

ACCELERATING BUSINESS DECENTRALIZATION

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#DECENTRATECH



Public Blockchains - Platforms and Businesses Applications

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Online Meetup Information/Tips

- We are using Zoom for our online meetups and events.
- Use the chat facility for mingling, introductions and shoutouts.
- Use the Q&A facility to ask questions of the host/presenter(s).



About The DecentraTech Collective

- A 'spin out' from the Austin Blockchain Collective.
- Global in remit. Will tap into Austin ecosystem but also innovation happening in other centers.
- Education and practical advocacy to accelerate decentralization technologies for business. An open community.
- Early focuses on DeFi, decentralized identity/verifiable credentials, decentralized networking and storage, Baseline Protocol.





DecentraTech Collective Partners

- Thanks to our founding Partners – Lighthouse Partners, Massing PR and Capital Factory (Texas).
- Partners provide funding and in-kind support to allow the DecentraTech Collective to provide broad education services, mostly for free or low cost. Partners benefit from visibility and industry leader association.
- The DecentraTech Collective’s practical advocacy services tap into offerings provided by Partners on best commercial terms to accelerate business adoption of decentralization technologies.



Decentralization Technologies aka DecentraTech

The DecentraTech Stack enables decentralized applications (DApps) and results in decentralized business processes. It includes:

- Blockchain and DLT
- Cryptographic Proofs (ZKP)
- Smart contracts
- Peer-to-peer messaging
- Decentralized storage
- Edge computing
- Serverless computing and API management/marketplaces
- Web 3.0 approaches, such as SSI and 'own your data'



Note These #AustinBlockchain Dates

See the DecentraTech Collective Meetup Group and RSVP for:

Monday, June 28, 1pm CT – #AustinBlockchain Conversations online with Joseph Kelly, Unchained Capital.

Thursday, July 1, 6pm CT - #AustinBlockchain Q&A & Cocktails in-person with the Unchained Capital team.





Today's Presentation

Public Blockchains – Platforms and Business Applications



Setting the Scene

- Public Blockchain Characteristics.
- Public Blockchain Business Landscape/Trends.
- Many Public Blockchains.



Public Blockchain Characteristics

- Open - no permission required to join, read, write, mine/validate.
- In general, public blockchains aspire to support many geographically distributed miners (to prevent hacks).
- Hopefully, public blockchains are 'always on', available everywhere.
- Generally, public blockchains offer lower performance and less scalability vs private blockchains.
- Usually, a native cryptocurrency is supported to reward miners.



Public Blockchain Business Landscape/Trends

- End 2019 EY/Forrester survey found 75% of enterprises exploring public blockchains for business applications.
- Hyperledger embracing public blockchains, e.g. Hyperledger Besu.
- Hedera Hashgraph has global name-brand corporate investors/board.
- Decentralized Finance, NFTS, Verifiable Credentials are key apps.
- Many are well funded by crypto/token sales.
- Huge focus for VC firms – A16z, DCG, Paradigm, Fabric, Outlier, Multicoon, Castle Island, Galaxy, Pantera, Union Square.



(Too) Many Public Blockchain Platforms - 1

- > Ethereum (several variants)
- > Polkadot
- > Cosmos
- > VeChain
- > Binance Chain
- > Algorand
- > Cardano
- > NEM
- > Solana
- > NEAR
- > Hedera Hashgraph
- > Decred
- > Factom
- > EOS



Many Public Blockchain Platforms - 2

- > IOST
- > Wanchain
- > DigiByte
- > Shardus
- > Kadena
- > Tezos
- > Horizen
- > IOTA
- > Stellar
- > Nano
- > Monero
- > Flow
- > Telos
- > Oh, also Bitcoin



Examples of Public Blockchain Platforms

- Ethereum
- Hedera Hashgraph
- IOTA
- Polkadot
- Solana



Ethereum

- Community run ... “thousands” of Dapps.
- Project origin in 2013. Launched in 2015.
- Several variants, including Ethereum Classic and Quorum.
- Commercial supporters include EY, ConsenSys, Microsoft.
- Enterprises sometimes implement as a private network.
- Public platform widely used for DeFi and NFTs.
- Reference implementation for Baseline Protocol.
- Ethereum 2 (Eth2) is coming to address scalability, sustainability, security. Interim improvements – EIP 1599 – to lower gas prices.



