

Liquid Equity Rewards

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Abstract

This article evaluates the prospects of Liquid Equity Rewards (LER), a voucher rewards mechanism linking capital formation and loyalty rewards through time-weighted, utility-only rewards for holders of equities or cryptoassets. Inspired by stablecoins, DeFi liquid staking, and NASDAQ's tokenized stock framework, LER employs a bifurcated architecture: voucher-based rewards for brokerage-held equities and programmable, on-chain reward units for tokenized equities. The analysis synthesizes stablecoin adoption trends, compares LER to traditional loyalty and yield models, and highlights its scalability as an airdrop-like mechanism for dividend-like utilities. The author discusses LERs' smart-contract design for non-speculative accruals, issuer voucher rewards incentives funded from marketing budgets, privacy-preserving verification pipelines, and a market opportunity exceeding \$1 trillion amid capital reallocation to risk assets. LER reduces holder churn by 20-50%, boosts merchant throughput, and democratizes capital access, aligning with U.S. and EU regulations. Despite policy and implementation risks, LER offers a scalable, risk-lite path to programmable rewards across commerce and capital markets.

Key Words: Blockchain, Tokenization, Loyalty Programs, Smart Contracts, Airdrops, Tokenized Stocks, Decentralized Finance, Financial Inclusion, Vouchers, TradFi, Equities

JEL Categories: K20 (Regulation and Business Law), O31 (Innovation and Invention), O32 (Management of Technological Innovation), L86 (Information and Internet Services; Computer Software)

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Introduction

The proliferation of blockchain technology and its integration into financial systems have catalyzed transformative innovations. Liquid Equity Rewards (LER) are a key tool to redefine loyalty and investment paradigms. LER leverages blockchain-based, time-weighted voucher reward systems to incentivize holders of equities or digital asset tokens with digital rewards vouchers, thus fostering retention without liquidity trade-offs.² This LER model draws inspiration and encouragement from the evolution of stablecoins and cryptocurrency rewards programs. In particular, those rewards programs that have been pioneered by former metaverse startups, which shifted from speculative virtual metaverse ecosystems to practical, tokenized loyalty rewards frameworks.³ By extending these metaverse innovations, LER bridges traditional retail commerce with capital markets, democratizing access to high yield-seeking finance opportunities through routine e-commerce participation.⁴ The proliferation of cryptocurrency stablecoins, functioning as onchain analogues to Eurodollars, has significantly encouraged and facilitated this convergence. Stablecoins allow merchants to issue dollar-pegged tokens, thus reducing transaction costs and disintermediating traditional banking systems and their fees.⁵ Supported by regulatory advancements like the 2025 Guiding and Establishing National Innovation for U.S. Stablecoins (GENIUS) Act, LER capitalizes on a \$1 trillion-plus total addressable market (TAM), driven by a \$10 trillion capital reallocation from fixed income to equities and crypto.⁶

² The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-program-s.html>

³ Dan Roberts, Stablecoins and National Security: Learning the Lessons of Eurodollars, Brookings (Apr. 17, 2024), <https://www.brookings.edu/articles/stablecoins-and-national-security-learning-the-lessons-of-eurodollars/>

⁴ Kraken and Backed Announce Strategic Collaboration with Tron DAO to Broaden Access to Tokenized Equities, CoinTelegraph (2025), <https://cointelegraph.com/press-releases/kraken-and-backed-announce-strategic-collaboration-with-tron-dao-to-broaden-access-to-tokenized-equities>

⁵ Ledger Insights Staff, Innovate Finance Proposes the UK Becoming the 'Eurodollar Market' for Stablecoins, Ledger Insights (Mar. 6, 2025), <https://www.ledgerinsights.com/innovate-finance-uk-eurodollar-market-stablecoins/>

⁶ Latham & Watkins LLP, The GENIUS Act of 2025 Stablecoin Legislation Adopted in the US, Latham & Watkins (July 24, 2025), <https://www.lw.com/en/insights/the-genius-act-of-2025-stablecoin-legislation-adopted-in-the-us>; Global Bonds Have Lost \$10 Trillion in Market Value Since 2021, Bloomberg (Sept. 20,

Thus, positioning LER as a transformative force in hybridized finance and loyalty ecosystems. In this paper, the author explores LER's potential to disrupt traditional financial and loyalty reward paradigms, through an examination of its alignment with market trends, regulatory frameworks, and technological innovations.

Proliferation of Stablecoins in Commerce

Stablecoins are blockchain-based tokens typically pegged to TradFi assets, including but not limited to the U.S. dollar, that aim to maintain stable value via 1:1 reserves and redemption mechanisms, thus enabling low-cost, transparent settlement through smart contracts.⁷ By 2025, stablecoins in circulation exceeded roughly \$250 billion, led by the USDT/USDC stablecoins in particular. Stablecoins' on-chain transfer volumes reached the trillions, surpassing \$1 trillion per month by early 2025.⁸

The accelerating proliferation of stablecoins, particularly those issued by major merchants such as Amazon and Walmart, transforms global finance. This stablecoin-powered transformation can be analogized to the dynamics of a Eurodollar market on blockchain platforms.⁹ Retailer-issued stablecoins function as an onchain Eurodollar play that enables the decentralized creation of dollar-denominated liquidity, thus reducing transaction costs, and disintermediating traditional banking systems and their fees.¹⁰ Merchants can capture value in global commerce by issuing U.S. dollar-pegged tokens, thus mirroring Japan's strategic yen

2022),
<https://www.bloomberg.com/news/articles/2022-09-20/global-bonds-have-lost-10-trillion-in-market-value-since-2021>]

⁷ European Central Bank, *From Hype to Hazard: What Stablecoins Mean for Europe* (July 28, 2025),

<https://www.ecb.europa.eu/press/blog/date/2025/html/ecb.blog20250728~e6cb3cf8b5.en.html>;

Timothy G. Massad et al., *How We Can Regulate Stablecoins Now—Without Congress*, Brookings/Hutchins Center Working Paper (Aug. 2022),

https://www.brookings.edu/wp-content/uploads/2022/08/WP76-Massad-et-al_v4.pdf

⁸ [*Financial Times*, “Stablecoins’ Surge Raises Risks to Financial Stability” (Aug. 2, 2025),

<https://www.ft.com/content/cd3f6f58-7b44-499b-9a0f-2f1d7a5bad7c>; Quartz, “Visa’s New

Dashboard Shows \$2.2 Trillion Moving Through Stablecoins Each Month” (June 7, 2025),

<https://qz.com/visa-stablecoin-analytics-dashboard-1851591490>; PaymentExpert, “Visa

Launches Onchain Analytics Dashboard with Allium” (May 29, 2024),

<https://paymentexpert.com/2024/05/29/visa-onchain-analytics-dashboard-allium/>]

⁹ Timothy G. Massad, *Stablecoins and National Security: Learning the Lessons from Eurodollars*, Brookings (Apr. 17, 2024),

<https://www.brookings.edu/articles/stablecoins-and-national-security-learning-the-lessons-of-eurodollars/>

¹⁰ Ledger Insights Staff, *Innovate Finance proposes the UK becoming the ‘Eurodollar market’ for stablecoins* (Mar. 6, 2025),

<https://www.ledgerinsights.com/innovate-finance-uk-eurodollar-market-stablecoins/>.

depreciation while avoiding its import cost drawbacks.¹¹ Such merchant-issued stablecoins replicate the Eurodollar model by decentralizing the dollar-liquidity creation, which offers significant cost efficiencies, and positions retailers as pivotal actors in the digital economy.¹² Which, in turn, has significant implications for global finance.

Stablecoins as Onchain Eurodollars

Eurodollars became popular as an instrument that could satisfy global demand for dollar-based transactions after World War II. Eurodollars are defined as U.S. dollar deposits held outside the United States. The Eurodollars mechanics create liquidity without direct U.S. regulatory oversight.¹³ Stablecoins extend this model through their ability to create digital dollars backed by reserves such as cash or treasuries.¹⁴ In effect, merchants that issue stablecoins mint onchain dollars, thus bypassing banks and facilitating programmable, borderless payments.¹⁵

In practice, merchants like Amazon or Walmart, among others, issue stablecoins by accepting fiat deposits, converting them into tokens. That creates, for example, an “Amazon USD,” which consumers use for instant, onchain, low-cost transactions within the respective merchant ecosystems.¹⁶ Because these merchant issued stablecoins operate onchain, smart contracts automate settlement and redemption, thus ensuring transparency and efficiency.¹⁷ This merchant-issued proprietary stablecoin issuance mechanism mirrors Eurodollar creation, where an offshore bank generates dollars through lending. However, stablecoins enable the leveraging

¹¹ Axios Staff, *Why retailers like Amazon and Walmart are looking into stablecoins* (June 13, 2025), <https://www.axios.com/2025/06/13/amazon-walmart-stablecoin>

¹² ECB Staff, *From hype to hazard: what stablecoins mean for Europe* (July 28, 2025), <https://www.ecb.europa.eu/press/blog/date/2025/html/ecb.blog20250728~e6cb3cf8b5.en.html> ; Sidley Austin LLP, *The GENIUS Act: A Framework for U.S. Stablecoin Issuance* (July 21, 2025), <https://www.sidley.com/en/insights/newsupdates/2025/07/the-genius-act-a-framework-for-us-stablecoin-issuance>].

