

# NFTs In Music Industry: Potentiality and Challenge

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## 1. INTRODUCTION

The market for composers of music for film, TV or videogames is more complex and competitive than that of pop music. Revenues are lower and it is more difficult to achieve a stable and recognised position.

Since the 1990s, music and technology have been closely intertwined, and the composer community pays great attention to new ways of expression and innovative means of distribution. Unfortunately, the initial promises of democratization of the music business have been largely unfulfilled, due to the legal or commercial failure of bottom-up projects such as Napster or MySpace.

This short paper aims to address opportunities, challenges and possible drawbacks about the adoption of non-fungible tokens (NFTs) in the music composition market, exploring possible sustainable business models.

## 2. THE CONTEXT

Music composers' natural engagement is through publishers, serving as administrators of a composition. Their services usually include managing writers' catalogues, placing and promoting the composition, etc. (Kretschmer et al.1999). Usually, royalty distribution schemes are regulated so that the income is split between the author and the publisher, whose role consists of helping artists to develop their market and achieve a stable reputation (Bennett 2008).

Moreover, another source of income for film and TV composers is represented by libraries (Minibayeva & Dunn 2002). A music library consists of music-related materials for patron use, working as an agent allowing composers to realise income on licensing fees or as co-publisher, offering the

author a 50/50 income split, lower than a traditional co-publishing deal. Music libraries, however, provide an alternative revenue stream especially for composers of film music, TV, documentaries, and videogames.

### 2.1 Non-fungible tokens

Contemporary digitization is also applicable to music composition and the arise of new distribution media (Scherer 2006) facilitates composers to enlarge their possible audience through social media channels, such as Patreon (<https://www.patreon.com>) and Twitch (<https://www.twitch.tv/>), giving them the opportunity to develop their own fanbase and potentially earn more, increasing their visibility and social media reputation.

In this scenario, *Non-fungible tokens* (NFTs) technically enable composers to develop a new market, mainly targeted at direct users, amateurs, fans, a larger number of publishers, ensuring through the blockchain the possibility to verify authorship, authenticity, rights and associated royalties and their duration (Regner 2019; Wang 2021; Chevet 2018). NFTs, also known as digital contracts or, according to Ethereum naming convention, as *smart contracts*, are blockchain-based digital signatures used to authenticate digital assets. The simplest approach consists in transferring the ownership of the composition via NFT and keep the royalties as the author.

NFTs associated to a limited collection of music, for example, represent the opportunity for a fan to participate in the career of their favourite artists, supporting their work, the development of their reputation and earning from them.

Given how NFTs work, it is necessary to determine how to place it on the market. NFTs are mainly

linked to Ethereum Blockchain and placing an NFT on any marketplace, e.g., Opensea (<https://opensea.io/>) necessitates the ownership of an Ethereum Wallet, such as Coinbase (<https://www.coinbase.com/>) or Metamask (<https://metamask.io/>) and entails an initial fee that can be high, depending on demand, and therefore on the moment in which the operation is made. An initial assessment must therefore be made on the value attached to the NFT and inexperienced creators run the risk of losing their money in the process of selling their art.

Several options are available on the market, based on currencies other than Ether (ETH), e.g., Binance NFT Marketplace (BNB currency), Solana (Sol currency), and even non-crypto alternatives such as Coinbase. A GAS-free alternative is represented by Polygon Network (MATIC currency), an Ethereum-based platform that enables blockchain networks to connect and scale. The choice of platform affects both the trading currency of the digital asset, and the way in which such assets can be traded. As an example, minting an NFT on Polygon blockchain allows the creation of more than one edition of the same file, but it can't be auctioned, whereas using the Ethereum blockchain, it can, but not with multiple editions. Opensea, the main NFTs marketplace, allows its users to sell their assets in several currencies, on both Ethereum and Polygon blockchains, facilitating multi-platform trading.

Once the NFT is sold, the new owner may decide to resell it (at a fixed price or auctioned) and may also receive offers from other users. The original owner, retaining the copyright of the original file, may decide to mint more than one NFT using the same art piece, i.e., the same file, at the risk of devaluing his own art.

A case study worth mentioning as an example is ClownCore. They are a duo (saxophone and percussion) who play in disguise to conceal their identity. They launched an industrial project and minted their latest 4 songs as an NFT collection on Opensea (<https://opensea.io/collection/clowncoin>). These tracks were sold for a total of ETH 2.1922 (€ 6179.98 at today's exchange rate). Interestingly, their fanbase is very limited (only 180000 subscriptions on YouTube). Despite this, clowncoin3, which is the only NFT for sale is currently out at ETH 3.124 (\$ 10082.49 - € 8806.79)

The described case study shows some potential in using NFTs to enlarge authors' audience and market. Moreover, several business model could be designed to allow composers and musicians to get the most from their art.

At the time of writing, we are also about to conduct an experiment to assess the convenience of this simple business model. The NFT will be offered as a one-off – thus as a collector's item – to fans of the composers involved in the experiment (Bob and Barn). We aim to present the result (opportunities and possible drawbacks) in a further paper.

NFTs have also been criticized for their impact on the environment due to the energy consumption associated to the *minting* process and to the blockchain-based trading operations (Chohan and Paschen 2021). Moreover, despite its critics, NFTs appear an attractive opportunity especially in the current market sufferance due to the lack of income because of Covid-19 restrictions.

### 3. ACKNOWLEDGEMENTS

This research was funded by the Department of Philosophy "Piero Martinetti" of the University of Milan under the Project "Departments of Excellence 2018-2022" awarded by the Ministry of Education, University and Research (MIUR).

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