USING BLOCKCHAIN AND NON-FUNGIBLE TOKENS TO IMPLEMENT DECENTRALIZED REPOSITORY OF ENTERPRISE MODELS

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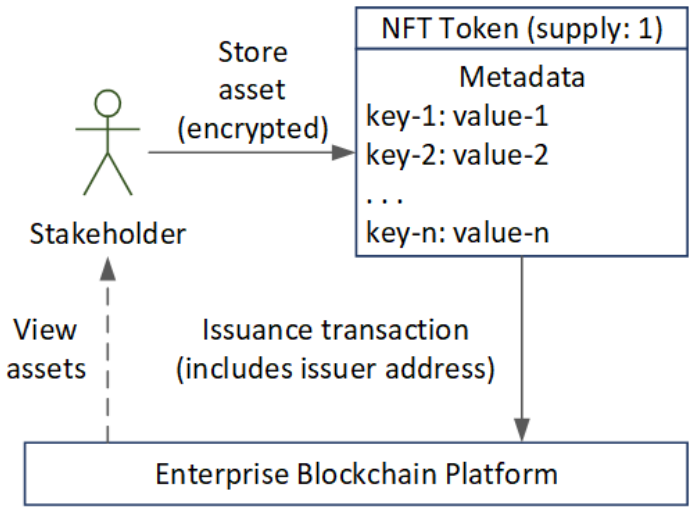
Introduction. After so called "crypto-boom" of 2016–2017 years, the Blockchain technology has become extremely popular. Despite Bitcoin cryptocurrency as the first well-known application of Blockchain technology was introduced back in 2010, it did not receive much attention, except from technology enthusiasts, until the end of 2016. Rapid growth of Bitcoin price has made cryptocurrencies, as well as "mysterious" in those time Blockchain technology, such popular and promising. However, nowadays Blockchain is still presented mostly in financial industry, where it is used as the base for thousands of cryptocurrencies traded on dozens of exchanges. Obviously there are a lot of Blockchain applications in other industries, such as decentralized governance, healthcare, and welfare services, supply chain, and logistics management. Blockchain usage for assets tokenization is probably one the most interesting applications, which assumes usage of tokens of the certain Blockchain platform to represent literally any physical or digital items. Unlike tokens used to represent monetary assets similarly to any other cryptocurrency, tokenization of unique items requires special non-fungible tokens (NFT). First NFT tokens standard, introduced on the Ethereum platform, was ERC-721, which was extended with more recent ERC-1155 standard. Currently NFT tokens are used mostly for crypto-collectibles (e.g. CryptoKitties) and digital arts. For now (March 2021) NFT tokens are having their best time.

Relevance. It is actually very important to design and support a corporate database for knowledge sharing within an organization. In multiple organizations knowledge is still more similar to "corporate folklore" than regulations.



Proposal. Hence, we propose an approach to design the storage of digital assets that represent the corporate knowledge (see. Fig. 1). Models, blueprints, guidelines, or other practice solutions developed or adopted by an organization can be stored in such database. In order to keep collected enterprise knowledge secured and traceable, it is proposed to use a decentralized storage based on the Blockchain platform for enterprise applications and services, such as Neblio [1]. Digital assets of the enterprise could be represented as NFT tokens with unique properties.

References:

1. Technology – Neblio // URL: https://nebl.io/technology/