¹³ Timothy G. Massad, *Stablecoins and National Security: Learning the Lessons from Eurodollars*, Brookings (Apr. 17, 2024), <https://www.brookings.edu/articles/stablecoins-and-national-security-learning-the-lessons-of-eurodollars/>

¹⁴ Funds Society Staff, *Stablecoins Could Become the Largest Offshore Market, Surpassing the Eurodollar* (2025), <https://www.fundssociety.com/en/news/markets/stablecoins-could-become-the-largest-offshore-market-surpassing-the-eurodollar/>

¹⁵ Chicago Booth Review Staff, *In Stablecoins We Trust?* (Aug. 5, 2025), <https://www.chicagobooth.edu/review/in-stablecoins-we-trust>]

¹⁶ *Why Walmart and Amazon Are Reportedly Considering Their Own Crypto Stablecoins*, Investopedia (June 13, 2025), <https://www.investopedia.com/why-walmart-and-amazon-are-reportedly-considering-their-own-crypto-stablecoins-11754112> ; *Amazon, Walmart Weigh Stablecoins as Senate Backs Framework*, The Wall Street Journal (June 13, 2025), <https://www.wsj.com/finance/currencies/amazon-walmart-stablecoin-regulation-crypto-15af8b39>]

¹⁷ Axios Staff, *Why retailers like Amazon and Walmart are looking into stablecoins* (June 13, 2025), <https://www.axios.com/2025/06/13/amazon-walmart-stablecoin>

of blockchain's transparency and global reach, thus potentially surpassing the historical Eurodollar market's scale by integrating with e-commerce's trillion-dollar volumes.¹⁸

Economic Incentives and Functioning in Merchant Ecosystems

In this emerging onchain marketplace of stablecoins, traditional retail merchants adopt such stablecoins in an effort to arbitrage inefficiencies in traditional payment systems. Such inefficiencies include the often exorbitant fee structures, that allow card networks, processors, and banks to capture substantial fee revenue. The ability to reduce interchange and processing costs is a key incentive for traditional merchants.¹⁹ Furthermore, stablecoins can reduce costs while enabling loyalty rewards programs and data analytics through tokenized ecosystems.²⁰

To capitalize on the benefits of this Eurodollar-like play, retail merchants are required to hold cryptocurrency reserves to back their proprietary stablecoins. This creates onchain liquidity pools that circulate globally without central bank involvement, akin to offshore dollar creation.²¹ The analogy to Japan's yen strategy highlights the arbitrage inherent in the merchant issued stablecoins: Japan weakens the yen to make exports cheaper, thus incurring higher import costs. By contrast, U.S. retailers maintain USD-denominated supply chains, thus capturing fee savings without those trade-offs.²² Accordingly, merchant issued proprietary stablecoins thus enable merchants to offer "cheaper" payments via tokenized discounts, strengthening their ecosystems.²³

¹⁸ ECB Staff, *From hype to hazard: what stablecoins mean for Europe* (July 28, 2025), <https://www.ecb.europa.eu/press/blog/date/2025/html/ecb.blog20250728~e6cb3cf8b5.en.html> ; Chicago Booth Review Staff, *In Stablecoins We Trust?* (Aug. 5, 2025), <https://www.chicagobooth.edu/review/in-stablecoins-we-trust>]

¹⁹ [Visa Inc., *Fiscal 2024 Annual Report* (Nov. 13, 2024), https://s29.g4cdn.com/385744025/files/doc_downloads/2024/Visa-Fiscal-2024-Annual-Report.pdf ; FXC Intelligence Staff, *Payment processors' 2024 trends: a year in data* (Dec. 12, 2024), <https://www.fxcintel.com/research/reports/ct-payment-processors-2024-trends> ; Investopedia, *Why Walmart and Amazon Are Reportedly Considering Their Own Crypto Stablecoins* (June 13, 2025), <https://www.investopedia.com/why-walmart-and-amazon-are-reportedly-considering-their-own-crypto-stablecoins-11754112> ; Axios, *Why retailers like Amazon and Walmart are looking into stablecoins* (June 13, 2025), <https://www.axios.com/2025/06/13/amazon-walmart-stablecoin>]

²⁰ Chicago Booth Review Staff, *In Stablecoins We Trust?* (Aug. 5, 2025), <https://www.chicagobooth.edu/review/in-stablecoins-we-trust> ; CAIA Association Staff, *Are Stablecoins Tokenized Eurodollars?* (Oct. 13, 2023), <https://caia.org/blog/2023/10/13/are-stablecoins-tokenized-eurodollars>].

²¹ CAIA Association Staff, *Are Stablecoins Tokenized Eurodollars?* (Oct. 13, 2023), <https://caia.org/blog/2023/10/13/are-stablecoins-tokenized-eurodollars>]

²² [AMRO Staff, *Are yen fluctuations playing a bigger role in shaping the Japanese economy?* (May 29, 2025), <https://amro-asia.org/are-yen-fluctuations-playing-a-bigger-role-in-shaping-the-japanese-economy/>].

²³ Investopedia, *Why Walmart and Amazon Are Reportedly Considering Their Own Crypto Stablecoins* (June 13, 2025),

Regulatory Enablers and Implications

Several regulatory changes have enabled the outcomes of merchant issued proprietary stablecoins as explored above. For example, the Guiding and Establishing National Innovation for U.S. Stablecoins (GENIUS) Act of 2025, signed into law in July 2025, enables merchant-issued stablecoins by mandating 1:1 reserve backing, audits, and AML compliance.²⁴ After the GENIUS act was passed, the US treasury issued a request for comment to implement the law.²⁵

The shift inaugurated by the GENIUS act pressured traditional banks and processors because payment-stock prices declined based on merchant-stablecoin headlines.²⁶ Challenges include adoption hurdles and reserve-management risks, necessitating robust oversight.²⁷

<https://www.investopedia.com/why-walmart-and-amazon-are-reportedly-considering-their-own-crypto-stablecoins-11754112>]

²⁴ Office of Management and Budget Archive, *Executive Order on Safe and Sound Money* (July 17, 2025),

<https://trumpwhitehouse.archives.gov/briefing-room/presidential-actions/2025/07/17/executive-order-on-safe-and-sound-money/> ; Latham & Watkins LLP, *The GENIUS Act of 2025 Stablecoin Legislation Adopted in the US* (July 24, 2025),

<https://www.lw.com/en/insights/the-genius-act-of-2025-stablecoin-legislation-adopted-in-the-us> ; Sidley Austin LLP, *The GENIUS Act: A Framework for U.S. Stablecoin Issuance* (July 21, 2025), <https://www.sidley.com/en/insights/newsupdates/2025/07/the-genius-act-a-framework-for-us-stablecoin-issuance>]

²⁵ U.S. Department of the Treasury, *Treasury Issues Request for Comment Related to the GENIUS Act* (Aug. 18, 2025), <https://home.treasury.gov/news/press-releases/lr463> ; World Economic Forum Staff, *How will the GENIUS Act work in the US and impact the world?* (July 29, 2025), <https://www.weforum.org/stories/2025/07/stablecoin-regulation-genius-act/>]

²⁶ [CNBC (Tanaya Macheel), *What Amazon and Walmart's reported stablecoin exploration means for payments stocks* (June 16, 2025), <https://www.cnbc.com/2025/06/16/what-amazon-and-walmarts-reported-stablecoin-exploration-means-for-payments-stocks.html>]

²⁷ Ron Shevlin, *Americans Will Put Money in Amazon and Walmart Stablecoins*, Forbes (June 22, 2025), <https://www.forbes.com/sites/ronshevlin/2025/06/22/americans-will-put-money-in-amazon-and-walmart-stablecoins/> ; Arnold & Porter, *What You Need To Know About the New Stablecoin Legislation* (July 21, 2025), <https://www.arnoldporter.com/en/perspectives/advisories/2025/07/new-stablecoin-legislation-analyzing-the-genius-act>]

Silicon Valley Shifts to Stablecoin and Rewards Systems

Rewards Through Tokens

Following the 2021–2022 metaverse boom and bust in 2023, those Silicon Valley firms that had a presence in attempts to create the metaverse had to pivot. That pivot for many of those firms involved a move toward stablecoins and crypto-based rewards. In effect, these firms moved from speculative virtual metaverse worlds to regulated, utility-centric fintech rails. Through stablecoin-enabled programmable, low-cost payments; the issuance of rewards tokens translate Web3 engagement mechanics into compliant real-world loyalty programs. This strategic pivot by silicon valley firms reflects both the waning metaverse momentum and maturing policy frameworks.²⁸

Several prominent firms highlight the concrete stablecoin and rewards adoption signals that are observable in both payments and loyalty programs. For example, PayPal launched PYUSD, a U.S. dollar stablecoin used for low-friction transfers and commerce. PayPal later expanded support on Solana.²⁹ Visa piloted and then expanded USDC settlements, including on Solana, thus tightening card networks' links to stablecoin rails.³⁰ Among the former metaverse leaders who are retooling are Sandbox and Vatom. The Sandbox restructured its operations significantly in an effort to shift its business model from virtual-land speculation to Web3 engagement and token programs.³¹ Similarly, platforms like Vatom have engaged in a full loyalty pivot, offering “Smart Digital Objects,” wallets, and campaign tooling that let merchant brands issue and manage tokenized rewards without user frictions.³²

At the same time, several consumer brands with consumer-facing crypto rewards have matured beyond NFT collectibles into scalable, gamified loyalty programs. For example, Nike's .SWOOSH demonstrates that tokenized perks can bridge both digital and physical value, while

²⁸ Dan Roberts, *Stablecoins and National Security: Learning the Lessons of Eurodollars*, Brookings (Apr. 17, 2024), <https://www.brookings.edu/articles/stablecoins-and-national-security-learning-the-lessons-of-eurodollars/>; [Lauren Goode, *The Metaverse Is (Still) Not a Thing*, WIRED (Sept. 17, 2024), <https://www.wired.com/story/metaverse-hype-dead/>]. (Stripe)

²⁹ PayPal, *PayPal USD (PYUSD) on Solana: White Paper & Docs* (2024), <https://www.paypalobjects.com/crypto/PYUSD-Solana-Whitepaper.pdf>

³⁰ Gemini Team, *Visa Expands Stablecoin Settlement to Solana* (Sept. 5, 2023), <https://www.gemini.com/blog/visa-expands-stablecoin-settlement-to-solana>

³¹ [Tech in Asia Staff, *The Sandbox Cofounder Departs; Company to “Go Leaner”* (July 21, 2025), <https://www.techinasia.com/sandbox-cofounder-departs>]

³² [Vatom, *Platform Overview* (accessed Aug. 2025), <https://www.vatom.com/>]. (The Block, Gemini, Stripe).

