Monetization of non-fungible tokens

Media and entertainment
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1. Introduction

Blockchain technologies and innovative ways of conducting business have continued to flourish over the last several years. In particular, in 2021, we have seen a significant increase in activity with respect to non-fungible tokens (NFTs). Many media and entertainment (M&E) entities are utilizing these tokens as a means to further monetize existing assets (e.g., movies, music, video games, personal images, art). As NFT transactions continue to gain in popularity, this publication addresses some of the key considerations for M&E entities to be mindful of as they continue to enter into these arrangements. In addition, these considerations are written from the perspective of the party selling the NFT, rather than the party purchasing the NFT, unless otherwise noted.

An NFT is a non-fungible token that is created, maintained and transferred on a blockchain (typically, a public blockchain, such as the Ethereum) and represents ownership of a digital or physical asset, as discussed further below. The distinguishing factor between fungible tokens and NFTs can be demonstrated by the underlying ownership and the characteristics of the token. For instance, a crypto asset like bitcoin is fungible — trading one bitcoin for another bitcoin leaves you with the same asset. In contrast, NFTs are generally unique or serialized (i.e., one of a limited number).

NFTs are generally used to convey the ownership or rights in purely digital assets, such as songs, pictures, images or art, although they could also be used to reflect rights to tangible assets or the delivery of services. An NFT is created through a process known as “minting” — the same term used to describe the creation of certain crypto assets. While an NFT is intangible, it is certifiably unique, similar to many tangibles that exist today, such as a signed baseball with a hologram from a certified authenticator.

Given the unique nature of these arrangements, and myriad ways in which NFTs can be transacted, we focus on key considerations that companies should be mindful of in the following areas:

- Tax implications
- Accounting and associated internal control considerations
- Legal risks and considerations

We explore these considerations from the perspective of the minter and seller of the NFT. This publication will continue to be updated for any new considerations as they arise.

As important as it is to understand what NFTs are, it’s also important to recognize what they are not. Specifically, an NFT is a token that represents ownership rights over a digital or physical asset — it is not the asset itself. This means that, generally, the referenced underlying asset (e.g., a digital media file) is maintained in storage other than on the same blockchain directly (e.g., cloud storage arranged by the NFT platform, a separate blockchain-based data storage solution).

The nature of the rights transferred by an NFT is completely dependent upon the terms and conditions in the applicable agreement with respect to the transfer of the property. Thus, an NFT could reflect that all rights to a digital picture were sold to the buyer. However, it may be the case that the NFT does not transfer any interest in the copyrights and only provides a limited license.

Some examples we have seen include the following:

- A film company licenses pre-existing intellectual property (IP), such as images from a popular film to a third party in a licensing arrangement. The third party runs a platform to mint and sell NFTs created from that IP.
- An athlete uses a third-party platform to mint and sell NFTs, paying the platform a commission as a percentage of sales and adhering to the same general terms and conditions that all sellers are subject to.
- An entity runs an NFT-specific blockchain or maintains the platform to sell NFTs to the consumer market, facilitates secondary market sales in exchange for a commission on such sales, and provides or otherwise arranges for private key custody and digital file storage.
2. Background on blockchain technology

NFTs are part of the evolution from web 2.0 — which advanced the internet from static desktop pages to interactive experiences and user-generated content, with enhancements using innovations such as cloud computing and social media — to web 3.0, characterized as an internet that leverages open, trustless, permission-less data networks to more efficiently deliver value. The key technological features that underpin the NFT markets are:

1. **What is blockchain?**

   Blockchain technology gets its name from the way transactions are validated and stored on the network. Transactions are grouped and validated in a batch called a block, and each block is linked to a chain of blocks using cryptography (i.e., securing information with encryption). This chain of blocks is the ledger that is maintained by a network of participants rather than a central party, and anyone can join by downloading and running software that defines the rules for updating the ledger (i.e., the consensus protocol). Each computer that holds a copy of the ledger is called a node, and the ledger is replicated and synchronized across all nodes in real time. The blockchain with the most NFT activity is Ethereum, but similar programmable blockchains also see a fair share of NFT activity. In addition, NFT-specific blockchains have also been developed.

2. **Private keys and custody**

   To transact on a blockchain, a participant needs to use a private “key” (i.e., a string of letters and numbers) that is typically stored on hardware or software known as a “digital wallet.” The owner of the associated asset — whether an NFT or a crypto asset — uses the private key to access the tokens recorded on the blockchain, akin to cash payments authorized with a signature or a PIN code. Participants use digital wallet software to arrange a transfer transaction and submit it into the blockchain network. Once a transaction is submitted, the nodes that maintain the network must then validate the transaction in accordance with the blockchain’s consensus protocol. Certain NFT platforms require a moderate level of familiarity with wallet technology and private key management, while other NFT platforms that are directed toward a broader audience may integrate private key management and associated custody through a more seamless user experience.

3. **Tokenization**

   Tokenization allows a minter to turn almost any asset, either real or virtual, into a digital token and enables the digital transfer, ownership and storage without the necessary need of a central third party or intermediary. A digital token can thereby be described as a piece of software with a unique asset reference, properties or legal rights attached. Token standards — generic “smart contract” code formats — have also been developed to facilitate the scaling of NFT minting (e.g., Ethereum Request for Comments 721 and Ethereum Request for Comments 1155 token standards on Ethereum).

