity systems is growing rapidly:

- The global digital identity market is projected to reach \$70.7 billion by 2030, driven by demand for portable, secure identity.
- The digital wallet market is projected to exceed \$16.2 trillion in transaction volume by 2028, with more than 5.2 billion users worldwide by 2030.

As identity, payments, and digital ownership converge, the HUMBL Wallet is positioned to become a foundational gateway for verified commerce, government services, and personal data control in the new digital economy.



U.S. Digital Payments and Programmable Money

Building a cheaper, faster and more transparent global payments system through blockchain technology.

Market Problems

The U.S. currently runs primarily on legacy payment rails (ACH, SWIFT, card networks) that are slow, expensive, and highly dependent on intermediaries such as banks. Cross-border payments are particularly inefficient, requiring multiple intermediaries and incurring high fees.

Globally, Western Union, a global leader in money transfer services, has also faced significant fines due to lapses in its anti-money laundering (AML) and fraud prevention programs. In 2017, Western Union agreed to a \$586 million settlement with U.S. authorities after admitting to willfully failing to implement an effective AML program and aiding and abetting wire fraud related to human smuggling, romance scams and lottery scams.

Domestically, Zelle, a widely used peer-to-peer payment platform, has faced significant challenges related to scams and fraudulent activities. Since the launch of Zelle, customers have reported losses exceeding \$870 million on the platform, due to various scams on the platform involving phishing, social engineering, and impersonation schemes.

Market Solutions

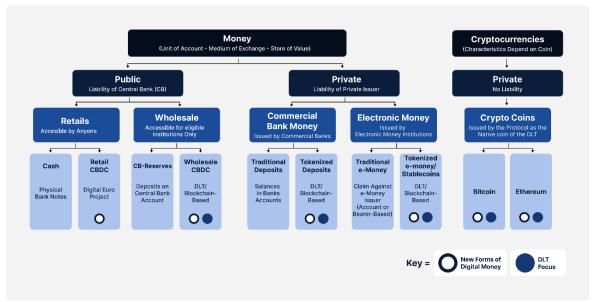
HUMBL integrates digitally-verified, blockchain-based payments, via digital wallets and blockchain-ledgered transactions. This solves core market problems by removing intermediaries and enabling near-instant, borderless transactions at lower costs. Smart

contracts and decentralized settlement layers add automation, transparency, and programmability to every transaction.

Further, HUMBL's introduction of a **U.S.** "**Verified Commerce**" layer for digital transactions, ensures that payment counterparties have gone through KYC / AML and proper verification measures, ensuring a reduction in fraudulent activity around social engineering and impersonation, alongside improved transaction record keeping and cost savings.

Potential Market Applications

- Cross-border remittances
- E-commerce and retail payments
- Payroll systems for government and corporations
- Financial markets payments and settlements



Source: Deutsche Bank, "At the Digital Money Junction": March 2025

HUMBL: System and Method for Transferring Currency Using Blockchain

HUMBL proposes a new system of verified identity, paired with high speed, low-cost global payments using blockchain networks and stablecoins. Smart contracts can be architected to handle compliance, escrow, and settlement, reducing reliance on intermediaries. Integrated KYC/AML features will support P2P, B2B, and enterprise payments, offering verified alternatives to legacy payment platforms.

HUMBL was recently issued the U.S. Patent: "System and Method for Transferring Currency Using Blockchain" (U.S. Patent - 12,118,613).

Stablecoin transaction volumes alone on blockchain reached \$27 trillion in 2024, surpassing Mastercard and Visa combined by over 7%. HUMBL is currently determining how best to monetize and apply this patent.

While Visa's patent ("Digital Fiat Currency," Simon et al) teaches the conversion of government money into digital formats, HUMBL's patent ("System and Method for Transferring Currency Using Blockchain, Foote et al) teaches the sending of digital forms of fiat money and digital currencies from one digital wallet to another using blockchain; improving speed, costs, and tunneled cybersecurity features; and pooled investment accounts for storage and yield.

HUMBL's patented system for transferring currency has many potential UVP benefits as a global payments system vs. legacy banking and payment rail solutions: lower costs, faster processing speeds, improved settlement times, blockchain-immutable personal, corporate and government transaction records, digital forms of currency like USDC stablecoins (vs. more fluctuating national currencies in unstable areas) and yield / APY% on pooled storage accounts.

Market Impact

The global peer-to-peer (P2P) payments market is experiencing significant growth, with projections indicating a rise from \$3.2 trillion in 2023 to over \$8 trillion by 2030, reflecting a compound annual growth rate (CAGR) of over 15%. Remittance flows to low- and middle-income countries alone are projected to total \$5.4 trillion by 2030, underscoring the vast scale of this market.

Traditional payment and remittance methods, such as those offered by companies like Western Union, and corresponding banks, often involve high fees and extended processing times. By eliminating intermediaries, blockchain facilitates direct peer-to-peer transfers, reducing costs and increasing transaction speed.

The patented HUMBL payments platform enables faster, more cost-effective and transparent domestic and cross-border transactions; and can be scaled to accommodate trillions of dollars of transaction volume.



U.S. Financial Markets (ETxs)

Improving our digital trading markets for speed, efficiency and liquidity through the blockchain tokenization of stocks, bonds and new asset classes.