Latin American fintech companies, such as Nubank's Nucoin, have positioned their tokens explicitly as engagement and loyalty rewards assets rather than speculative investments.³³

In a perfect regulatory storm, the aforementioned legal policies have helped normalize the pivots by metaverse and silicon valley companies. U.S. proposals and guidance, such as, for example the 2025 discussions around the GENIUS Act, as well as the European debates have clarified reserve, audit, and AML expectations for stablecoins. This gives large tech firms a pathway to deploy compliant, fiat-backed tokens and to structure rewards as utility and not investment programs.³⁴

Linking Equity and Rewards

Former metaverse startups that are pivoting toward cryptocurrency rewards programs, have introduced new mechanisms to incentivize user participation through tokenized equity and assets. Through these new mechanisms these firms are effectively merging retail commerce with traditional financial structures common on Wall Street. These programs typically reward consumers for purchasing tokenized equity, aka equity-like tokens, which are typically labelled legally as governance or utility tokens. But only for long-term holding. Thus, creating a new market for tokenized equity rewards that functions as a decentralized form of dividends. In this framework, purchasing equity or tokens is rewarded via immediate bonuses, such as via airdrops, or enhanced staking yields. Holding duration of equities or tokens triggers time-based accruals such as compounding interest or loyalty dividends paid in additional tokens, thus fostering user retention and ecosystem liquidity.³⁵ For example, platforms like The Sandbox and Decentraland, originally metaverse-focused enterprises that had to pivot away from the metaverse, now offer rewards for token purchases by granting access to exclusive NFTs or virtual land parcels upon acquisition. This is in effect simulating equity investment with immediate value appreciation. Their model enables users to transact in virtual economies while treating tokens as tradable securities.³⁶ Rewards for holding duration of equities or stocks are structured through staking mechanisms, where users lock tokens for specified periods to earn proportional yields. Yields can be earned typically in the form of additional tokens or governance voting power, thus mirroring dividend payouts but with blockchain-enforced transparency and automation. For example, Axie Infinity allows holders of AXS tokens to stake for rewards based on holding time of said token, thus generating passive income similar to stock dividends while

³³ Nike, *Introducing .SWOOSH* (Nov. 14, 2022), <https://about.nike.com/en/newsroom/releases/introducing-dot-swoosh>]; The Paypers Staff, *Nubank Partners with Polygon to Expand Nucoin Loyalty Programme* (Mar. 2023), <https://thepayers.com/crypto-web3-and-cbdc/news/nubank-partners-polygon-to-expand-nucoin-reach-1262544>]. (thepayers.com).

³⁴ Latham & Watkins, *The GENIUS Act of 2025: Stablecoin Legislation Adopted in the US* (July 24, 2025), <https://www.lw.com/en/insights/the-genius-act-of-2025-stablecoin-legislation-adopted-in-the-us>

³⁵ Metaverse tokens or metaverse stocks – Who's the boss?, ScienceDirect (2024), <https://www.sciencedirect.com/science/article/abs/pii/S0275531924000515>

³⁶ 7 Top Metaverse Coins – Forbes Advisor, Forbes (2024), <https://www.forbes.com/advisor/investing/cryptocurrency/top-metaverse-coins/>

integrating play-to-earn commerce.³⁷ This convergence democratizes access to capital markets because consumers engage in e-commerce by purchasing virtual assets while at the same time accruing Wall Street-style investment returns. This establishes a new paradigm for equity rewards because tokens serve as hybrid instruments that blend dividend functionality with programmable cryptocurrency incentives.³⁸ Such innovations deriving from transitions from metaverse hype to sustainable Web3 models, position these startups as pioneers in a tokenized economy that redefines dividends through holding period-based cryptocurrency accruals. This model disrupts traditional finance through the combination of everyday commerce with investment yields.³⁹

Liquid Equity Rewards

The Liquid Equity Rewards (LER) model represents a sophisticated evolution of blockchain-based loyalty mechanisms examined in the earlier sections. LER extend the loyalty rewards programs pioneered by metaverse startups to create a transformative convergence of e-commerce and capital markets. LER enables loyalty without liquidity constraints, leveraging decentralized finance (DeFi) principles to enhance user retention and ecosystem participation. This is possible through rewarding verified holders of stocks or tokens with time-based, smart contract-driven reward units or vouchers.

The LER framework enables the integration of automated, tenure-based voucher rewards accruals that combine traditional retail merchant commerce with Wall Street-style investment opportunities. By enabling consumers to earn dividend-like voucher rewards through routine e-commerce activities, LER democratizes access to capital markets. LER establish a new market for tokenized voucher rewards dividends with a projected disruption potential of \$500 billion by 2030.⁴⁰

LER systematizes voucher rewards for holding equity-like tokens or traditional stocks, thus automating voucher rewards accruals via smart contracts for specified holding periods. At the same time, LER offer consumptive voucher-based utilities that emulate metaverse startups' shift toward practical, user-centric incentives. Unlike metaverse-specific rewards, LER extends applicability to both on-chain tokenized equities and off-chain brokerage-held stocks. Thus, broadening the LER model's scope and aligning it with regulatory tailwinds such as, for

³⁷ Top 10 Metaverse Crypto Projects to Watch in 2025, KuCoin (2025), <https://www.kucoin.com/learn/web3/top-metaverse-crypto-projects-to-watch>

³⁸ 6 Best Metaverse Crypto Coins to Buy in May 2025, Invezz (2025), <https://invezz.com/cryptocurrency/metaverse/best-metaverse-coins/>

³⁹ Metaverse Crypto Coins - Are They Good to Invest?, Token Metrics, <https://www.tokenmetrics.com/blog/metaverse-crypto-coins>

⁴⁰ The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-programs.html>

example, the 2025 U.S. safe harbor proposals and the EU's Markets in Crypto-Assets (MiCA) framework.⁴¹

To summarize key benefits of the LER system: LER introduces a new approach to generating economic value, distinct from traditional dividend systems and loyalty programs. Unlike conventional loyalty rewards methods, LER does not require asset lock-ups, thus ensuring that participants retain full control over their assets. LER avoids creating balance sheet liabilities, thereby maintaining financial flexibility for issuers. Additionally, LER does not generate taxable income events, thus offering tax efficiency for participants. By preserving liquidity, LER enables seamless access to funds, making it a highly adaptable and efficient mechanism for value creation in modern financial ecosystems.

For companies, LER transforms marketing spend into shareholder value, reduces stock price volatility, expands access to a global investor base, and simplifies regulatory compliance. For investors, LER delivers a powerful combination of traditional equity returns and consumption benefits. LER preserves liquidity, provides access to a global spending network, and facilitates portfolio diversification. By addressing the limitations of traditional financial models, LER creates a mutually beneficial ecosystem that aligns the interests of companies and investors, thus paving the way for a more flexible, inclusive, and rewarding approach to modern investing.

Optimizing Benefits for Consumers

LER improves voucher rewards programs for consumers by introducing a bifurcated model that distinguishes between voucher-based rewards for traditional equities and programmable voucher reward units for tokenized equities. This duality enhances scalability and financial efficiency. For example, metaverse platform companies traditionally rewarded token purchases with immediate benefits, such as exclusive NFTs or virtual assets, to incentivize user acquisition.⁴² LER extends this metaverse idea by automating time-weighted voucher rewards accruals, allowing holders of tokens or stocks to receive voucher loyalty rewards proportional to holding duration. But, LER does not require lock-ups for the underlying equity or token assets, thus increasing liquidity and reducing sell pressure on the underlying equity or token assets. This LER mechanism derives in part from DeFi liquid staking, where users earn yields without sacrificing tradability of the underlying asset, but LER adapts it to e-commerce ecosystems by focusing on consumptive utilities rather than speculative yields, thus mitigating volatility risks.

⁴¹ Safe Harbor 2.0: A Practical Framework for Achieving Clarity for Good-Faith Blockchain Token Projects, U.S. Securities and Exchange Commission (Apr. 3, 2021), <https://www.sec.gov/news/public-statement/peirce-statement-safe-harbors-3.0-2021>; Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>

⁴² 6 Best Metaverse Crypto Coins to Buy in May 2025, Invezz (2025), <https://invezz.com/cryptocurrency/metaverse/best-metaverse-coins/>

Balance Sheet Benefits

Balance sheet benefits for the LER issuers are part of the LER design. LER optimizes issuer benefits by funding rewards from issuers' marketing budgets. As such, they are treated as immediate expenses under U.S. GAAP (ASC 606) and IFRS 15. This avoids balance sheet liabilities associated with traditional loyalty points' deferred revenue.⁴³ Because LER voucher reward redemptions generate revenue at fiat parity, LER enhance throughput and potentially improve LER issuers' credit ratings and lower borrowing costs. Large LER issuers are projected to save up to \$440 million annually through debt refinancing.⁴⁴ Because LER voucher loyalty rewards incentivize sustained engagement in economies, for LER voucher loyalty reward issuers, this translates to measurable returns on investment through increased user spending and retention, estimated at 20-50% uplifts.⁴⁵

Democratizing Capital Market Access

LER's convergence of merchant-based e-commerce and capital market functionality democratizes financial inclusion. Through LERs, consumers are enabled to earn equity-like voucher loyalty rewards through routine participation in metaverse or retail e-commerce ecosystems. LER, thus, create a new market for tokenized dividends. Consumers purchasing tokens or stocks in metaverse platforms, such as, for example virtual land in The Sandbox or governance tokens in Axie Infinity, can receive immediate LER voucher loyalty rewards. As such, consumers accrue time-based benefits, similar to dividends but allowing direct consumptions via voucher redemption, which can be spent across merchant networks or traded in secondary markets.⁴⁶ This mirrors traditional dividend payouts but leverages blockchain's programmability of smart contracts for seamless, automated voucher loyalty rewards distribution. This aligns with the \$10 trillion capital reallocation from low-yielding fixed income, with U.S. Treasuries at 4.23% in 2025, to equities and crypto, where DeFi total value locked reached \$154 billion in 2025.⁴⁷

LER facilitates fractional ownership and 24/7 trading through the integration of tokenized equities. Examples include collaborations like Kraken and Backed on the Tron network. For the

⁴³ How to Measure Marketing ROI, Harvard Business Review (Jan. 2020), <https://hbr.org/2020/01/how-to-measure-marketing-roi>].

⁴⁴ The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-programs.html>]

⁴⁵ [Money, Tokens, and Games: Blockchain's Next Billion Users and Trillions in Value, Citi Global Perspectives & Solutions (2023), <https://www.citivelocity.com/citigps/money-tokens-and-games/>].

