

Session Title: Tokenization and Real-World Assets

Session Chair: Masato Yamanaka

Session Notes Taker: anonymous student note taker

Please list the key points of your conversation and/or what you would like to share with your colleagues:

Presentation by Yamanaka:

- Tokenized securities represent an underlying traditional security
- Phase0: existing finance (phase=segment)
- Phase1: replace shareholders registers with permissioned blockchain
- Phase2: replace shareholders registers with permissionless blockchain
- Phase3: Self-Custodial wallet
- Phase4: On-chain

- Phase0
 - transfer Agents stores who own the stocks (shareholder register)(Digitalized)
 - Custody bank offers security
 - Transfer agent doesn't know UBO
 - Shareholder right stored in two DB (Transfer Agent B, security company)

- Phase1
 - Shareholder register replaced with Blockchain (permissioned)
 - Custodial wallets and token issuer's wallet access to the chain (No metamask)
 - Q: Why is a self-custodian wallet unneeded?
 - Permissionless doesn't mean no self-custodian (to prove it's actually signed by the entity)
 - Security token : holder = 1:1
 - Transfer Agent's role?

- Phase2
 - Permissionless Blockchain
 - Do we need a tamper-resistance DB for this?
 - Adding transparency
 - Permissioned smartcontract on Permissionless Blockchain
 - If plain ERC-20 token on permissionless Blockchain, the compliance problem appears (Token holders may be whitelisted)
 - Only one entity can update the whitelist? Or in a decentralized way?

- Two ways of using Blockchain
 - Storing all data (like ERC-20) for transparency
 - Storing all logs as zkp(hash) of the transaction happened off-chain

Presentation by William Remor:

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