Market Problems

Legacy global financial markets are constrained by outdated infrastructure, manual processes, and fragmented systems that hinder efficiency, accessibility, and innovation. Most issuers and trading venues still rely on decades-old frameworks involving multiple custodians, intermediaries, and legal layers - resulting in settlement cycles that often stretch to T+2 or longer. This creates friction, ties up capital, increases operational costs, and limits investor access - particularly in global or after-hours markets.

Blockchain tokenization presents a transformative opportunity to address these inefficiencies. By moving assets such as stocks, bonds, and real estate onto blockchain-based infrastructure, markets can reduce reliance on intermediaries, shorten settlement from days to minutes, and unlock benefits like 24/7 trading, fractional ownership, and global investor participation.



The next generation for markets, the next generation for securities, will be the tokenization of securities.

- Larry Fink, CEO of BlackRock

Larry Fink, CEO of BlackRock - the world's largest asset manager with approximately \$11.55 trillion in assets under management - has emerged as a leading advocate for the blockchain-tokenization of assets. He argues that tokenization can democratize investing, improve transparency, and reduce costs by streamlining the ownership and settlement process.

In January 2025, Mr. Fink publicly called on the SEC to accelerate the approval of blockchain-tokenized financial instruments, emphasizing their potential to revolutionize the global financial system.

Other major institutions, such as Franklin Templeton, have echoed this vision, stating that blockchain-tokenization will "fundamentally reshape the asset management industry" by unlocking new models for access and distribution.

In particular, blockchain tokenized capital markets offer enhanced liquidity for traditionally illiquid asset classes - including private equity, infrastructure, and commercial real estate. Blockchain platforms can lower barriers to entry for both retail and institutional investors while providing greater speed, security, and cost efficiency.

As traditional finance accelerates into the adoption of blockchain tokenization and digital asset infrastructure, the United States has a strategic opportunity to lead in building this next-generation financial system.

By embracing digital wallets and blockchain-tokenized markets, the U.S. can modernize its outdated financial infrastructure rails, unlock broader access to capital, and strengthen its leadership in global finance. This evolution will drive greater efficiency, reduce operational friction, and enhance liquidity across a wide range of asset classes - positioning the U.S. at the forefront of financial innovation.

Market Solutions

HUMBL Financial ETXs - index, thematic, or active - are programmable digital asset subscription services, or custodial product lines, designed to streamline and modernize access to tokenized markets. Delivered as index-based, thematic, or actively signaled structures, ETXs can be deployed globally with embedded compliance logic, real-time tracking, and automated execution via smart contracts.

Based on regulatory frameworks and client needs, HUMBL Financial ETXs can be delivered in both custodial and non-custodial formats:

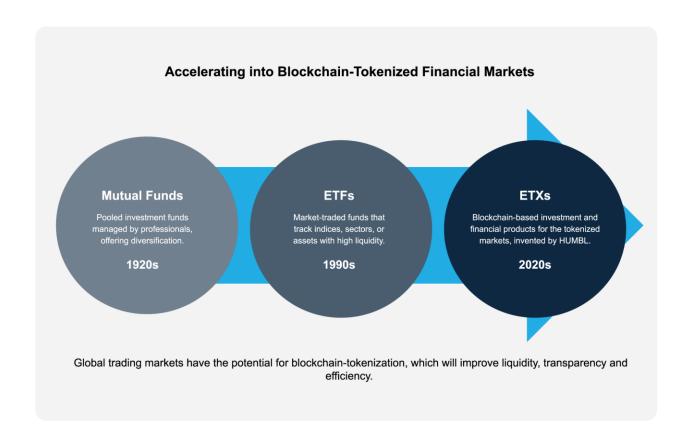
- Non-Custodial ETXs operate as a subscription overlay on major exchanges (e.g., Coinbase, Binance), where users maintain full control of their private keys and assets. HUMBL provides index logic, tracking, and rebalancing signals, while execution remains user-driven.
- Custodial ETXs will be tokenized and NAV-backed, suited for managed platforms, financial advisors, and institutions, seeking to offer well-designed

exposure to clients on the digital asset markets, or traditional stock markets as they become tokenized.

As global financial infrastructure evolves, HUMBL Financial ETxs are designed to expand beyond digital assets - scaling into tokenized stocks, bonds, commodities, and other traditional financial instruments as they become blockchain-compatible. The HUMBL Token Engine, HUMBL Smart Contracts and HUMBL Registry will provide the programmable core to support this expansion.

Potential Market Applications

- Asset management platforms
- Digital wealth advisory tools
- Cryptocurrency and trading exchanges
- Index, thematic, and active exposure models
- Retail investing and financial education products
- Future tokenized securities (stocks, bonds, commodities)



Market Impact

Blockchain tokenization is widely expected to redefine global capital markets over the next decade. By embedding asset logic and compliance directly into blockchain-native wrappers, tokenized markets can enable near-instant settlement, reduce costs and reliance on intermediaries, and support both fractional ownership and global market access. This shift represents a fundamental upgrade to how financial instruments are issued, traded, and managed - moving from manual, institution-heavy systems to streamlined, programmable infrastructure.

The global market for tokenized securities - including equities, bonds, and real-world assets - is projected to surpass \$10 trillion by 2030, signaling strong institutional momentum toward this transition.