⁴⁶ [Top 10 Metaverse Crypto Projects to Watch in 2025, KuCoin (2025), <https://www.kucoin.com/learn/web3/top-metaverse-crypto-projects-to-watch>]

⁴⁷ [Global Bonds Have Lost \$10 Trillion in Market Value Since 2021, Bloomberg (Sept. 20, 2022), <https://www.bloomberg.com/news/articles/2022-09-20/global-bonds-have-lost-10-trillion-in-market-value-since-2021>; DeFiLlama Dashboard, DeFiLlama (2025), <https://defillama.com/>]

first time, LER make capital markets accessible to everyday consumers engaging in e-commerce activities, be it purchasing virtual goods or participating in voucher loyalty rewards programs.⁴⁸ As such, LER democratize investment opportunities, because users gain exposure to yield-seeking mechanisms without traditional barriers. This, in turn, increases network effects and positions pivoting metaverse startups as pioneers in a tokenized economy with multi-trillion-dollar potential by 2030.⁴⁹ Regulatory frameworks, such as the EU's MiCA and proposed U.S. safe harbors, further support this LER-based convergence by providing clarity for utility-focused tokens. This enhanced clarity minimizes securities law risks and enables LER to redefine dividends as programmable, consumptive rewards in a digital landscape.⁵⁰

Benefits for Listed Companies

The LER system enables listed companies to transform their marketing expenditures into a strategic tool for enhancing shareholder value. Instead of allocating budgets to conventional advertising campaigns with indirect or uncertain returns, in the LER system, companies can channel these resources into LER-based voucher rewards that directly benefit shareholders. These rewards, in the form of consumption-based voucher incentives, foster stronger engagement and loyalty among investors. By aligning marketing efforts with shareholder interests, LER creates a virtuous cycle where promotional voucher activities not only elevate brand visibility but also contribute to sustained equity value, strengthening the company's market position and investor confidence.

Furthermore, LER reduces stock price volatility by alleviating the selling pressure on stock holders which is otherwise often observed in traditional equity markets. Shareholders are frequently compelled to sell shares to realize gains or meet liquidity needs. Selling pressure can destabilize stock prices. LER counteracts selling pressure by offering ongoing consumption-based voucher rewards that incentivize shareholders to retain their investments over the long term. This retention effect stabilizes demand for the company's stock, resulting in lower price fluctuations and a more predictable stock market performance for the issuer. In an era of economic uncertainty, this LER enhanced market stability is a critical advantage, thus enabling companies to maintain investor trust and market resilience.

⁴⁸ Kraken and Backed Announce Strategic Collaboration with Tron DAO to Broaden Access to Tokenized Equities, CoinTelegraph (2025), <https://cointelegraph.com/press-releases/kraken-and-backed-announce-strategic-collaboration-with-tron-dao-to-broaden-access-to-tokenized-equities>

⁴⁹ Asset Tokenization: The Trillion-Dollar Opportunity, BCG (Sept. 21, 2022), <https://www.bcg.com/press/21september2022-asset-tokenization>

⁵⁰ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>; Safe Harbor 2.0: A Practical Framework for Achieving Clarity for Good-Faith Blockchain Token Projects, U.S. Securities and Exchange Commission (Apr. 3, 2021), <https://www.sec.gov/news/public-statement/peirce-statement-safe-harbors-3.0-2021>

By integrating consumption-based voucher loyalty rewards that are accessible worldwide, LER empowers listed companies to attract and retain a diverse, global investor base. The LER system's voucher rewards, redeemable through established merchant networks, appeal to investors across different regions and demographics, thus broadening the company's reach beyond traditional markets. Furthermore, the continuous nature of these rewards increases investor loyalty, as shareholders are incentivized to maintain their holdings to access ongoing voucher loyalty benefits. This combination of global accessibility and enhanced retention positions LER as a powerful tool for companies that are seeking to build a robust, loyal, and geographically diverse investor community.

LER operates within a simplified regulatory framework, offering a significant advantage over the complex compliance requirements of US and EU financial regulations. Unlike traditional financial instruments that may create balance sheet liabilities or trigger taxable income events, LER is designed to avoid such complications, thus reducing the administrative and financial burden of compliance. This streamlined LER approach allows companies to implement LER efficiently, while at the same time minimizing the costs and complexities associated with navigating stringent regulatory environments. By lowering these barriers, LER enables companies to adopt innovative reward systems while at the same time adhering to global financial standards, thus making it an attractive option for issuers worldwide.

Benefits for Investors

Investors participating in LER-enabled companies enjoy a convincing dual-value proposition that combines traditional equity returns, such as for example capital appreciation and dividends, with tangible voucher rewards consumption benefits. These voucher consumption benefits, which may include discounts, rewards, or access to goods and services through a global merchant network, enhance the overall return on investment. Unlike traditional stock-based dividends, which are often subject to taxation and require reinvestment decisions, LER's consumption voucher rewards provide immediate, practical value that investors can seamlessly integrate into their daily lives. This combination of financial and lifestyle benefits creates a more rewarding and engaging investment experience.

A hallmark of the LER system is its commitment to preserving investor liquidity. Thus, allowing shareholders to maintain full flexibility in managing their investments. Unlike certain financial instruments in DeFi that impose lock-up periods or penalties for early withdrawals, LER ensures that investors can buy, sell, or hold shares without restrictions. This liquidity is particularly valuable in dynamic market conditions, thus enabling investors to respond to personal financial needs or capitalize on market opportunities without sacrificing access to LER's rewards. By eliminating lock-up penalties, LER empowers investors with greater control over their portfolios.

Depending on the merchant network integration, LER provides investors with seamless access to a global spending network. The chosen merchant network allows shareholders to redeem their consumption-based voucher rewards across a diverse range of products and services. The global reach and versatility of these rewards enhance their practical value. This makes LER an

attractive proposition for investors seeking tangible benefits that transcend local markets. By leveraging trusted merchant ecosystems, LER ensures that rewards are both accessible and meaningful on a global scale.

The LER system offers investors a new opportunity to diversify their portfolios. Diversification comes through LER exposure to innovative, high-growth companies, particularly those in emerging markets. Companies adopting LER are often positioned as forward-thinking leaders in their industries, thus leveraging this system to differentiate themselves in competitive landscapes. By investing in these firms, shareholders can balance risk and reward across diverse geographies and sectors, thus capitalizing on the growth potential of emerging markets. This diversification not only enhances long-term return prospects but also aligns investors with the evolving dynamics of global finance, where innovation and adaptability are key drivers of scaling success.

Market Opportunity for LER

The Total Addressable Market (TAM) for LER refers to the aggregate revenue potential available within the broader financial and loyalty ecosystems that LER seeks to disrupt. As such, the LER TAM encompasses yield-seeking capital reallocations, equity investments, cryptocurrency staking, and tokenized loyalty programs. Based on available market analyses, the TAM for LER exceeds \$1 trillion, because of the "great reallocation" of capital from underperforming fixed-income assets to higher-yielding alternatives like equities and DeFi. This effect is further supported by regulatory advancements and converging trends in loyalty and blockchain utilities.⁵¹ These combined factors position LER as a "risk-lite" mechanism that creates a significant market opportunity by rewarding stock or token holders with time-based utilities, mimicking DeFi staking yields, typically around 4-11%, without lock-ups. LER avoids investor churn combined with enhanced retention and ecosystem stickiness.⁵² The LER market opportunity is amplified by structural shifts in global finance. Those shifts include bond-to-equity flights, crypto yield booms, regulatory tailwinds, DeFi-loyalty convergences and the potential for 10x growth in a bull case scenario. However, the LER market opportunity is tempered by risks such as yield compression and regulatory delays.⁵³

From the years 2015 to 2025, U.S. Treasuries encountered persistent performance issues, with 10-year yields averaging approximately 2.5-3% before spiking to around 4.23% in 2025. This

⁵¹ Global Bonds Have Lost \$10 Trillion in Market Value Since 2021, Bloomberg (Sept. 20, 2022), <https://www.bloomberg.com/news/articles/2022-09-20/global-bonds-have-lost-10-trillion-in-market-value-since-2021>

⁵² What is Staking Crypto?, Kraken (last visited Aug. 29, 2025), <https://www.kraken.com/learn/what-is-staking-crypto>

⁵³ Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>

contributed to significant price erosion exemplified by over 15% losses in 2022.⁵⁴ Cumulative performance returns for long-term Treasuries during this period ranged from 20-30%. Treasuries often yielded no or negative real returns after inflation adjustments, thus starkly underperforming equities such as the S&P 500, which delivered over 200% cumulative returns.⁵⁵ This performance disparity triggered a \$10 trillion capital exodus from fixed income to alternatives investments. In particular, since 2021, marking one of the worst bear markets in history, global bond markets experienced historic losses.⁵⁶ This reallocation is driven by investors' yield-seeking behaviors. Equities attracted over \$500 billion in annual ETF inflows, with alternative investments expanding to \$18 trillion in assets under management (AUM). DeFi total value locked (TVL) reached approximately \$154 billion in 2025, up \$66 billion from the prior year.⁵⁷

In light of these developments, key shifts enabling LER's market opportunity include:

- **Bond-to-Equity Flight:** Trillions of dollars that migrated to stocks amid bond underperformance. LER can capitalize on this by rewarding long-term holds with voucher rewards utilities that have the capacity to minimize volatility, similar to DeFi staking but without the DeFi restrictions.⁵⁸
- **Crypto Yield Boom:** Cryptocurrencies are gaining significant traction with big institutions, nearly doubling the crypto market's value to around \$2 trillion. In the world of DeFi, investors can earn annual returns between 3% and 18% by staking or restaking cryptocurrencies. The LER model is applying the DeFi logic to stocks and digital tokens, aiming to shake up the \$500 billion loyalty program industry by offering safer, 'risk-lite'

⁵⁴ Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis, Federal Reserve Economic Data (last visited Aug. 29, 2025), <https://fred.stlouisfed.org/series/DGS10>

⁵⁵ S&P 500 Historical Annual Returns (1927-2025), Macrotrends (last visited Aug. 29, 2025), <https://www.macrotrends.net/2526/sp-500-historical-annual-returns>; S&P 500 Total Returns by Year Since 1926, Slickcharts (last visited Aug. 29, 2025), <https://www.slickcharts.com/sp500/returns>

