

Digital Asset and CBDC Legislation Trends

“Put Automated Digital Trust to Work”

Jim Mason
DLT Architect, DTCC
jemason@ebt-now.com

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking, Payments
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

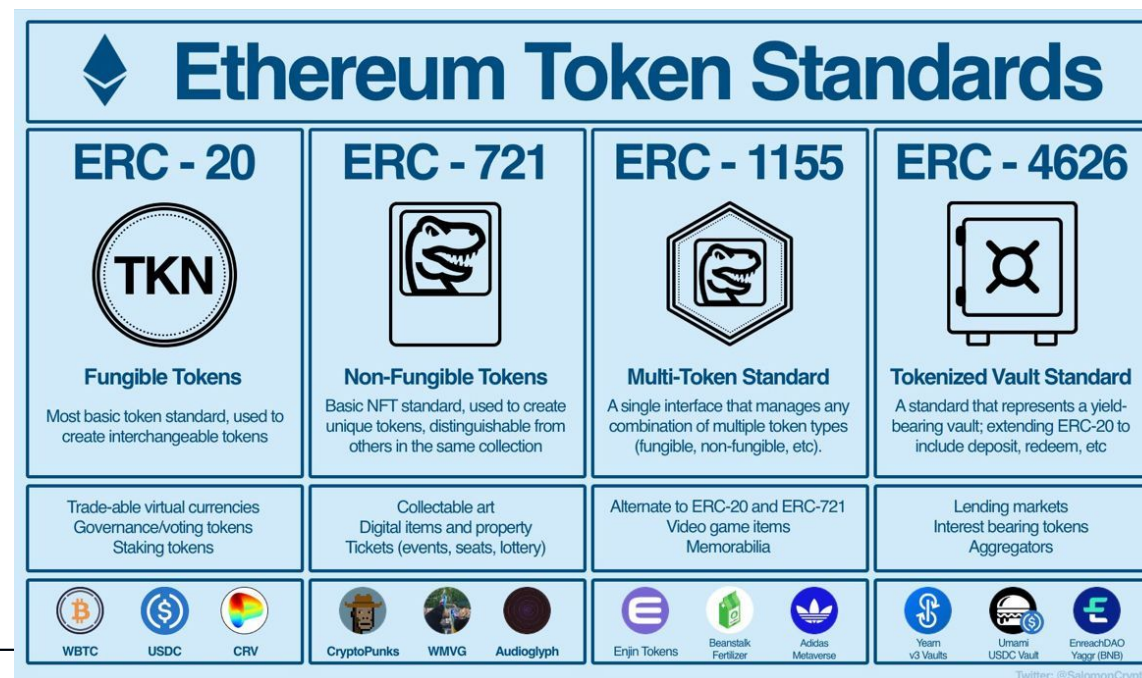
Digital Asset Types, Tokens, Wallets

● Digital Assets

- Digital Asset (wikipedia)
- A digital asset is anything that exists only in digital form and comes with a distinct usage right.
- Financial Assets
 - Bitcoin, Ether, other crypto
 - Stable coins: Tether, USD coin ..
 - Securities
 - CBDC: Central Bank Digital Currencies
- Physical Asset Proxies
 - Cars, Land titles
- Service Asset Proxies
 - Events,
- Rights Asset Proxies
 - DRM assets (music, books, ...)

● Tokens & Wallets

- Token Taxonomy: defines token types
- Digital Wallets: store different token types, digital credentials etc
- Fungible Token: all the same (eg Bitcoin)
- Non-Fungible Token: each different (art, domains)
- Anthony Day, IBM, Ethereum Token Standards



Token Economy

● Token Economy Features

- Tokenized Digital Assets
 - **Digital Asset represented by a token**
- Digital Wallets
 - Hold digital asset tokens, credentials
- Blockchain
 - a distributed ledger of permanent transactions on a network
- Smart Contract
 - a program that executes on a blockchain
 - usually enforces contract terms between parties (eg sell an asset ..)
- Marketplaces
 - many marketplaces use blockchains, tokens and smart contracts to trade digital assets

● Token Economy: Andy Martin, IBM

Token economy

Digital Asset



Tokenisation associates ownership, identity, governance & access rights

Smart Contract



Process codifies & automates the business model, organisation & governance for trading & use of digital assets

Blockchain



Shared, trusted, timestamped & distributed & decentralised source of the truth of that digital asset

Source, Andy Martin, IBM

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

Digital Asset Services: Banking, Exchanges, Custody

● Digital Asset Services Providers

- Digital Banking
 - new Digital Banks online offer digital asset services (Chime, Nubank, Bitbank)
 - existing Banks adding digital asset services (Citibank, more)
- Exchanges
 - Online markets where you can trade assets (coinbase, more)
- Custody services
 - Many digital banks, exchanges offer custody services to hold digital assets

● Questions to answer

- What assets are you investing in?
- How do you know which providers can be trusted?
- Are digital providers safer than existing financial providers? or Not?
- Should you keep your digital assets in your wallet on your phone? Why Not?
- What's good about unregulated providers?
- What's bad about unregulated providers?
- What transactions are taxable? will be taxable?
- Which assets have stable value and which fluctuate?
- Which providers are safer to use?
- Are my assets insured?