With active ETFs crossing the \$1 Trillion mark for the first time in March 2025, global customers are investing in a range of funds from fixed income and structured credit, to crypto and leveraged stock trades. Our prediction is that younger investors will continue to seek out unique financial products, and wrappers, with greater levels of liquidity, shorter lockup times and a more unique breadth of asset classes.

HUMBL Financial ETXs are built to operate at this intersection - delivering flexible, compliant, and scalable infrastructure for the next era of blockchain-tokenized investment markets. By aligning with emerging digital asset standards, HUMBL Financial is helping to shape a future where capital markets are faster, more transparent, and more liquid.



U.S. Real World Assets (RWAxs)

Building the next major global trading market through the blockchain tokenization of real world assets.

Market Problems

Real-world asset markets remain largely illiquid, inefficient, and opaque. Transactions in sectors like real estate, collectibles, and infrastructure rely on siloed systems, manual processes, and fragmented records.

These legacy frameworks introduce high transaction costs, settlement delays, and limited access - especially for global or retail investors. Ownership records are often unverifiable, asset provenance is difficult to trace, and resale markets are complex to navigate.

Without digitized ownership or programmable compliance, these markets are not designed for the speed, transparency, or scale of modern digital finance and are limited to traditional private placement or stock market investments.

Market Solutions

HUMBL's RWAxs (Real World Asset eXchange System) is a blockchain-based solution that digitizes and tokenizes real-world assets - enabling programmable, verifiable, and borderless ownership and exchange across global markets.

Transforming Real World Assets into New Digital Trading Markets

HUMBL RWAxs turns real estate, vehicles, collectibles, and other real-world assets into on-chain, tradable tokens. Each token includes embedded ownership rights, compliance logic, and lifecycle metadata - delivering secure, transparent, and automated asset management.



Over time, we expect all financial assets to eventually move onto blockchain infrastructure.

- Jonathan Steinberg, CEO of WisdomTree

In the same way that crypto created a new \$3 Trillion trading market, we believe that the largest human trading market is yet to come, and that it will be the blockchain-tokenization of Real World Assets (RWA's).

1. Multi-Market Integration

Assets are tokenized with unique IDs and immutable transaction histories, enabling secure interactions across primary, secondary, and decentralized finance (DeFi) markets.

2. Smart Contract Automation

Compliance, royalties, and transfer logic are built directly into smart contracts - reducing reliance on intermediaries and lowering transaction costs.

3. Verifiable Ownership & Provenance

Assets are tied to decentralized identifiers (DIDs), wallets, and registries, creating auditable records of ownership, history, and eligibility.

4. Lending & Liquidity

Tokenized assets can serve as collateral across lending platforms, unlocking liquidity that is typically trapped in legacy asset structures.

5. Global Investor Access

Digital ownership lowers barriers to entry, enabling fractionalization and broader participation from retail and institutional investors around the world.

6. Verified Asset Marketplaces

HUMBL's digital listing platforms open new markets by enabling compliant, real-time trading of tokenized assets that were previously illiquid or restricted by geography.

7. A New \$500 Trillion Potential Asset Class

Real-world assets represent an estimated **\$500 trillion** in global value. By making these assets tradable via digital wallets and blockchain tokenization, HUMBL RWAxs can power the world's largest trading market - spanning issuance, secondary sales, DeFi, and peer-to-peer lending.

HUMBL's Approach to RWAxs: An Integrated Platform for New Trading Markets

The HUMBL RWAxs system is being designed to seamlessly integrates with:

- HUMBL Wallet for secure asset storage and transfer
- HUMBL Registry for verified asset identity and provenance
- HUMBL Smart Contracts for compliance automation and transaction execution

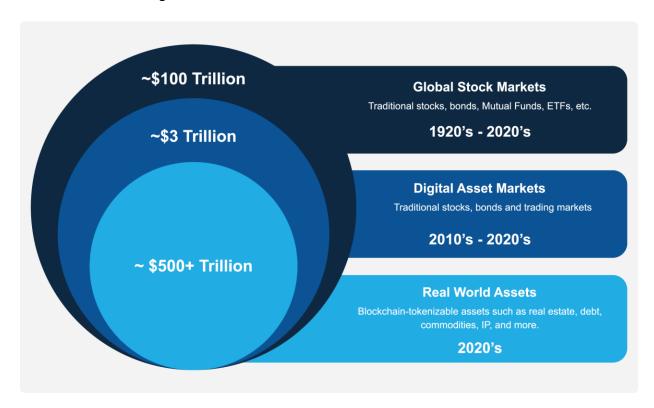
This full-stack ecosystem is being developed to support:

- Peer-to-peer and secondary market trading
- KYC/AML-verified transactions
- On-chain tracking and settlement
- Enhanced liquidity through tokenized lending
- Broader access to global investment opportunities

Together, these tools provide a full-stack, next-generation infrastructure for tokenized asset markets. Through HUMBL RWAxs, asset ownership can be tracked from issuance to resale, with programmable features such as investor restrictions, or royalty payments baked into every transaction.