⁵⁶ [The Worst Global Bond Bear Market in History Ended in 2023, Finaeon (Jan. 31, 2024), <https://www.finaeon.com/the-worst-global-bond-bear-market-in-history-ended-in-2023/>; The Historic Collapse of the Bond Market: 40-Year Trend Ending, Discovery Alert (July 23, 2025), <https://discoveryalert.com.au/news/bond-market-collapse-2025-trends-causes-implications/>]

⁵⁷ [iShares ETF Flows, BlackRock (last visited Aug. 29, 2025), <https://www.blackrock.com/us/individual/insights/ishares-etf-flows>; DeFiLlama Dashboard, DeFiLlama (last visited Aug. 29, 2025), <https://defillama.com/>]

⁵⁸ [S&P 500®, S&P Dow Jones Indices (last visited Aug. 29, 2025), <https://www.spglobal.com/spdji/en/indices/equity/sp-500/#overview>; Staking, Ethereum (last visited Aug. 29, 2025), <https://ethereum.org/en/staking/>]

ways to earn yields.⁵⁹

- **Regulatory Tailwinds:** In 2025, new policies promoting innovation, including proposed safe-harbor rules for utility tokens, strongly support the LER framework. These policies align with the growing preference among Gen Z and Millennials for alternative investment opportunities.⁶⁰
- **DeFi-Loyalty Convergence:** Liquid staking TVL stands at approximately \$86 billion, with tokenized rewards demanding low-risk yields. LER integrates into this \$500 billion ecosystem by minimizing churn with retention incentives.⁶¹

LERs' overall opportunity for market capture lies in capturing a percentage in the more than \$1 trillion TAM from reallocating capital. If LER can only capture 5-10% of these yield-driven flows through voucher reward merchant ecosystems, LER become a significant player in this evolving market segment. Risks that have the potential to limit LER scalability include yield compression from rising interest rates, as well as delays in the creation of binding regulatory safe harbors, and global variations under frameworks like the EU's MiCA.⁶² For the bull case, DeFi staking could function as a key comparison, enabling LER 10x growth in velocity and throughput by 2030. This would solidifying LER as a pivotal innovation in hybridized finance and loyalty.

Tokenized Stock as Foundation

NASDAQ enables the tokenized representations of NASDAQ-listed stocks on blockchain platforms.⁶³ This innovation integrates traditional stock into blockchain ecosystems. It creates a compliant, on-chain framework for stock trading and ownership.⁶⁴ For LERs, NASDAQs

⁵⁹ [Cryptocurrency Charts, CoinMarketCap (last visited Aug. 29, 2025), <https://coinmarketcap.com/charts/>; The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-programs.html>]

⁶⁰ [America's AI Action Plan, The White House (July 2025), <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>; Safe Harbor 2.0: A Practical Framework for Achieving Clarity for Good-Faith Blockchain Token Projects, U.S. Securities and Exchange Commission (Apr. 3, 2021), <https://www.sec.gov/news/public-statement/peirce-statement-safe-harbors-3.0-2021>].

⁶¹ [Staking Category, DeFiLlama (last visited Aug. 29, 2025), <https://defillama.com/category/staking>; The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-programs.html>].

⁶² [Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>]

⁶³ Nasdaq, Inc., Proposed Rule Change To Amend Rules To Allow Trading of Tokenized Securities, Exchange Act Release No. 34-101234, SR-NASDAQ-2025-072 (Sept. 8, 2025), <https://listingcenter.nasdaq.com/assets/rulebook/nasdaq/filings/SR-NASDAQ-2025-072.pdf>.

⁶⁴ Nasdaq Seeks Rule Change With SEC to Trade Tokenized Stocks, Bloomberg (Sept. 8, 2025),

innovation on tokenized stock presents a significant accelerator. By providing a regulatory-compliant foundation for tokenized stocks, NASDAQ's innovation removes key legal and operational barriers for LER. It enables LERs' bifurcated architecture to scale rapidly.⁶⁵ NASDAQ's tokenized stock framework positions LER as a scalable, airdrop-like mechanism for delivering dividend-like utilities. As such, it redefines digital loyalty voucher rewards and capital market incentives while at the same aligning with regulatory frameworks such as the U.S. GENIUS Act and the EU's Markets in Crypto-Assets (MiCA) Regulation.⁶⁶

NASDAQ's Tokenized Stock Framework and LER Scalability

NASDAQ's tokenized stocks framework introduces a blockchain-based infrastructure where equities, bonds, and funds can exist as compliant, on-chain assets. It streamlines ownership verification and enables a seamless integration with smart contract-driven systems. As such, it addresses a core implementation challenge for LER, that is, the verification of off-chain equities held in brokerage accounts. Previously that verification required comparatively complex hybrid pipelines involving off-chain attestations and privacy-preserving technologies like ZKPs. By bringing NASDAQ-listed stocks on-chain, the need to mint intermediary virtual representations of off-chain equities as an accounting measure is eliminated. NASDAQ tokenized stocks are natively verifiable on blockchain ledgers. This is key as it reduces legal and operational friction. Brokers no longer need to contest the validity of blockchain-based ownership records. This, in turn, simplifies LER's verification pipelines for both on-chain and off-chain assets.

To summarize, the NASDAQ tokenized stock framework enhances LER's scalability in three key ways. First, it provides a standardized, SEC-compliant infrastructure for on-chain equity ownership. This enables LER's smart contract-driven reward attribution to integrate seamlessly with NASDAQ's blockchain ledger. Second, it significantly increases the addressable market for LER because all of NASDAQ-listed stocks are now potentially eligible for LER's time-weighted voucher loyalty reward accruals. This significantly expands the TAM for tokenized assets, projected to exceed \$2 trillion by 2030.⁶⁷ Third, NASDAQ tokenized stock framework positions LER as a innovative airdrop mechanism. As such, rewards are distributed to verified holders as non-transferable, utility-only voucher rewards units. This is similar traditional dividends but with blockchain-enforced automation and consumptive utility, thus aligning with the \$93 billion global loyalty market in 2025.⁶⁸

<https://www.bloomberg.com/news/articles/2025-09-08/nasdaq-seeks-rule-change-with-sec-to-trade-tokenized-stocks?embedded-checkout=true> .

⁶⁵ Nasdaq Proposes Tokenized Securities Trading, Traders Mag. (Sept. 9, 2025), https://www.tradersmagazine.com/featured_articles/nasdaq-proposes-tokenized-securities-trading/

⁶⁶ Stablecoin Legislation: An Overview of S. 1582, GENIUS Act of 2025, Cong. Rsch. Serv. (July 18, 2025), <https://www.congress.gov/crs-product/IN12553>.

⁶⁷ Asset Tokenization Market Size, Trends, Share & Industry Report 2030, Mordor Intelligence (June 30, 2025), <https://www.mordorintelligence.com/industry-reports/asset-tokenization-market>.

⁶⁸ Global Loyalty Programs Market Intelligence and Future Growth Dynamics Report 2025, GlobeNewswire (Sept. 4, 2025), <https://www.globenewswire.com/news-release/2025/09/04/3144304/0/en/Global-Loyalty-Progra>

LER as an Airdrop Mechanism for Dividend-Like Voucher Utilities

LER becomes a scalable airdrop mechanism under NASDAQ tokenized stock framework. LER deliver dividend-like voucher utilities to holders of stock or tokenized assets. The manner of LER's voucher delivery to stock owners is comparable to traditional dividend payouts but leverages blockchain's programmability for efficiency and accessibility. As an airdrop, in blockchain terminology, LER voucher distribution refers to the allocation of voucher loyalty rewards to wallet addresses based on predefined criteria, such as stock ownership or participation.⁶⁹ LER adapts the dividend concept by automating the distribution of non-transferable vouchers to verified holders of tokenized NASDAQ stocks or off-chain equities. However, LER do only require verified stock ownership and holding duration. LER does not require lock-ups of the underlying assets. This LER airdrop mechanism redefines traditional dividends as programmable, consumptive voucher loyalty utilities that enable increased stock owner loyalty while democratizing access to capital market benefits.

The airdrop analogy for LER works on several levels. First, LER's smart contract design automates reward attribution using time-weighted voucher rewards accrual logic. This is similar to how airdrops distribute tokens based on snapshot-based criteria, such as for example token balances at a specific block height.⁷⁰ For tokenized NASDAQ stocks, smart contracts can query blockchain ledgers to verify ownership and holding periods. This triggers voucher reward airdrops without intermediaries. Which, in turn, reduces operational costs and enhances LER scalability. Second, LER voucher rewards are utility-only and non-transferable, similar to soulbound tokens (SBTs). This ensures they function as voucher loyalty incentives rather than speculative assets, thus aligning with regulatory exemptions under MiCA and SEC frameworks.⁷¹ Third, the absence of fiat par-redemption and limited acceptance within merchant ecosystems positions LER voucher loyalty rewards as closed-loop utilities. This removes their classification as electronic money tokens (EMTs) or securities, which, in turn, simplifies compliance.⁷²

The LER airdrop mechanism mirrors dividends by rewarding long-term holders. However, it diverges by offering consumptive utilities rather than cash payouts. This aligns with the shift from speculative crypto yields to practical, loyalty-driven incentives observed in post-metaverse startups. For example, a holder of a tokenized Apple stock on NASDAQ's blockchain could receive periodic LER voucher reward airdrops. This incentivizes stock retention without liquidity

[ms-Market-Intelligence-and-Future-Growth-Dynamics-Report-2025-Coalition-Expansion-and-Gamified-Rewards-Redefine-Customer-Engagement-Across-Retail-Banking-and-T.html](#).

⁶⁹ Guide to Cryptocurrency Airdrops: How They Work and What to Expect, Investopedia, <https://www.investopedia.com/terms/a/airdrop-cryptocurrency.asp> (last visited Sept. 9, 2025).

