BTP REPORT

MetaInsurance - Insurance of metaverse objects using blockchain

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PROBLEM OVERVIEW

Risks associated with NFTs

- Loss of private key
- Failure of the server that holds the actual digital asset
- NFT theft
- Copymints and copyright issue

In this project, we aim to design an insurance framework for metaverse objects like art, collectibles, virtual land and avatars using blockchain.

PROGRESS SO FAR

Current working on selecting and training a ML model that calculates

- NFT Valuation at the time of insurance proposal
- Risk Factor

For NFT Valuation, we extracted NFT data of top 100 collections by market cap to train on the following features to predict its value –

- First sale price i.e. price when it was first minted and sold
- Proposal cost price i.e. price paid by insurance proposer
- Floor sale price of collection
- List of sales
- Type of NFT [Art/ Collectible/ Virtual Land]
- Rarity based on attributes

Risk factor [0-1] is predicted on the basis of –

- NFT Valuation
- Storage medium of token and metadata
  Distributed storage like IPFS / Web Services like AWS / Others
- Security rating of wallet used
  Multi-factor authentication or not
  Secure cold wallets used or not
- Token standard of NFT smart contract
  Independent(pre-ERC721)/ ERC 721/ ERC998/ ERC1155
- Blockchain on which smart contract is deployed

FUTURE PLAN

- Train the model for NFT valuation and risk factor with satisfactory results.

Thereafter, work will be done to complete the insurance framework including –

- Application procedure
- Claim process
- Claim review process
- Use of other AI models
  - to prevent NFT plagiarism
  - to detect NFT wash trading