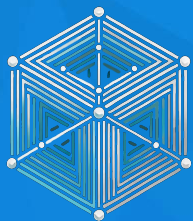




Beyond the Blockchain

How Financial Institutions Are Entering the World of Crypto

Grzegorz Timoszek



1st International
On-chain Economy
Conference

©2024 7bulls.com sp. z o.o. All rights reserved. This document contains trade secrets of 7bulls.com. Disclosing in whole or in part to any third party requires a prior written consent of 7bulls.com

Agenda

- ◆ An honest overview
- ◆ Is blockchain already mainstream?
- ◆ CeX & DeX
- ◆ RWA & stablecoins
- ◆ L2s
- ◆ Private validium
- ◆ Identity & KYC

Blockchain - real world assessment

- L1 networks are slow (many are very slow)
- Poor Developer Experience and Tooling
- Issues with decentralization
 - ETH + Lido, Solana
- Cross-Chain Fragility
 - even between L2s
- Security issues

Why blockchain is already successful

▲ #	Coin		Price	1h	24h	7d	24h Volume	Market Cap
☆ 1	 Bitcoin BTC	Buy	\$110,945	▼ 0.1%	▲ 2.3%	▲ 7.5%	\$56,165,012,881	\$2,203,897,653,419
☆ 2	 Ethereum ETH	Buy	\$2,636.93	▼ 0.1%	▲ 5.2%	▲ 4.0%	\$30,823,785,065	\$318,284,016,701
☆ 3	 Tether USDT	Buy	\$1.00	▼ 0.0%	▼ 0.0%	▲ 0.0%	\$94,601,455,375	\$152,429,448,498
☆ 4	 XRP XRP	Buy	\$2.41	▼ 0.3%	▲ 1.5%	▼ 0.5%	\$3,584,505,814	\$141,685,974,533

- No intermediaries
- Global accessibility
- Programmable Automation (smart contracts)
- Composability (DeFi Legos, Open Zeppelin, dApps)
- Robust Operating Environment (Infrastructure and Libraries)

Blockchain is already mainstream

- Coinbase (S&P500), Binance, Bitget
- USDT, USDC
- BUIDL, BENJI,
- Securitize
- Bitcoin, Ethereum, Ripple, Tron
- Block Inc.

CeX vs DeX

Aspect	CeX (Centralized Exchange)	DeX (Decentralized Exchange)
Composability	Limited; closed systems, no permissionless smart contract integration; API-based.	Highly composable; protocols can be combined (“money legos”); open to any contract.
Security	Custodial: user funds are held by the exchange—at risk of hacks, internal misuse.	Non-custodial: user keeps control of assets; smart contract risk, but no custody.
Costs	Trading fees, deposit/withdrawal fees, sometimes hidden spreads; may be lower for large traders.	On-chain gas fees (variable), protocol fees; can spike during network congestion.
Transparency	Limited; order books and reserves are not always public; possible internal trading.	Fully transparent: all trades and liquidity visible on-chain; no hidden activity.
User Experience	Fast, smooth UX; fiat on/off ramps; customer support.	Slower (block time), no fiat, user manages keys; can be complex for beginners.
Innovation Speed	Slow—new assets and features are curated, risk-based.	Fast—anyone can launch new tokens/pools; high experimentation and risk.
Flexibility	Asset list is limited and curated.	Anyone can list/create a market instantly; censorship-resistant.
KYC/Regulation	Requires user verification; subject to government oversight.	Pseudonymous—no KYC/AML; regulation is evolving and may impact access.



Indicator	Binance	Coinbase	GPW (Warsaw Stock Exchange)
Avg. Daily Trading Volume	\$71.6 billion (spot + derivatives)	\$2.88 billion (spot only)	\$560 million
Quarterly Trading Volume	\$2.2 trillion (Q1 2025, spot only)	\$312 billion (Q1 2024)	\$11.6 billion in April
Assets Under Custody / Mkt. Cap	\$100+ billion	\$335 billion (Q1 2024, assets on platform)	1.92 trillion PLN (~\$448 billion, total market cap)
Users	250 million registered users globally	108 million accounts; ~8 million monthly active	2M brokerage accounts

DeX Types

- AMM
 - Uniswap, Curve, Balancer, PancakeSwap
- Order book
 - dYdX, hyperliquid
- Aggregator
 - Jupiter, 1inch, CoW Swap