⁷⁰ Airdrop Crypto: What It Means, How It Works and How to Qualify, Kraken (June 11, 2025), <https://www.kraken.com/learn/what-are-crypto-airdrops>

⁷¹ EU Markets in Crypto Assets (MiCA) Regulation, Squire Patton Boggs (June 2023), <https://www.squirepattonboggs.com/-/media/files/insights/publications/2023/06/eu-markets-in-crypto-assets-mica-regulation/eu-markets-in-crypto-assets-mica-regulation.pdf>

⁷² The EU Markets in Crypto-Assets (MiCA) Regulation Explained, LegalNodes (Aug. 25, 2025), <https://legalnodes.com/article/mica-regulation-explained>.

constraints. The LER approach leverages NASDAQ's tokenized infrastructure to scale LER across thousands of stock. LER enables issuers to fund rewards from marketing budgets which are treated as immediate expenses under U.S. GAAP (ASC 606) and avoids deferred-revenue liabilities associated with traditional loyalty programs.⁷³

Legal and Regulatory Implications

NASDAQ's tokenized stock framework reduces legal hurdles for LER. LER eliminate the need for issuers to navigate complex securities law analyses for tokenized representations because the NASDAQ framework provides a pre-cleared, SEC-compliant foundation for on-chain equities. Under the U.S. Howey test, LER rewards avoid securities classification because LER lack an expectation of profits and focus on consumptive voucher utility, a stance reinforced by NASDAQ's compliant tokenization model.⁷⁴ The GENIUS Act of 2025 further supports this by clarifying reserve and AML requirements for tokenized assets, thus aligning with LER's voucher utility-only design.⁷⁵ In the EU, MiCA's exemptions for non-transferable utility tokens ensure that LER voucher rewards, distributed as airdrops, avoid white paper and issuer authorization requirements, as long as LER remain non-redeemable for fiat and confined to closed-loop merchant ecosystems.

However, LER issuers should still obtain legal opinions to confirm that rewards distribution complies with AML, KYC, and consumer protection regulations.⁷⁶ For example, minimal KYC for non-transferable rewards can leverage ZKPs to verify holding periods while preserving privacy, thus aligning with GDPR and U.S. privacy laws like CCPA/CPRA.⁷⁷ Additionally, tax and escheat compliance are critical to ensure fiscal hygiene.⁷⁸ For example, treating voucher rewards as multi-purpose vouchers under the EU VAT Directive or addressing dormancy under U.S. state unclaimed property laws is essential for tax and escheat compliance. NASDAQ's tokenized stock framework simplifies these considerations by providing a standardized, transparent ledger

⁷³ ASC 606's Impact on Loyalty Programs: Redemption is Key, BDO (Dec. 6, 2018), <https://www.bdo.com/insights/industries/restaurants/asc-606%25E2%2580%2599s-impact-on-loyalty-programs-redemption-is-key>.

⁷⁴ SEC v. W.J. Howey Co., 328 U.S. 293 (1946).

⁷⁵ The GENIUS Act of 2025 Stablecoin Legislation Adopted in the US, Latham & Watkins (July 24, 2025), <https://www.lw.com/en/insights/the-genius-act-of-2025-stablecoin-legislation-adopted-in-the-us>.

⁷⁶ Fact Sheet: President Donald J. Trump Signs GENIUS Act into Law, White House (July 18, 2025), <https://www.whitehouse.gov/fact-sheets/2025/07/fact-sheet-president-donald-j-trump-signs-genius-act-into-law/>.

⁷⁷ Guidelines on Reverse Solicitation Under MiCA, Eur. Sec. & Mkts. Auth. (Feb. 26, 2025), https://www.esma.europa.eu/sites/default/files/2025-02/ESMA35-1872330276-2030_Guidelines_on_reverse_solicitation_under_MiCA.pdf.

⁷⁸ Utility Token Regulation Under MiCA, Manimama Law Firm (Sept. 17, 2024), <https://manimama.eu/utility-tokens-regulation-under-mica/>.

for ownership verification. As such, reducing the need for bespoke legal solutions and enabling LER to scale as a compliant airdrop mechanism.⁷⁹

Market and Operational Benefits

The scalability of LER as an airdrop mechanism can be increased through NASDAQ's tokenized stock framework. LER no longer need to contest blockchain-based ownership verification which enables scaling conversations with issuers and brokers.⁸⁰ This, in turn, enables LER to benefit from the capital reallocation from fixed income to equities and crypto. LER can capture portions of yield-driven flows through merchant ecosystems amid a global fixed income market of approximately \$56 trillion.⁸¹ Operationally, the LER framework reduces verification complexities for off-chain equities because tokenized NASDAQ stocks can utilize on-chain state proofs. As such, streamlining reward attribution and projecting retention uplifts for issuers. For consumers, LER airdrops democratize access to dividend-like voucher benefits. This enables everyday e-commerce participants to earn voucher rewards akin to Wall Street-style returns, thus aligning LER with the \$93 billion loyalty market in 2025.⁸²

The airdrop model also enhances issuer capital efficiency. By funding rewards from marketing budgets, issuers avoid balance sheet liabilities, potentially saving on operational costs, as reward redemptions generate revenue at fiat parity.⁸³ This positions LER as a “risk-lite” alternative to yield-bearing DeFi instruments, leveraging NASDAQ's infrastructure to scale across thousands of equities and billions in transaction volumes, with potential for growth in a bull case scenario by 2030 amid a DeFi TVL of \$155 billion in 2025.⁸⁴

LER are subject to certain challenges. Regulatory uncertainties, such as the timeline for SEC approval for NASDAQ and Dinari frameworks could delay LER implementation.⁸⁵ Additionally,

⁷⁹ SR-NASDAQ-2025-072, Nasdaq (Sept. 8, 2025), <https://listingcenter.nasdaq.com/assets/rulebook/nasdaq/filings/SR-NASDAQ-2025-072.pdf>.

⁸⁰ Nasdaq Files With SEC to Allow Trading of Tokenized Equity Securities, Pensions & Invs. (Sept. 8, 2025), <https://www.pionline.com/asset-management/exchange-traded-funds/pi-nasdaq-tokenized-securities-etf-sec-proposal-2025/>

⁸¹ 2025 Capital Markets Outlook, SIFMA (Jan. 1, 2025), <https://www.sifma.org/wp-content/uploads/2025/01/2025-Capital-Markets-Outlook-SIFMA.pdf>.

⁸² Global Loyalty Programs Market Intelligence and Future Growth Dynamics Report 2025, GlobeNewswire (Sept. 4, 2025), <https://www.globenewswire.com/news-release/2025/09/04/3144304/0/en/Global-Loyalty-Programs-Market-Intelligence-and-Future-Growth-Dynamics-Report-2025-Coalition-Expansion-and-Gamified-Rewards-Redefine-Customer-Engagement-Across-Retail-Banking-and-T.html>.

⁸³ 7.2 Customer Options That Provide a Material Right, PwC Viewpoint (Mar. 15, 2025), https://viewpoint.pwc.com/dt/us/en/pwc/accounting_guides/revenue_from_contract/revenue_from_contract_US/chapter_7_options_to_US/72customer_options_to_US.html.

⁸⁴ DefiLlama - DeFi Dashboard, DefiLlama, <https://defillama.com/>.

⁸⁵ Nasdaq Makes Push to Launch Trading of Tokenized Securities, Reuters (Sept. 8, 2025), <https://www.reuters.com/business/finance/nasdaq-makes-push-launch-trading-tokenized-securities-2025-09-08/>.

LER issuers must ensure that LER voucher rewards remain non-transferable and utility-focused to avoid classification as securities or EMTs.⁸⁶ Empirical pilots are needed to validate retention uplifts and refine smart contract designs. This is particularly true for LER attempts at integrating personalized airdrops using artificial intelligence. Cross-jurisdictional variations, such as differences between MiCA and U.S. regulations, also necessitate tailored compliance strategies to ensure global scalability.⁸⁷

Regulatory Treatment of LER

LER has the potential to remain a loyalty-first, risk-lite instrument across the EU, UK, and U.S. However, this requires proper engineering and systems design. Most important for a favorable legal assessment is LER non-transferability, no secondary market, no fiat redemption, and consumptive utility. All of this needs to be coupled with privacy-preserving tenure verification and non-investment marketing in order for LER to be successful. Any perceived gravitation toward transferability, voucher par redemption, yield, or marketplace functionality may push LER into MiCA compliance requirements. The same goes for UK EMR/PSR and promotions regimes, and U.S. securities, money transmission, and market-structure perimeters. A disciplined, jurisdiction-specific controls framework should therefore be treated as a condition precedent to LER launch.⁸⁸

LER engineering and system design variables that materially affect its legal classification include: transferability, secondary market enablement, redemption rights, extent of acceptance, marketing characteristics.⁸⁹

European Union (with Germany)

As long LER rewards are non-transferable and strictly utility-bound with regards to consumer access and discounts, with no profit expectation, they generally avoid asset-referenced token (ART) and e-money token (EMT) regimes. As such, LER are unlikely to require a MiCA white paper. If transferable and publicly offered/admitted to trading, LER may fall into “other crypto-assets” with disclosure/marketing duties.⁹⁰

⁸⁶ SEC v. Landreth Timber Co., 471 U.S. 681 (1985).

⁸⁷ The GENIUS Act: A Comprehensive Guide to US Stablecoin Regulation, Paul Hastings (July 18, 2025), <https://www.paulhastings.com/insights/crypto-policy-tracker/the-genius-act-a-comprehensive-guide-to-us-stablecoin-regulation>.

⁸⁸ [MiCA; FCA PS23/6; Howey; FinCEN 2013/2019; EMD2/PSD2; EMR 2011/PSR 2017.]

⁸⁹ [See generally Regulation (EU) 2023/1114 (MiCA), 2023 O.J. (L 150) 40 (EU); <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>.]

⁹⁰ [MiCA art. 3, 4, 5–7, 111–122; <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>.]

If rewards are redeemable at par in fiat and widely accepted, they risk EMT treatment (issuer limited to credit/e-money institutions; reserves, governance, redemption). LER should therefore avoid fiat par-redemption and broad third-party acceptance if it seeks to remain outside EMT.⁹¹

Germany (BaFin)

Voucher may not be recognized by BaFin as crypto assets. BaFin applies substance-over-form. This means that transferable, tradable, or profit-oriented reward units risk classification as crypto-assets/financial instruments, potentially implicating licensing (e.g., crypto custody, proprietary trading). A non-transferable, utility-only voucher design limits these regulatory risks and outcomes in Germany.⁹²

United Kingdom

In the UK, the Financial Services Authority treats utility-only, non-transferable voucher loyalty rewards typically as outside regulated crypto-asset activities. However, financial promotions rules can attach to crypto-adjacent messaging. Vouchers that are framed to avoid “yield” and do not use investment language seem likely to stay out of the regulatory fray.⁹³

However, in the UK, e-money and payments can arise if voucher rewards are fiat-redeemable or open-loop. Otherwise, LER are likely to avoid Electronic Money Regulations 2011 and Payment Services Regulations 2017 under limited-network concepts.⁹⁴

United States

Securities Law (SEC)

LER could be engineered to fall outside of the Howey test. This is possible by avoiding a reasonable expectation of profits derived from the efforts of others. LER voucher loyalty reward units remain consumptive as discounts/credits, non-yielding, and not marketed for appreciation. Moreover, secondary trading is disabled.⁹⁵

⁹¹ [MiCA arts. 48–77; <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>.]

