



# Transforming real estate using blockchain and the metaverse

Blockchain and the metaverse are among the most promising emerging technologies in recent times. While blockchain is secure, transparent and immutable, the metaverse offers virtual reality experiences and lifelike user interactions. Over the years, significant obstacles have been encountered while attempting to reduce problems associated with asset sales in sectors like real estate through traditional means. Both blockchain and the metaverse can be leveraged to mitigate real-world problems, such as preventing real estate sale fraud.

## Problem statement

Monetary mismanagement and transactional fraud in real estate asset sales are serious problems that require immediate attention. Considering the limited efficiencies of the traditional strategies implemented to prevent real estate fraud, it is apparent that there is a need for more transparency in the process. According to the United Nations Economic Commission for Europe survey of 2019, only 48% of respondents confirmed the presence of measures for countering fraud associated with the properties near them.<sup>1</sup> Thus, it is crucial to find an effective solution to reduce real estate frauds.

## Issues encountered in real estate



Source: PwC

## Solution

To facilitate authentic transactions, we propose a solution that will utilise the metaverse and blockchain technologies and enable prospective buyers to tokenise their real estate assets, such as flats. Builders will benefit from this solution as it will allow them to understand the needs of potential buyers in a relatively easy manner. Interested buyers, for instance, will be able to purchase tokens representing different flats, including those under construction. The solution will then allow interested individuals to have a three-dimensional, completed view of the under-construction flats through the metaverse.

In addition, the owners of flat tokens can customise different features of the flat according to their preferences. Modifications to features like colour and texture of the walls can be easily conveyed to the builders, leading to high customer satisfaction. The use of virtual reality glasses can enable people to take a virtual tour of their flats of interest. Even the representation of different products in the flat, like refrigerators and air conditioners, is possible through non-fungible tokens (NFTs). Scanning the tokens representing the products displayed in the flats can notify the vendors selling such products. Therefore, both vendors and customers can benefit from such a solution.

## How PwC can help

We are developing an end-to-end platform solution that can help in minting NFTs associated with real estate assets. Using NFTs to represent real estate assets will considerably reduce fraudulent ownership claims. A corresponding metaverse for each NFT will also be incorporated in the solution. This will increase user trust in the authenticity of the asset and provide them with a three-dimensional virtual reality experience of the same in real time.

<sup>1</sup> [https://unece.org/sites/default/files/2021-10/Fraud\\_LA\\_E.pdf](https://unece.org/sites/default/files/2021-10/Fraud_LA_E.pdf)

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