RWA

- Securitize
 - \$4B+ On-chain (including BUILD)
 - 550K+ Accounts
- RealT
 - 65K+Registered Investors
 - \$24+ million In rental income distributed
- Ondo Finance
 - USDY, a tokenized yield-bearing stablecoin
- Centrifuge
 - tokenizing RWAs and using them as collateral for on-chain lending

Stablecoins

Indicator	Visa & Mastercard	USDC & USDT
2024 Transaction Volume	~\$15.8 trillion (first 9 months)	USDC: >\$20 trillion, USDT (TRON only): \$5.46 trillion
Market Capitalization	Visa: \$364.9B, Mastercard: \$328.8B	USDC: \$43.9B, USDT: \$137.5B
Monthly Peak Volume	Not specified	USDC: \$1 trillion (Nov 2024)

- Instant payments
- Cross border payment
- Multichain

Yield bearing tokens

Category	Example	Yield Type	Typical APY
Staking	ETH, DYDX	Protocol inflation	4–15%
Lending	Aave, Compound	Interest payments	2–10%
LP Tokens	Uniswap, Curve	Trading fees	5–50%+ (variable)
Liquid Staking Derivatives	stETH, rETH	Staking + liquidity	~5%
RWA Tokens	USDY, BUIDL	Treasury yields	4–6%
Revenue-Sharing Tokens	GMX, Curve	Protocol income	Variable
Yield Bearing Stablecoins	sUSDS, sUSDe	Yield, fully liquid	Variable

L2s - stacks

L2	Tech Stack	Backed By	Main Use Case
Arbitrum	Custom rollup	Offchain Labs	DeFi, DAOs, general scaling
Optimism	OP Stack	Optimism Collective	Funding public goods, scaling
zkSync	ZK Stack	Matter Labs	Privacy, scalability via ZK tech
AggLayer	ZK Stack	Polygon	Interoperability
StarkNet	ZK rollup	Starkware	Scaling Ethereum + Bitcoin

L2s - key technology

- Rollups
 - Optimistic rollups, ZK rollups
- Bridging
 - Tokens & messages
- Cross-chain messaging
 - LayerZero, Wormhole, Connex
- Oracles
- Native Account Abstraction
 - Gasless transactions, multi-sig by default, social recovery, session keys, automation

L2s - new things just right the corner

- Soneium
 - Aims to bridge web2 with web3
 - Gaming, music, film,...
- Ink
 - Connecting DeFi with CeFi
- World Chain
 - Biometric ID, Real world onboarding facilities
 - Human centered
 - Real world onboarding facilities
- Base
 - Retail adoption
 - Coinbase backed

L2s - enterprise lead

- EY – Nightfall (ZK-Rollup)
 - Purpose: Private transactions on Ethereum for enterprise operations
- Deutsche Bank – Project Dama 2 (with ZKsync)
 - Purpose: Compliant public-permissioned Ethereum L2
- Converge network (Securitize + Ethena)
- Canton Network
 - Purpose: Financial market infrastructure: trading of tokenized bonds, cross-bank data exchange, global market integration
 - Participants: Goldman Sachs, Microsoft, Deloitte, Deutsche Börse, BNP Paribas
- Axoni – Veris Platform
 - Purpose: Real-time equity swap and derivatives reconciliation between major asset managers and clearinghouses (e.g., OCC, BlackRock)
 - Used by BlackRock, OCC, Nasdaq, and Cboe

Private validium

How It Works

- Transactions are processed off-chain in a private environment.
- A validity proof is generated (e.g., “this computation was done correctly”).
- The proof is submitted to a verifier contract on L1 (e.g., Ethereum).
- The L1 accepts the batch as valid without knowing the actual data.

Examples

- dYdX - All trades and balances are kept off-chain to preserve speed and privacy, but transaction correctness is verified with ZK-STARK proofs (in batches).
- Immutable X - NFT transactions (minting, transfers, orders) are processed off-chain to minimize gas usage and latency. A ZK-STARK proof of correctness is generated periodically for all batched transactions.

Identity and KYC

Identity

- World project
- QuarkID
- China RealDID

KYC

- Securitize
- UAE KYC Blockchain Platform
- Kinto



Delivery manager

Grzegorz Timoszuk

gtimoszuk@7bulls.com

mob. +48 698 391 311

7bulls.com Sp. z o. o.

al. Armii Ludowej 26

00-609 Warsaw, Poland

tel. +48 22 583 10 60

www.7bulls.com