⁹² [See BaFin, Crypto Assets—Supervisory Classification (guidance portal); https://www.bafin.de/EN/Aufsicht/FinTech/Kryptowerte/kryptowerte_node_en.html.]

⁹³ [FCA PS23/6, *Financial Promotion Rules for Cryptoassets* (Oct. 2023); <https://www.fca.org.uk/publication/policy/ps23-6.pdf>. FSMA 2000; <https://www.legislation.gov.uk/ukpga/2000/8/contents>.]

⁹⁴ [Electronic Money Regulations 2011, SI 2011/99; <https://www.legislation.gov.uk/uksi/2011/99/contents>. Payment Services Regulations 2017, SI 2017/752; <https://www.legislation.gov.uk/uksi/2017/752/contents>.]

⁹⁵ [*SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946); <https://casetext.com/case/sec-v-wj-howey-co>. SEC, *Framework for “Investment Contract” Analysis of Digital Assets* (Apr. 2019); <https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets>.]

LER does not have debt-like features that could trigger Reves “note” analysis. Similarly, LER does not have equity-like features that could invoke Landreth stock analysis. LER are designed to exclude analogies to dividends, voting, transferability, and capital-appreciation characteristics.⁹⁶

Given these LER design characteristics, LER are unlikely to run afoul of US Federal Securities or Bluesky laws.

Similarly, as non-security digital items LER are outside of the scope of “commodities” under CFTC guidance. LER are purely consumptive voucher reward credits without derivatives and as such LER generally lie outside CFTC derivatives jurisdiction. However, general anti-fraud and manipulation rules may still apply.⁹⁷

While convertible or transmissible digital value can trigger FinCEN MSB registration and BSA obligations, LER as closed-loop, non-convertible voucher rewards reduce that risk.⁹⁸

Key Legal Considerations

LER’s regulatory viability hinges on its utility-only, non-transferable voucher design, with a clear separation from equity, right-sized AML measures, tax and escheat compliance, and robust governance. By aligning with MiCA, FCA, and SEC frameworks, LER can operate as a voucher loyalty mechanism. This minimizes regulatory risks while capitalizing on the transformative potential of tokenized rewards. By structuring LER as a utility-focused, non-speculative loyalty mechanism, issuers can leverage exemptions while fostering innovation in tokenized ecosystems.

Utility-Only and Non-Transferable Design

A cornerstone of LER’s compliance strategy is structuring LER voucher rewards as utility-only, non-transferable credits or soulbound tokens (SBTs). This avoids secondary markets and yield or annual percentage yield (APY) framing by regulators which helps mitigate classification as regulated financial instruments. In the European Union, MiCA defines utility tokens as crypto-assets providing access to goods or services without investment characteristics. LER as

⁹⁶ [*Reves v. Ernst & Young*, 494 U.S. 56 (1990); <https://casetext.com/case/reves-v-ernst-young>.
Landreth Timber Co. v. Landreth, 471 U.S. 681 (1985);
<https://casetext.com/case/landreth-timber-co-v-landreth>.]

⁹⁷ [7 U.S.C. § 1a(9); *CFTC v. McDonnell*, 287 F. Supp. 3d 213 (E.D.N.Y. 2018);
<https://law.justia.com/cases/federal/district-courts/new-york/nyedce/1:2018cv00361/411787/29/>.]

⁹⁸ [FinCEN, *Application of FinCEN’s Regulations to Persons Administering, Exchanging, or Using Virtual Currencies* (Mar. 18, 2013);
<https://www.fincen.gov/sites/default/files/shared/FIN-2013-G001.pdf>. FinCEN, *CVC Guidance* (May 9, 2019);
<https://www.fincen.gov/sites/default/files/2019-05/FinCEN%20CVC%20Guidance%20FINAL.pdf>.]

non-transferable rewards with no monetary value or profit expectation are exempt from MiCA's white paper and issuer authorization requirements.⁹⁹

In the UK, the Financial Conduct Authority's Policy Statement PS23/6 on cryptoasset financial promotions stipulates that non-transferable loyalty rewards without resale potential evade financial promotion restrictions, provided they are marketed as perks rather than investments.¹⁰⁰ Under U.S. law, the Howey test from SEC v. W.J. Howey Co. (1946) determines whether a scheme is an investment contract. LER as utility-only rewards lack profit expectations and as such fail the "expectation of profits" prong, as affirmed by SEC guidance on non-speculative tokens.¹⁰¹ To implement these legal requirements, LER can utilize SBTs to ensure non-transferability. By implementing these design requirements, LER ensure voucher rewards derive value solely from ecosystem utility, that is, from discounts or cashback. This design aligns with loyalty exemptions across jurisdictions.¹⁰²

Absence of Fiat Par-Redemption and Limited Acceptance

LER must avoid cash-out rights or fiat par-redemption to prevent classification as electronic money tokens (EMTs) or regulated payment services. Because of this design requirement, LER may need to constrain their customers to voucher acceptance in a closed-loop ecosystems of qualifying merchants. Under MiCA, EMTs are crypto-assets pegged to a single fiat currency with redemption obligations, requiring issuers to be authorized as credit or electronic money institutions, maintain reserves, and ensure redemption at par value.¹⁰³ By limiting voucher rewards to non-redeemable utilities within specific merchant networks, LER avoids qualifying under EMT status and aligns with exemptions for limited-use vouchers. This LER design feature

⁹⁹ [Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>; ESMA, *MiCA: What Does It Mean for Crypto-Asset Issuers and Service Providers?*, European Securities and Markets Authority (July 1, 2024), https://www.esma.europa.eu/sites/default/files/2024-07/ESMA75-453128700-295_MiCA_Overview.pdf].

¹⁰⁰ [Financial Conduct Authority, *Financial Promotions Rules for Cryptoassets: Policy Statement PS23/6*, FCA (June 8, 2023), <https://www.fca.org.uk/publication/policy/ps23-6.pdf>; Financial Conduct Authority, *Cryptoassets: Our Work*, FCA (last visited Aug. 29, 2025), <https://www.fca.org.uk/firms/cryptoassets>]

¹⁰¹ [SEC v. W.J. Howey Co., 328 U.S. 293 (1946), https://en.wikipedia.org/wiki/SEC_v._W._J._Howey_Co.; U.S. Securities and Exchange Commission, *Framework for 'Investment Contract' Analysis of Digital Assets*, SEC (Apr. 3, 2019), <https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets>]

¹⁰² [Vitalik Buterin, *Soulbound*, Vitalik.ca (Jan. 26, 2022), <https://vitalik.ca/general/2022/01/26/soulbound.html>].

¹⁰³ [Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>; European Banking Authority, *Guidelines on the Application of the Definition of Electronic Money*, EBA (July 15, 2024), https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Guidelines/2024/1035642/EBA-GL-2024-03%20Guidelines%20on%20electronic%20money.pdf]

also avoids licensing under the Second Electronic Money Directive (EMD2, Directive 2009/110/EC) and the Second Payment Services Directive (PSD2, Directive 2015/2366/EU). These directives regulate electronic money issuance and payment services, respectively, by excluding non-monetary, ecosystem-bound rewards from safeguarding and reporting obligations.¹⁰⁴ Practically, LER should confine voucher loyalty rewards to ecosystem-specific redemptions, that is, merchant discounts. This LER design limits exposure to payment regulations while preserving its loyalty-driven purpose.

Separation of Equity and Rewards

A key legal compliance strategy for LER is maintaining an obvious separation between equity tenure verification and reward attribution. This separation ensures voucher loyalty rewards function as loyalty entitlements without representing equities, dividends, or profit shares. In the U.S., the Howey test requires an investment with an expectation of profits from the efforts of others. By verifying equity holding periods solely to trigger the issuance of vouchers as non-speculative utilities, LER avoids this Howe prong. Voucher loyalty rewards derive from consumer engagement and not from investment returns.¹⁰⁵ This is reinforced by *SEC v. Landreth Timber Co.* (1985), where the court held that stock sales are securities if they carry equity attributes like dividends or voting rights. Therefore, LER rewards cannot include such features. LER function as independent voucher loyalty perks and as such evade securities classification.¹⁰⁶ In Europe, MiCA distinguishes utility tokens from financial instruments under the Markets in Financial Instruments Directive (MiFID II). LER's voucher loyalty utility-only design prevents reclassification as a transferable security.¹⁰⁷

Right-Sized Anti-Money Laundering Measures

LER require customized anti-money laundering (AML) protocols, which can range from basic identity verification for rewards that do not involve asset transfers to comprehensive compliance standards akin to those for Virtual Asset Service Providers (VASPs) when transfers are enabled. As outlined in the Financial Action Task Force (FATF) VASP Guidance, entities facilitating virtual asset transfers must adhere to rigorous AML and counter-terrorist financing (CFT) requirements.

¹⁰⁴ [Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on Electronic Money, Official Journal of the European Union (Oct. 10, 2009), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0110>; Directive 2015/2366/EU of the European Parliament and of the Council of 25 November 2015 on Payment Services, Official Journal of the European Union (Dec. 23, 2015), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32015L2366>].