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

Taxation of Digital Assets

● Governments tax people, orgs

- People, organizations subject to taxes by jurisdiction
 - Governments (Federal, State, Local) have legal taxing authorities
 - Tax laws in effect are often very complex
 - Taxes may be based on:
 - income, property, sales, specific taxes (gas, alcohol, tobacco etc)
- Governments differ on how to tax
 - Governments change tax policies, basis and rates frequently
 - States, countries differ on what, how much to tax
 - US is pushing other countries to adopt a global minimum tax - why?

● Digital Asset Taxation

- Some countries have defined how digital assets are classified, regulated and taxed
- How should cryptocurrencies be regulated?
- US CFTC (Commodities Trade Commission) says crypto should be regulated as a commodity
 - new Lummis bill agrees
- SEC says SOME cryptos are really securities
 - should be regulated, taxed as securities
 - claims [9 cryptocurrencies on coinbase are really unregistered securities](#)
- US Treasury governs the fiat currency supply (dollars backed by the US government)
- If the US issues a “digital dollar” (CBDC), Federal Reserve will likely manage it

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

Innovations: Securities, Commodities, Banking

● Financial Services Innovation

- DeFi - Decentralized Finance
 - financial products and services built with tokens, smart contracts and blockchain often considered DeFi
 - The theory is intermediaries aren't required between to parties to transact
 - Reality is 2 parties rarely interact without an exchange or some other DeFi platform in the middle
- Candidate use cases include:
 - KYC, AML, OFAC compliance
 - insurance, payments, loans
 - asset management
 - digital identity and credentials (degrees, licenses etc)

● Governments React to Innovation

- Smaller countries Innovate faster
 - Estonia, Liechtenstein, Luxembourg, more
- Some Asian countries have led on crypto regulation
 - Singapore, Japan, Dubai more
- EU has been a leader on studies, regulation
 - ECB, WEF studies on crypto, digital asset use cases
 - EUBOF: [EU Blockchain Observatory & Forum reports](#)
- [US Executive Order on Responsible Development of Digital Assets](#) (3/9/2022)
- [Atlantic Council CBDC tracker](#)
- [Digwatch tracks digital identity projects](#)

Innovations: Digital Dollar Project

● Digital Dollar Project

- Why a digital dollar (CBDC)?
- “A digital dollar would help future-proof the greenback and allow individuals and global enterprises to make payments in dollars irrespective of space and time. We are launching the Digital Dollar Project to catalyze a digital, tokenized U.S. currency that would coexist with other Federal Reserve liabilities and serve as a settlement medium to meet the demands of the new digital world and a cheaper, faster and more inclusive global financial system.”

J. Chris Giancarlo, DDF founder

- Jennifer Lassiter is Executive Director of DDP
- The DDP works closely with its Advisory Group, Participants, and Pilot Partners to explore the challenges and opportunities of a U.S. CBDC through pilot projects

● DTCC Project Lithium: CBDC trades

- DTCC is building a prototype to support CBDC in the US clearing & settlement process as part of the DDP
- explore how a CBDC might operate in the U.S clearing and settlement infrastructure leveraging distributed ledger technology (DLT).
- The prototype, known as Project Lithium, will measure the benefits of a CBDC and inform the future design of the firm’s clearing and settlement offerings.
- It will also explore how a CBDC could enable atomic settlement, a conditional settlement that occurs if delivery and payment are both received at the same time.

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

Consumer Data Protection Concepts

● Privacy

- Sales Solicitation Laws
 - Do Not Call Laws, registries
 - Solicitations illegal in some areas
- EU has led the way in legislation with GDPR
- California Consumer Protection Act
 - covers some of GDPR
- New York Consumer Protection Act
 - covers use of private data as well
- more US states pushing legislation

● GDPR in the EU

Sets principles for lawful processing of personal data

- Processing includes the collection, organisation, structuring, storage, alteration, consultation, use, communication, combination, restriction, erasure or destruction of personal data
- Principles for Data Controllers include:
 - Lawfulness, fairness and transparency
 - Purpose limitation
 - Data minimisation
 - Accuracy
 - Storage limitation
 - Integrity and confidentiality (security)
 - Accountability
- Data controllers are responsible for complying with the principles and letter of the regulation. Data Controllers are also accountable for their processing and must demonstrate their compliance.

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking, Payments
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

EU MiCA ([Markets in Crypto Assets](#))

● MiCA concepts

- The European Commission's MiCA proposal is a regulatory framework developed to help regulate currently out-of-scope crypto-assets (stable coins etc) and their crypto-asset service providers in the EU and provide a single licensing regime by 2024.
- MiCA goals
 - Provide legal certainty for crypto-assets not covered by existing EU laws
 - To establish uniform rules for crypto-asset service providers and issuers at EU level
 - To replace existing frameworks for crypto-assets not covered by existing law
 - to establish specific rules for so-called 'stablecoins', including when these are e-money.