Potential Market Applications

- Real estate, REITs, and property title markets
- Automotive and vehicle sales with ownership history
- Art, antiques, and collectible authentication and resale
- Intellectual property and royalty-based licensing
- Infrastructure assets, commodities, and capital-intensive equipment
- Event ticketing, carbon credits, and other verifiable asset classes



Market Impact

The blockchain tokenization of real-world assets is one of the most significant growth opportunities in blockchain finance:

• **REITs alone represent a \$3.5 trillion market**, much of which remains locked behind institutional structures and paper-based ownership models.

- The broader market for tokenizable real-world assets (RWAxs) including real estate, infrastructure, vehicles, and art - is projected to exceed \$16 trillion by 2030.
- Blockchain tokenized RWA markets will drive increased liquidity, investor inclusion, and programmable financial innovation across industries.

Larry Fink, CEO of BlackRock, has also emphasized the importance of expanding investment opportunities to include private assets such as real estate, infrastructure, and private credit.

He suggests a shift from the traditional 60/40 stock-and-bond portfolio to a 50/30/20 allocation, with 20% dedicated to private assets. Fink believes that democratizing access to these private markets can provide better returns, lower volatility, and greater diversification for everyday investors.

HUMBL RWAxs provides the infrastructure to unlock this value - delivering a scalable, secure, and regulatory-aligned framework for next-generation asset ownership and exchange.



U.S. Authenticated Search Engines & Marketplaces

Building post-Web2 / U.S. internet commerce platforms that are built on verified profiles, transactions and registries.

Market Problems

Today's Web2 / MegaTech search engines and eCommerce platforms operate on centralized, unverified data layers.

They rely on unstructured content, anonymous sources, and platform-optimized algorithms that expose consumers and businesses to fake listings, counterfeit products, manipulated reviews, and ad fraud.

As AI-generated content continues to flood the internet, the inability to verify the authenticity of search results, sellers, or assets only magnifies these risks.

- Global ad fraud is projected to exceed \$100 billion annually by 2025, according to Juniper Research, driven by bots, spoofed clicks, fake traffic, and programmatic manipulation. Platforms like Google Ads are heavily affected, with click farms and algorithmic exploitation distorting ROI and weakening advertiser trust.
- Meta has also struggled with platform integrity, reportedly hosting up to 1 billion fake user accounts over time undermining authenticity and security across its ecosystem. Despite investing over \$3 billion in its metaverse and blockchain-related ventures, Meta has yet to deliver a successful, interoperable digital commerce platform.
- Amazon has faced scrutiny for up to 42% of product reviews being fake or manipulated, casting doubt on the credibility of its marketplace. The issue extends to eBay, where luxury authentication programs have found that up to 80% of designer goods in some listings were counterfeit, contributing to a global counterfeit goods market valued at over \$500 billion annually. Fake profiles, counterfeit sellers, and deceptive reviews continue to erode consumer trust especially in high-value verticals like fashion, electronics, and collectibles.

Traditional digital commerce still relies on outdated tools such as static shopping carts, email-based receipts, and centralized databases, which lack the traceability and proof-of-origin needed to verify authenticity.

Amazon	Meta	Google
42% of product reviews are potentially fake or manipulated	Over 1 billion fake user accounts identified and removed	Estimated \$100 billion in annual ad click fraud across the industry
Fakepost, FTC reports, consumer research	Meta transparency reports, cybersecurity firms	Industry-wide estimates, Juniper Research

These are major companies that are a critical fabric to the U.S. technology industry, but the existing Web2 / Legacy infrastructure rails of their current systems fail to deliver the transparency and accountability required for verified digital transactions and systems design.

Blockchain-based registries and digital wallets offer a more robust alternative - anchoring transactions, identity, and asset verification in secure, tamper-proof systems that address fraud at its structural core.

Market Solutions

The HUMBL Platform is being designed in a post-Web2, blockchain-authenticated framework that integrates search engines, marketplace listings, and verified registries - delivered through blockchain-based metadata, digital wallets, and decentralized identifiers (DIDs).

- Digital Wallets: The HUMBL Wallet serves as a secure hub for identity, credentials, purchase receipts, ownership verification, and transaction historyreplacing legacy systems like email receipts and shopping carts. Each transaction is immutably recorded and tied to verified users and asset data.
- **Search Engines:** Unlike traditional engines that index scraped, unverified websites, blockchain-authenticated search engines return structured, tamper-proof results anchored to on-chain records and trusted registries.
- eCommerce Marketplaces: Products, services, and sellers can be verified using DIDs, Verifiable Credentials (VCs), and Certificates of Authenticity (COAs), ensuring users interact only with legitimate listings and verified individuals or businesses.
- Blockchain Registries: The HUMBL Registry digitizes and secures titles, credentials, licenses, and asset records - embedding ownership rights, compliance requirements, and legal agreements directly into programmable tokens via smart contracts.

The proposed **HUMBL** "**Verified Commerce**" architecture enables users to search, discover, transact, and verify within a unified Web3 ecosystem - where every interaction is cryptographically tied to a verified identity and recorded in a distributed registry. This represents a significant upgrade from the fragmented and opaque nature of current global web commerce.

HUMBL proposes that blockchain registries be designed with flexible permissioning structures - ranging from private to semi-private to public - based on the sensitivity and purpose of the data being recorded. This adaptable framework supports the diverse data privacy and transparency needs across sectors in the digital economy.