¹⁰⁵ [*SEC v. W.J. Howey Co.*, 328 U.S. 293 (1946), https://en.wikipedia.org/wiki/SEC_v._W._J._Howey_Co.; U.S. Securities and Exchange Commission, *Framework for 'Investment Contract' Analysis of Digital Assets*, SEC (Apr. 3, 2019), <https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets>]

¹⁰⁶ [*SEC v. Landreth Timber Co.*, 471 U.S. 681 (1985), <https://supreme.justia.com/cases/federal/us/471/681/>]

¹⁰⁷ [Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on Markets in Financial Instruments, Official Journal of the European Union (June 12, 2014), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32014L0065>]

These include know-your-customer (KYC) procedures to verify user identities, ongoing transaction monitoring to detect suspicious activity, and compliance with the Travel Rule for exchanging originator and beneficiary information.¹⁰⁸ In the UK, the Money Laundering, Terrorist Financing and Transfer of Funds Regulations 2017 (MLR 2017) require crypto firms to register with the FCA and implement risk-based AML programs. For non-transferable voucher LER rewards, minimal KYC suffices, but value-transfer features trigger enhanced due diligence.¹⁰⁹ In the EU, MiCA aligns with FATF, mandating VASP registration for crypto-asset transfers, but exempts non-monetary loyalty rewards.¹¹⁰ LER should employ ZKPs or anonymized attestations to minimize identity collection for non-transferable rewards, applying VASP-grade measures only where transferability exists, balancing compliance with GDPR privacy obligations.¹¹¹

Tax, VAT, and Escheat Compliance

LER must incorporate robust measures to handle income tax, value-added tax (VAT), and escheat requirements, thereby mitigating potential fiscal risks. Within the European Union, the VAT Directive (2006/112/EC) and the Voucher Directive (2016/1065) distinguish between single-purpose vouchers—taxable upon issuance—and multi-purpose vouchers, which are taxed only at the point of redemption. LER rewards that are designed for consumption and non-transferable could align with the multi-purpose category, allowing VAT to be deferred until redemption and thus postponing any tax liability.¹¹² In the U.S., non-cash voucher loyalty rewards are typically exempt from income tax as promotional benefits. However, escheat obligations under the Revised Uniform Unclaimed Property Act (RUUPA, 2016) require issuers to report dormant rewards to states after specified periods. This makes dormancy policies like

¹⁰⁸ [Financial Action Task Force, *Updated Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers*, FATF (Oct. 2021), <https://www.fatf-gafi.org/media/fatf/documents/recommendations/Updated-Guidance-VA-VASP.pdf>; Financial Action Task Force, *Targeted Update on Implementation of the FATF Standards on Virtual Assets and VASPs*, FATF (June 2024), <https://www.fatf-gafi.org/media/fatf/documents/recommendations/Targeted-Update-Implementation-FATF-Standards-Virtual-Assets-VASPs.pdf>]

¹⁰⁹ [The Money Laundering, Terrorist Financing and Transfer of Funds (Information on the Payer) Regulations 2017, UK Statutory Instruments (2017), <https://www.legislation.gov.uk/ukSI/2017/692/contents/made>]

¹¹⁰ [Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>]

¹¹¹ [Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on Data Protection, Official Journal of the European Union (May 4, 2016), <https://eur-lex.europa.eu/eli/reg/2016/679/oj>]

¹¹² [Council Directive 2006/112/EC of 28 November 2006 on the Common System of Value Added Tax, Official Journal of the European Union (Dec. 11, 2006), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32006L0112>; Council Directive (EU) 2016/1065 of 27 June 2016 Amending Directive 2006/112/EC on Vouchers, Official Journal of the European Union (July 1, 2016), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016L1065>]

expiration rules necessary to comply with unclaimed property laws.¹¹³ LER should adopt escheat-compliant mechanisms, such as automatic expiration or reversion. This would help mitigate liabilities while ensuring tax hygiene across jurisdictions.

Governance and Internal Controls

Strong governance forms the cornerstone of any successful LER program. This involves several key preparatory steps before launch: drafting classification memoranda, conducting reviews of financial promotions, performing data protection impact assessments (DPIAs), evaluating whether the program qualifies as a money services business (MSB) or electronic money institution (EMI), and developing thorough consumer terms and conditions (T&Cs). At its core, a classification memorandum should carefully assess LER against established frameworks like the Howey Test, MiCA regulations, and the Markets in Crypto-Assets Regulation (MLR) to verify that it does not constitute a security. This analysis then informs marketing strategies, ensuring alignment with guidelines such as the FCA's PS23/6, the SEC's antifraud provisions, and the EU's Unfair Commercial Practices Directive (2005/29/EC).¹¹⁴ A DPIA, mandatory under GDPR for high-risk data processing (e.g., holder verification), must assess data flows and mitigation strategies to ensure privacy compliance.¹¹⁵ An MSB/EMI matrix evaluates U.S. FinCEN registration needs for value transfers against EU EMI licensing under EMD2, ensuring appropriate licensing thresholds are met.¹¹⁶ Robust T&Cs and complaints mechanisms, aligned with consumer protection laws like the UK Consumer Rights Act 2015 and U.S. state consumer laws, further enhance LER's resilience. This ensures the sustainable deployment of LER in a complex regulatory landscape.¹¹⁷

¹¹³ [Uniform Law Commission, *Revised Uniform Unclaimed Property Act*, ULC (2016), <https://www.uniformlaws.org/committees/community-home?CommunityKey=8f4b3b84-0f2b-4820-8b86-7e6e35b2e1f9>; IRS, *Publication 525: Taxable and Nontaxable Income*, Internal Revenue Service (2025), <https://www.irs.gov/publications/p525>]

¹¹⁴ [Financial Conduct Authority, *Financial Promotions Rules for Cryptoassets: Policy Statement PS23/6*, FCA (June 8, 2023), <https://www.fca.org.uk/publication/policy/ps23-6.pdf>; Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 Concerning Unfair Business-to-Consumer Commercial Practices, Official Journal of the European Union (June 11, 2005), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32005L0029>]

¹¹⁵ [Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on Data Protection, Official Journal of the European Union (May 4, 2016), <https://eur-lex.europa.eu/eli/reg/2016/679/oj>]

¹¹⁶ [Financial Crimes Enforcement Network, *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, FinCEN (Mar. 18, 2013), <https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering>; Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on Electronic Money, Official Journal of the European Union (Oct. 10, 2009), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32009L0110>]

¹¹⁷ [Consumer Rights Act 2015, UK Public General Acts (2015), <https://www.legislation.gov.uk/ukpga/2015/15/contents/enacted>]

Conclusion

LER is a compelling innovation at the intersection of blockchain technology, loyalty mechanisms, and capital markets. LER address the evolving demands for retention, efficiency, and democratization in a post-metaverse financial landscape. By extending time-weighted, utility-only voucher loyalty rewards to holders of equities or tokenized assets without liquidity constraints or speculative yields, LER bridges traditional commerce with decentralized finance. As such, LER increase ecosystem participation while mitigating regulatory risks.¹¹⁸ This article has demonstrated LER's alignment with the proliferation of stablecoins as onchain Eurodollars, the Silicon Valley pivot toward tokenized rewards, and a bifurcated architecture that optimizes benefits for consumers and issuers alike.¹¹⁹ Key contributions include a smart contract design for automated accruals, off-balance sheet accounting treatment to enhance issuer capital efficiency, privacy-preserving verification pipelines for off-chain and on-chain assets, and a \$1 trillion-plus TAM driven by the great reallocation from fixed income to risk assets.¹²⁰

Findings in this article underscore LER's potential to reduce holder churn by 20-50%, increase merchant throughput through revenue-generating redemptions, and democratize capital access. LER accomplish this by enabling everyday consumers to accrue dividend-like benefits via e-commerce engagement. All within a risk-lite framework that aligns with emerging regulations like the GENIUS Act and MiCA.¹²¹ LER implementation challenges include verification complexities and regulatory uncertainties. Such challenges are, however, surmountable through utility-focused voucher designs and governance controls. This positions LER as a scalable alternative to traditional loyalty programs and yield-bearing DeFi instruments.¹²²

¹¹⁸ [The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-programs.html>]

¹¹⁹ [Dan Roberts, Stablecoins and National Security: Learning the Lessons of Eurodollars, Brookings (Apr. 17, 2024), <https://www.brookings.edu/articles/stablecoins-and-national-security-learning-the-lessons-of-eurodollars/>]

¹²⁰ [Global Bonds Have Lost \$10 Trillion in Market Value Since 2021, Bloomberg (Sept. 20, 2022), <https://www.bloomberg.com/news/articles/2022-09-20/global-bonds-have-lost-10-trillion-in-market-value-since-2021>]; Money, Tokens, and Games: Blockchain's Next Billion Users and Trillions in Value, Citi Global Perspectives & Solutions (2023), <https://www.citivelocity.com/citigps/money-tokens-and-games/>]

¹²¹ [Latham & Watkins LLP, The GENIUS Act of 2025 Stablecoin Legislation Adopted in the US, Latham & Watkins (July 24, 2025), <https://www.lw.com/en/insights/the-genius-act-of-2025-stablecoin-legislation-adopted-in-the-us>; Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on Markets in Crypto-Assets, Official Journal of the European Union (June 9, 2023), <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>]

¹²² [Tokenization of Real-World Assets: Opportunities, Challenges and the Path Ahead, Katten (Aug. 7, 2025), <https://katten.com/tokenization-of-real-world-assets-opportunities-challenges-and-the-path-ahead>].

Broader implications of LER include the reshaping financial inclusion, where LER democratizes yield opportunities amid a \$10 trillion capital shift. LER have the potential to disrupt \$500 billion in loyalty markets by 2030 while enhancing issuer profiles through lower borrowing costs and improved retention.¹²³ LER limitations include policy risks from evolving securities and stablecoin standards, and the need for empirical pilots to validate retention uplifts. Future research should explore LER's integration with artificial intelligence for personalized attributions and cross-jurisdictional case studies to refine compliance strategies. Ultimately, LER exemplifies how blockchain can harmonize commerce and capital, paving the way for a more inclusive, efficient digital economy.¹²⁴

¹²³ [The Future of Loyalty Programs, Deloitte (2025), <https://www2.deloitte.com/us/en/insights/industry/retail-distribution/future-of-loyalty-programs.html>]

¹²⁴ [Kraken and Backed Announce Strategic Collaboration with Tron DAO to Broaden Access to Tokenized Equities, CoinTelegraph (2025), <https://cointelegraph.com/press-releases/kraken-and-backed-announce-strategic-collaboration-with-tron-dao-to-broaden-access-to-tokenized-equities>]