● MiCA features

- based on laws for traditional financial institutions, which does not make them easily applicable to cryptoassets.
- someone issuing certain cryptoassets must also issue a whitepaper. Cryptoasset service providers such as brokers, exchanges and wallet providers, will need a licence.
- Stronger liability for crypto custodians
- If a company gets a MiCA passport to operate in EU, it must apply for AML licences by country.
- Expected impacts
 - address the risks of interconnectedness
 - regulate crypto staking and lending
 - address the regulation of decentralized finance where there are no intermediaries
 - regulate the issuance of crypto-assets where there is no identifiable issuer such as Bitcoin

Wyoming Digital Asset Laws

● Wyoming Digital Asset Laws

- In the US Federal law supercedes State laws
- Banking and Insurance were not part of the US Constitution and left to the States to regulate
- a digital asset is as “a representation of economic, proprietary or access rights that is stored in a computer readable format and is either a digital consumer asset, digital security or virtual currency.”
- recognizes digital assets as property – general intangible property – within the general Wyoming scheme of property rights, property protection and enforcement, sale, lease, licensing, assignment and any other disposition of property available to other forms of intangible property.
- digital assets are property subject to the UCC in which a security interest can be perfected, opposable in all U.S. jurisdictions.

● Wyoming Law features

- provides for use of “smart contracts” by secured parties in digital assets, algorithm or other code-controlled automated transactions, including transferring and taking proprietary control of a digital asset.
- sets an opt-in framework for bank custodial services for digital assets and a jurisdictional framework of Wyoming courts over digital asset disputes
- bank custodial services enables use of Wyoming SPVs as investment fund vehicles holding blockchain digital assets, NFTs and cryptocurrency as fund assets
- AML and audit provisions included
- None of the custody banks for digital assets have been assigned master accounts by the Federal Reserve for over a year. This effectively prevents them from operating.

US Executive Order Responsible Digital Assets (2022)

● Executive Order Basic Facts

- 40 million people in US have invested in cryptocurrencies.
- Over 100 countries are exploring CBDCs as digital currency.
- US government has multiple departments and agencies that need to work with digital assets (IRS, Treasury, SEC, CFTC, Commerce, DOJ and more).
- goals include:
 - reinforce US leadership in the global financial system and technology
 - includes consumer protection, financial stability, national security, and climate risk
 - US lead in global governance of digital assets ("consistent with democratic values and U.S. global competitiveness").

● Executive Order features

- Key priorities:
 - consumer and investor protection
 - financial stability
 - illicit finance
 - U.S. leadership in the global financial system and economic competitiveness
 - financial inclusion
 - responsible innovation.
- Activities?
 - primarily directs all departments to study the effects of digital assets and a CBDC
 - Propose legislation features
 - **suggests digital assets are similar to traditional financial assets. should follow “same business, same risks, same rules.”**

US Lummis Bill on Digital Assets

● Lummis Bill features (1)

- defines which digital assets are commodities and which are securities
- Assigns regulatory authority over digital asset spot markets to the CFTC.
- Defines rules for stablecoins to protect consumers and markets and promote faster payments
- committee to advise lawmakers on fast-developing technology
- set disclosure requirements on digital asset service providers
- a study on digital asset energy consumption
- report on the development of a self-regulatory organization (SRO) and develop a proposal for its creation (like FINRA)

● Lummis Bill features (2)

- develop comprehensive, principles-based guidance relating to cybersecurity for digital asset intermediaries with NIST
- a regulatory sandbox for regulators on innovative financial technologies
- define the taxation of digital assets
- study risks associated with investing retirement savings in digital assets
- conduct an information security study around the digital yuan, China's central bank digital currency

Agenda

- Digital Asset Types, Tokens, Wallets
- Digital Asset Services: Banking, Exchanges, Custody
- Taxation of Digital Assets
- Innovations: Securities, Commodities, Banking, Payments
- Consumer Protection Concepts
- Key Legislation Trends
- Key Takeaways

Key Takeaways on Digital Assets, CBDC

● Key Takeaways (1)

- DeFi and Digital Asset technology, innovations represent both opportunities and risks to manage
- Smaller States and Countries lead legislation on financial innovations
- Asia and Europe led on regulation before US
- Private companies and partnerships are the leaders in financial innovation
- Funding comes from states, venture capitalists, firms and individuals
- Cryptocurrencies can have high rewards, risks
- Stable coins are key for digital commerce on crypto and other assets now
- CBDC (Central Bank Digital Currencies) are a form of digital sovereign currency (dollar etc) that can improve trade and market efficiencies

● Key Takeaways (2)

- Innovation in digital assets is only beginning
- Technology will always be ahead of regulation
- Governments need to stay current on innovations
- **“Trust is the fuel the world runs on .. and we’re low” Jim Mason**
- **“Automated Digital Trust can improve efficiencies, open opportunities, lower risk and improve economic well being” Jim Mason**
- Energy efficiency may become a legal requirement (Bitcoin ?)
- Healthy economies and peace probably depend on the right balance between globalization and national independence
- Stakeholder capitalism may be a good path to improve economic well being and inclusion overall

Thank you !

- Questions ?