Authenticated Web Commerce tied to Digital Wallets and Blockchain Registries

Private Registries - Best suited for managing confidential information, such as financial records, personal identity data, and secure government operations. These

environments require strict access controls to protect sensitive content while maintaining integrity and verification.

Semi-Private Registries - Provide a balance between privacy and collaboration. They can enable controlled access for verified participants in regulated industries like healthcare, real estate, and supply chains - where data integrity and compliance are essential, but limited visibility is still necessary among trusted parties.

Public Registries - Promote transparency and accountability. They are ideal for open access use cases such as government disclosures, financial reporting, tokenized asset listings, and nonprofit transparency - where public auditability enhances trust and engagement.

This tiered approach to verified commerce and blockchain registry design ensures a scalable, secure, and inclusive digital ecosystem. It provides the necessary infrastructure to support a broad range of industries and use cases, while upholding the principles of privacy, trust, and accountability.

Potential Market Applications

- Search engines
- eCommerce platforms
- Real estate and property transactions
- Automotive service history and ownership verification
- Luxury goods, collectibles, and high-value consumer assets
- Supply chain traceability and COA issuance for manufacturing

Using the HUMBL Wallet, HUMBL RWAxs, and the HUMBL Registry, these applications become interoperable, fraud-resistant, and fully transparent - creating new, trust-based marketplaces powered by Al-connected digital wallets, blockchain-authenticated search, and verified asset registries.

Market Impact

The combined opportunity across authenticated marketplaces, blockchain-based registries, and verifiable identity systems is massive:

- The global eCommerce verification and traceability market is projected to exceed \$260 billion by 2028, driven by demand for authenticity and fraud prevention.
- Title, identity, and certification registries represent a \$500+ billion market opportunity, as institutions and governments migrate to blockchain-based

systems.

 As Al accelerates, the need for digital wallet-connected, blockchain-authenticated digital infrastructure will become foundational for verifying people, payments, and products.

HUMBL's platform proposes bringing together internet search, identity, transactions, and recordkeeping to create a next-generation layer of verified commerce - connecting Al discovery on the internet - to authenticated, real-world assets and transactions.



U.S. Government Systems

Designing modern government technology systems and databases that deliver cost savings, transparency and customer experience.

Market Problems

Government systems across federal, state, and local levels remain heavily fragmented - operating on legacy IT stacks, disconnected databases, and siloed departments.

These government IT systems lack verifiable audit trails, real-time visibility, and the cybersecurity standards required for modern digital governance. Manual processing, outdated procurement systems, and fragmented databases expose government operations to fraud, corruption, waste, and inefficiency.

Audit trails for public expenditures, licenses, and benefits are often scattered across multiple systems, making them difficult to track, verify, or reconcile - both internally and publicly. As a result, oversight, trust, and service delivery are severely compromised.

According to the U.S. Government Accountability Office (GAO), nearly 80% of federal IT spending - approximately \$100 billion annually - is directed toward maintaining outdated legacy systems, many of which are decades old and written in unsupported programming languages. These systems create massive operational inefficiencies, increase cybersecurity vulnerabilities, and hinder inter-agency coordination.

At a broader level, the combined budgets of U.S. federal, state, and local governments exceed \$10 trillion annually, yet much of this public funding flows through systems that lack accountability and real-time visibility. The U.S. national debt exceeded \$34 trillion in early 2025, with annual budget deficits continuing to surpass \$1.5 trillion, underlining the urgency of more accountable and efficient public sector infrastructure.

Market Solutions

HUMBL is developing a blockchain-authenticated platform for government agencies to streamline and modernize their systems - delivered through digital wallets, verifiable credentials, smart contracts, and tamper-proof registries.

- Digital Wallets: Citizens and officials can manage verified identities, credentials, licenses, and benefits using a secure, government-issued HUMBL Wallet reducing reliance on physical paperwork and outdated databases.
- **Smart Contracts:** Government rules, compliance thresholds, and eligibility criteria are codified into smart contracts automating approvals, disbursements, and enforcement in real time while minimizing fraud and administrative delay.
- **Shared Registries:** Licensing, permits, public disbursements, and essential records are stored on-chain within the HUMBL Registry ensuring transparency, auditability, and cross-departmental data integrity.
- Cross-Agency Interoperability: Disparate systems can be connected on a single infrastructure layer reducing IT fragmentation and enabling synchronized workflows across city, state, and federal departments.

This framework creates a unified, authenticated digital platform for government - where data flows securely between citizens, departments, and oversight bodies in real-time, with full audit trails and tamper-proof verification.

Potential Market Applications

- Licensing, permits, and certification systems
- Payroll, benefits, and public disbursement programs
- Procurement and expenditure auditing
- Public records and digital citizen identity systems
- Election infrastructure and voter ID verification

The core benefits of implementing systems such as digital wallets, blockchain databases and more unified government platforms include:

- Increase transparency in public spending and procurement
- Reduce fraud and administrative costs
- Enhance citizen trust and service accountability
- Automate compliance and eligibility screening
- Improve system resilience against data loss, tampering, and cyber threats

The U.S. government under President Trump has placed a new focus on improving digital infrastructure in banking and payments. These system upgrades will promote faster payment systems and support innovation in blockchain and financial technology. These actions aim to boost efficiency and strengthen the U.S. financial system.