Hedera Hashgraph

- Decentralized governance at scale.
- Project origin in 2012. Mainnet launched in 2018.
- Proof-of-stake public (but currently permissioned) Directed Acyclic Graph (DAG) ledger with patented Hashgraph consensus.
- Owners, governance council/node operators and commercial supporters include IBM, Google, Boeing, Deutsche Telecom, Tata, Wipro, Avery Dennison, Nomura.
- Proof for IoT records, content, product authenticity, tokenizing assets.
- 10,000+ transactions per second on single shard.



IOTA

- Securing data ... for digital lives ... connecting IoT.
- Project announced in 2015 (Jinn work predated it).
- DAG known as the Tangle.
- Commercial supporters include Dell, Jaguar/Land Rover, OMG
- No fees, designed for low power IoT devices.
- Targeted at mobility, smart city, supply chain applications.
- Currently partly centralized. IOTA 2.0 to be fully decentralized.



Polkadot

- Web 3.0 scalability and interoperability.
- Founded by former Ethereum Co-Founder and CTO.
- Project announced in 2016. Mainnet in production since 2020.
- Polkadot is a platform for building blockchain networks (parachains) and connecting them together. Parachains are based on a framework called Substrate.
- Allows blockchains to be built and customized to particular applications.
- VC and institutional investment interest increasing.
- 400+ projects built on Polkadot. Including Acala for DeFi, Ocean Protocol for data ownership.



Solana

- Blazing speed, low fees, censor resistant.
- Project originated in 2017. Mainnet beta live in 2021.
- Proof-of-Stake consensus, offering 50,000 transactions per second leveraging 'proof of history' for block ordering.
- Investors include major VC firms – A16z, Alameda, Polychain, Jump Trading – into company (\$335 million) and ecosystem funds.
- Early projects include Audius (music), Jet Protocol (lending), Serum (DEX), Terra (stablecoin)



Examples of Public Blockchain Applications

- Entrust
- Global Carbon Holding
- Mata Capital
- McLaren Racing
- MediLedger



Entrust

- Australian agri-tech specialist Entrust focusing on authenticity and track/trace of Australian fine wines.
- Leveraging Hedera Hashgraph for time stamping and immutability.
- Hashgraph chosen because it is “fast, cost-effective, secure and scalable”.
- Trials involves a dozen wine producers in Australia’s Clare Valley.
- Can track grapes through production, bottleing and distribution.
- Plans to track dairy products next.



Global Carbon Holding

- Italian GCH is creating and developing a marketplace for verified carbon credits, issued by companies of offset carbon emissions.
- Market was \$272 billion in 2020, growing at 20% but characterized by bad actors, lack of transparency and fraud.
- Offers tokenized carbon credits and leverages public blockchain technology from Algorand.
- Uses blockchain to take advantage of “transparency and immutability for all transactions in order to guarantee provenance.” Allows company to position itself as a trusted source of information.



McLaren Racing

- UK-based owner of Formula 1, Indycar and esports teams will create NFTs as part of fan experience programs.
- Multi-year technical partnership with Tezos.
- Tezos chosen because it allows McLaren to “share creative expression that is not offset by unnecessarily high energy consumption”.
- NFTs will showcase McLaren’s “illustrious racing heritage and renowned driver line-ups”. Fans can own “key pieces of our team.”
- Partnership includes Tezos branding on drivers’ race suits.



Mata Capital

- French real estate investment company is adopting blockchain company to automate processes related to its funds. Aims to expand participation by reducing minimum investment from 100 to 1 euros.
- Implemented technology from ConsenSys Codefi that leverages public Ethereum mainnet to tokenize securities from 3 funds, totaling 350 million euros.
- Also uses ERC 1400 smart contracts, a standard for financial assets. Implements KYC and other compliance controls.
- Real estate is world biggest asset marketplace - \$10 trillion in 2019.



MediLedger

- MediLedger is a decentralized ledger for pharmaceutical applications.
- Consortium of pharma and supply chain companies (US and Europe) – inc. Bayer, Pfizer, Gilead, Cardinal Health, McKesson – and technical steward Chronicled. Other partners inc. SAP, Accenture, Deloitte, GS1.
- Focusing on pharma supply chain apps, driven by DSCSA FDA regulations. Saleable returns is first app – a \$6 billion market.
- Uses Quorum public blockchain. Nodes operated by participants. Allows “business rules for transactions and shared data between companies ... enforced through blockchain without exposing any private data.”



Comments, Questions and Contacts

- Over to you for your comments and questions.
- Website: www.decentratechcollective.com
- Twitter: @DecentratechC
- LinkedIn page and Group
- Slack workspace
- Contact us via website or info@decentratechcollective.com.