

Blockchain tokens for gaming & collectibles

Thoughts & exchanges about blockchain in gaming & collectibles, and particularly on how token formats for flexible consumer usages could unfortunately lead to fragmentation (e.g. on Ethereum the cases of different token's types like ERC-20, ERC-223, ERC-721, ERC-1155, etc. are sometime difficult to manage for apps & wallets).

A list of some aspects to consider for these kind of tokens (rough, and high level):

- (non-)divisible
- amount (units)
 - unique (NFT)
 - limited edition numbers
 - open, not (yet) locked vs. locked
- attributes (characteristics)
 - additional info written within token on blockchain/contract(s)
 - link to parameters file or rich media (stored centralized vs decentralized, e.g. on another blockchain)
 - hash from parameters file or rich media
- contracts
 - identified/authorized (restricted or not, e.g. black- or white-list)
- features
 - identified/authorized
 - ownership
 - sending
 - swap
 - mass distribution (per wallet, as dividend)
 - trade orders: sell, buy (for DEX: units, price, period validity)
 - complex sell/buy, e.g. auction (unit & price as time function)
 - sell authorisation (for wallet): white-list (black-list)
 - (temporary) renting or sharing of tokens
- · group/family of tokens with sub-tokens
- issuer, ownership (of group/family, of individual token), renter, co-sharer
- usage by (d)apps
 - identified/authorized
 - etc.

2 last points about interoperability from BGA (Blockchain Game Alliance http://blockchaingamealliance.org/)

- (Last year) proposal with Json examples of digital assets collection https://blockchainizator.com/tmp2delete/JSON-proposal-blockchain-collection.html (slides overview available if desired)
- Blockchain Asset Metadata Standardization with a proposal named Blockchain Bean Assets (BBA)
 https://medium.com/@contact_39503/blockchain-game-alliance-launches-its-first-technical-working-group-today-april-19th-57a91d68e91c.

⇒ my advice by defining tokens formats in a blockchain: check previous experiences and put in place something modular to cover all use cases.

Nicolas Sierro - July 2019