Market Impact

The potential impact of this transition is massive:

- Improper payments across federal programs accounted for over \$247 billion in 2022 alone, according to the Office of Management and Budget.
- The U.S. government spends over \$600 billion annually on procurement and contracting, with significant inefficiencies due to poor data systems.

HUMBL's 2023 deployment of a government-issued digital wallet in a California county served as a successful pilot, validating the viability of blockchain-based public service delivery.

A Global Technology Export Opportunity for the U.S. Private Sector

Once deployed and proven effective at the city, state, or federal level, platforms like HUMBL can be exported as a U.S.-built digital infrastructure framework for allied nations and strategic partners worldwide. Just as U.S. defense and telecom systems have served as global standards, a trusted, scalable digital governance infrastructure can:

- Drive global demand for U.S. blockchain, cybersecurity, and fintech products
- Create high-value export opportunities for American technology firms
- Strengthen digital diplomacy and national security through tech alliances
- Offer turn-key public sector modernization packages for emerging and developing markets

According to the World Bank, global government IT spending is projected to exceed \$800 billion annually by 2027, with rising demand for secure digital infrastructure across identity systems, benefits distribution, and public transparency.

As a result, platforms like HUMBL can not only support internal U.S. government reform, but their implementation on a wide scale will position the U.S. as a net exporter of verified digital governance infrastructure - boosting the domestic economy and reinforcing U.S. leadership in the 21st century digital order.

// Protecting U.S. Consumer Privacy

Improving the quality and transparency of our digital economy, while preserving citizen data privacy and autonomy

To protect U.S. citizens in the digital era, we must build a system in which individuals can verify their identity, conduct more efficient digital transactions, and access transparent financial and government services - without enabling centralized control by either government or Web2/MegaTech platforms that might erode civil liberties or constitutional protections.

This concern is not hypothetical. Web2 wallet providers and payment platforms like PayPal have already faced scrutiny for freezing or restricting accounts tied to lawful businesses, such as firearms retailers and independent media outlets. These actions raise serious concerns about ideological bias, financial discrimination, and the unchecked power of private firms over digital access in an increasingly wallet-driven economy.

Such incidents underscore the danger of centralized wallets being used as tools of censorship or behavioral control. Without decentralized alternatives that preserve transparency and user autonomy, people risk having their economic freedoms governed by opaque terms of service rather than constitutional law.

Similarly, government-issued digital currencies (CBDCs) must be designed with clear safeguards. Without structural checks, they risk being used for financial surveillance or behavioral restriction. A decentralized, user-first infrastructure for identity and transactions offers an essential counterbalance - anchoring personal freedom in verifiable, cryptographic systems rather than discretionary policy.

Customer Privacy: Selective Disclosure, Zero-Knowledge Proofs, and Decentralized Identifiers

Modern digital identity infrastructure must enable individuals to prove who they are - or key facts about themselves - without compromising unnecessary personal data. This is achievable through technologies such as selective disclosure, zero-knowledge proofs (ZKPs), and decentralized identifiers (DIDs), all of which put users in control of what they share, with whom, and under what conditions.

DIDs allow users to manage their identities independently of centralized institutions, while ZKPs and cryptographic attestations enable them to prove facts - like age, citizenship, or investor status - without revealing underlying sensitive data. This privacy-preserving framework supports a future where compliance and governance do not come at the cost of civil liberty.

Digital Identity: Verifiable Credentials and Trustworthy Identity Systems

To further support this vision, verifiable credentials (VCs) make it possible for individuals and institutions to issue, hold, and present credentials that are secure, tamper-proof, and cryptographically verifiable. These credentials are essential for establishing trust in digital interactions - whether verifying employment history, academic achievement, or legal authority - without relying on paper records or central databases.

The World Wide Web Consortium (W3C) is leading global efforts to standardize DIDs, verifiable credentials, and selective disclosure. Meanwhile, the Trust Over IP Foundation (ToIP) is layering governance frameworks atop these technical standards to ensure interoperability and trust across both public and private sector systems. Together, these efforts create a durable and secure infrastructure for identity in the digital economy.

Compliance: Bridging the Gap Between Traditional and Decentralized Financial Markets

Financial systems depend on KYC (Know Your Customer), AML (Anti-Money Laundering), and investor accreditation frameworks to maintain compliance and protect market integrity. However, current systems are plagued by fragmentation, manual verification processes, and siloed data - leading to slow onboarding, duplicated efforts, and increased risk.

By integrating decentralized identity systems with regulated financial infrastructure, the U.S. can modernize these compliance frameworks. Blockchain-authenticated digital wallets can streamline verification, reduce fraud, and improve speed - all while ensuring clean money flows and regulatory protections.

This evolution will also unlock new decentralized finance (DeFi) rails for lending, liquidity, and investment. It will shorten lock-up periods, expand investor access to real-world assets, and increase liquidity across U.S. markets - stimulating innovation and economic growth while preserving strong compliance and consumer safeguards.

The Importance of Verified Digital Identity in U.S. Communications

Beyond transactions and compliance, digital identity and credentials will also form the foundation of cyber-resilient communications - a growing priority in an age of Al-generated impersonation, synthetic media, and rising cyber threats.

The ability to verify "who is communicating with whom" is becoming just as important as verifying financial transactions. Today, many public institutions and private organizations still rely on unverified or commercially hosted messaging platforms that lack end-to-end encryption and identity validation - leaving them vulnerable to breaches, spoofing, or impersonation.

For example, a recent breach involving a U.S. military group chat on Signal - where an unauthorized journalist from *The Atlantic* was mistakenly included - illustrates the limitations of current platforms. In a world where Al can generate fake voices, digital avatars, and entire conversation threads, the need for verifiable, authenticated communications infrastructure is urgent.

Blockchain wallets and registries already offer verified identity and cryptographic logging for payments and assets. These same capabilities can also power a secure messaging layer, where users are authenticated via DIDs and credentials, communications are encrypted and logged immutably, and access is granted via credential-based ZKPs.

Key Pillars of a Secure U.S. Digital Communications and Verification Layer

As the DOGE team works to inspect and review our legacy communications infrastructure, the following solutions may be of value:

- Anchor messaging systems to verified wallets and DIDs, ensuring users are cryptographically identified.
- Use zero-knowledge proofs (ZKPs) to control access to sensitive channels without revealing private data.

- Restrict classified or sensitive communications to verified individuals across government, defense, and institutional networks.
- Encrypt and log communications immutably for audit, compliance, and oversight without sacrificing privacy.

By creating a verifiable communications layer anchored in decentralized identity, the U.S. can defend the integrity of its digital infrastructure across governance, commerce, and civic engagement. A secure, interoperable framework for identity, transactions, and communication is no longer optional - it is a national imperative for the next era of American leadership.

Building Cyber Resilience into the Core of the U.S. Digital Economy

The United States must treat cybersecurity as a foundational design principle in the next generation of its digital economy. Much of our existing infrastructure - built long before the advent of AI and quantum computing - is not equipped to handle the scale, speed, or sophistication of modern threats.

Emerging Threats

- Al-driven manipulation: synthetic identities, deepfakes, automated fraud, and market spoofing
- Quantum decryption: the looming threat to RSA/ECC encryption that secures logins, records, and financial systems
- Systemic vulnerabilities: single points of failure in cloud databases, payment systems, and public registries

Modern Capabilities

- Immutable, tamper-proof records and audit trails
- Smart contract automation for real-time compliance, identity verification, and access control
- Decentralized, redundant data layers to prevent single-point compromise and improve system uptime

As HUMBL develops its platform architecture, it will be aligning with emerging Web3 and cybersecurity standards set by organizations such as NIST, CISA, W3C, and ISO frameworks for blockchain and digital identity. This will ensure that HUMBL's infrastructure is secure, interoperable, and, in the future - quantum-resilient - supporting broader U.S. national cybersecurity objectives.

What's at Stake: National Financial Security in the Age of Al and Quantum

The shift from traditional to quantum-enabled and Al-powered threats represents a paradigm change in cybersecurity risk. As Mitra Azizirad, President of Strategic Missions at Microsoft notes in her piece, *2025: The Year to Become Quantum-Ready*, "we are at the advent of the reliable quantum computing era."

If the U.S. fails to modernize its digital infrastructure soon, the integrity of our financial systems, ownership records, and governance data could be fundamentally compromised.

National Vulnerabilities:

- Banking Systems: Quantum decryption could expose private keys, allowing unauthorized access to user accounts, digital assets, and interbank payment networks.
- **Financial Markets**: Settlement records and trade confirmations could be spoofed or altered, enabling undetectable fraud and market manipulation.
- Land and Title Registries: Centralized property databases could be fraudulently altered, erasing legal ownership and leaving no verifiable audit trail.
- **Government Databases**: Critical systems may be breached or tampered with without immutable records or fail-safes to ensure accountability and recovery.

Just as no nation would deploy outdated aircraft into contested airspace, the U.S. must not rely on obsolete digital infrastructure to defend its economy, sovereignty, or citizens in this new threat landscape.

The Path Forward: A Verified and Quantum-Resilient Digital Perimeter

The future of U.S. cybersecurity and economic leadership depends on adopting next-generation digital infrastructure:

- Blockchain-enabled digital wallets with verified identity and programmable permissions
- Encrypted, authenticated communications linked to decentralized identifiers (DIDs)
- Quantum-resistant registries for public records, financial systems, and ownership verification

By embedding these technologies into our digital core, the U.S. can protect our systems, enhance public trust, and lead the world in designing a secure, verifiable, and sovereign digital future.

// Conclusion

This is a generational moment to build the U.S. Digital Economy Infrastructure of the future

In summary, to safeguard U.S. digital sovereignty and strengthen our economic infrastructure, we must modernize outdated, fragmented systems through a strategic integration of technologies such as AI, cloud and blockchain technologies.

Strategic Pillars for U.S. Digital Infrastructure Modernization

Category	Description	
Digital Wallets	Establish secure, interoperable digital wallets that empower individuals to manage identity, financial transactions, asset ownership, and access to government services while preserving autonomy and privacy. These wallets should serve as the primary gateway to verified digital commerce and interaction.	
Digital Payments	While blockchain is not a one-size-fits-all solution, it plays a vital role in verifying identity, securing records, and preserving transaction integrity. Governments and enterprises should deploy blockchain-based registries alongside Al and cloud infrastructure to reduce systemic risk, data corruption, and improve cost and speed.	
Financial Markets	Modernize how financial instruments and real-world assets-such as real estate, commodities, and securities-are recorded, tracked, and exchanged. Transitioning from legacy systems to programmable blockchain environments enhances transparency, automation, and auditability without replacing the entire financial system.	
Government Systems	Upgrade critical public sector data infrastructure-such as identity registries, licensing systems, payments, and property records - by adopting blockchain integrated with Al and post-quantum encryption standards.	
AI & Quantum Readiness	Build and implement digital infrastructure that is resilient and backed-up against emerging threats from Al and quantum computing, protecting personal assets, banking, capital markets, and government systems long term.	

With a supportive U.S. federal government, regulatory agencies, and private sector companies now working together, the U.S. has a historic opportunity to lead the world in building a new, **Web3 / Verified Commerce layer for the digital economy.**

As the global landscape accelerates toward AI, quantum computing, digital identity, payments and blockchain-tokenized financial systems, it is imperative that U.S. digital finance infrastructure evolves to remain secure, competitive, and economically resilient.

This transformation offers a once-in-a-generation opportunity to unlock trillions in potential U.S. economic growth and government savings, modernize legacy systems, and protect the digital privacy, market access and security of American citizens.

The result will be a resilient **U.S. Digital Economy Infrastructure** - anchored in verifiable identity, payments, financial transactions, and government services - while strengthening national security and citizen autonomy.

By adopting unified, digitally verified platforms like HUMBL - designed to prioritize digital identity, transaction transparency, and system interoperability - the U.S. can position itself as the global leader in the next-generation of internet transactions and commerce.

A new U.S. digital economy infrastructure is no longer optional - it is essential for the protection of our citizens, the integrity of our financial markets, and the effectiveness of our government. Now is the time to come together and build it.

// About HUMBL

HUMBL is owned by parent company WSCG, Inc. A U.S. based, private company, headquartered in Salt Lake City, Utah. We are focused on building the next generation of the internet - Web3 - to establish a modern U.S. Digital Economy Infrastructure through a framework we call "Verified Commerce."

The HUMBL platform is being developed around core tools such as verified identity, digital wallets, token engine, smart contracts, blockchain-asset tokenization and blockchain registry, to support use cases such as digital payments and the blockchain tokenization of real world assets. The HUMBL Financial brand and trademarks are owned by Avrio Worldwide, in which HUMBL maintains an equity stake and revenue share.

// Appendix

- 1. Executive Order "Modernizing Payments To and From America's Bank Account"
- 2. SEC "Spring Sprint Toward Crypto Clarity" Roundtables
 - SEC Events Calendar
 - Led by Acting Chair Mark Uyeda and Commissioner Hester Peirce
- 3. Office of Management and Budget (OMB)
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- 5. List of Collapsed Institutions
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 - o Signature Bank, Silvergate, SVB: FDIC Failures List
- 6. Digital Asset Market Cap Decline (2021–2022)
 - CoinMarketCap Historical Data
- 7. Marc Andreessen on The Joe Rogan Experience
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- 8. Larry Fink (BlackRock CEO) on Tokenization (2025)
 - o BlackRock Official Statements
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- 10. Digital Wallet and Identity Projections
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 - Microsoft Strategic Missions: Quantum at Microsoft
- 12. NIST Post-Quantum Cryptography Project
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- 14. Zelle Payment Scams & Fraud
 - Senate Report on Zelle Scams
- 15. Western Union \$586M Settlement (2017)
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- Juniper: \$100B Ad Fraud Projection
- 17. Meta Fake Accounts & Platform Integrity
 - Meta Transparency Center
- 18. Amazon Fake Review Research
 - Which? UK Investigation

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- 19. Real Estate and RWA Tokenization Market Size
 - BCG & ADDX Report on RWA Tokenization
- 20. BlackRock's Portfolio Shift Vision
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- 21. Tokenized REITs and Real Estate Market
 - Nareit REIT Market Data

Standards and Web3 Identity Frameworks

- 22. W3C Decentralized Identifiers (DIDs)
 - o W3C DID Spec
- 23. W3C Verifiable Credentials
 - o W3C VC Spec

24. Trust Over IP Foundation (ToIP)

ToIP Governance Framework

25. ISO/IEC Blockchain and DLT Standards

o ISO Blockchain Technical Committee

Additional Sources

26. National Debt and Federal Spending Data

- U.S. Debt Clock
- Congressional Budget Office (CBO)

27. Fox News Interview with DOGE Officials (March 27, 2025)

28. HUMBL Patent - System and Method for Transferring Currency Using Blockchain

- Bibliographic Data Application Patent Center USPTO
- HUMBL Patent Pending Comprehensive Buying, Selling, Trading, Tracking, Verification, Validation, Tokenization and Financial Services Using Blockchain <u>Bibliographic Data - Application - Patent Center - USPTO</u>

29. Forward-Looking Statements

This document contains forward-looking statements, including but not limited to projections, estimates, plans, expectations, and other statements regarding future events or outcomes. These statements are based on current assumptions and beliefs and are subject to various risks and uncertainties that could cause actual results to differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law. Artificial intelligence (AI) tools, including large language models, were used to assist in the editing and formatting of this document.