   On top of these underpinning technologies is a user interface and experience (UI and UX) layer in the form of online NFT marketplaces. Marketplaces offer a place to showcase, browse and auction NFTs. These marketplaces typically have low barriers to entry — virtually anyone can be a seller or buyer of an NFT. NFTs are often only available on specific platforms, but technologies are being developed that could be used to link these blockchains together.
3. Financial accounting and auditing considerations

The accounting for an M&E entity’s NFT activity depends on the nature of the particular approach the entity takes to access the market.

Accounting considerations for the purchasers and sellers of NFTs

To determine the appropriate accounting model to apply, entities need to evaluate the nature of the NFT activity and the parties involved.

**Purchasers of NFTs**

An entity that purchases NFTs should identify the rights conveyed through the purchase of the NFT. For example, an entity purchasing an NFT may receive the right to an underlying digital asset or the right to an underlying physical good. The determination of the rights received may affect the nature and amount of assets recorded on the entity’s balance sheet.

For an asset recognized by an entity upon the purchase of an NFT, an entity will have to consider the subsequent measurement of that asset. The subsequent measurement of such asset will depend on the nature of the asset that has been recognized in the balance sheet. Sometimes the reporting entity will need to determine the fair value of the recognized asset, including for reviewing for impairment. Determining fair value often can be difficult as relevant observable data from active markets may not be available and minimal other observable inputs (e.g., similar third-party transactions) may exist.

**Sellers of NFTs**

The following list includes some of the possible scenarios that an entity may encounter when transacting with NFTs, along with selected accounting considerations:

- **License of IP** — An entity may decide to license its functional IP to a counterparty that mints and sells NFTs from the licensed content. The terms of the arrangement may involve obtaining an equity stake in or entering into a profit share with the counterparty.

- **Directly minting NFTs** — An entity may decide to mint its own NFTs. The entity should assess the accounting for costs incurred in connection with minting the NFTs, including whether to record those expenses in the period incurred or initially capitalize and subsequently recognize those expenses in future periods.

- **Operating a platform** — If the entity provides an exchange or marketplace for buying and selling NFTs, the entity should assess whether it is a principal or agent with respect to minting and selling the NFT.

In each of the above scenarios, the entity will likely need to assess whether it has contracted with a customer to provide a good or a service that represents an output of its ordinary activities in exchange for consideration. If the entity determines that it has a contract with a customer, it will evaluate the timing and amount of revenue to recognize for the contract. If the entity determines that it does not have a contract with a customer, it will need to identify the appropriate accounting guidance to apply.
3. Financial accounting and auditing considerations (continued)

Accounting for consideration paid in the form of digital assets

In certain cases, transactions within NFT marketplaces may result in the seller receiving the marketplace’s specified crypto asset (e.g., ether if the underlying blockchain is Ethereum). If so, the seller should consider the classification and measurement of the crypto assets received, which is generally accounted for as an intangible asset and measured at cost, less impairment.

When assessing impairment, entities will need to assess all relevant events and circumstances that could adversely affect the significant inputs used to measure fair value. For example, if a crypto asset is traded on an exchange where there are observable prices in an active market, a decline in the quoted price below an entity’s cost is generally viewed as an impairment indicator. If an entity determines that an impairment indicator exists, the holder will have to perform a quantitative impairment test. Refer to our technical line, A holder’s accounting for cryptocurrencies for further information regarding the classification, measurement and other accounting considerations for crypto assets held.

Disclosures and presentation considerations

A company that transacts with NFTs will also have to evaluate the disclosure of such transactions. For example, a seller may receive crypto assets in exchange for the sale or transfer of an NFT. If the seller determines that the crypto asset received is accounted for as an intangible asset, it should consider providing disclosures required for intangible assets, including impairments. Further, a company would have to consider how the change in value of the crypto asset during the holding period before conversion to fiat currency should be presented on both the income statement and the statement of cash flows. Disclosures for revenue from a contract to transfer an NFT to a customer also may be required.

Internal control considerations

An entity’s accounting and technical staff who perform controls relating to NFT and crypto asset transactions should have the necessary competencies to perform their duties. Controls relating to the safeguarding of private keys and assessing the reliability of the blockchain to process transactions and produce accurate and timely information may require special skills in areas such as blockchain technology, cryptography and encryption.

It is important to recognize that for public companies under the Committee of Sponsoring Organizations (COSO) (and as required by the PCAOB rules for auditors), one element of ICFR that must be considered is the safeguarding of assets. Accounting processes may need to obtain information from the blockchain in periods after the initial transfer of an NFT if the entity retains certain continuing involvement (e.g., participation in secondary market profits, royalty payments). Management should evaluate whether the individuals implementing and performing the controls have the right skills to effectively prevent or detect errors or fraud that could result in material misstatements in the financial statements.

Entities must evaluate new third-party relationships and obtain a complete understanding of both parties’ rights and obligations. Entities should consider whether a third party is reputable, regulated, insured and audited, and also whether it provides a service organization control (SOC) report, as appropriate. As the crypto asset and blockchain space has matured in recent years, several service organizations—including private key custodians and data providers—have begun providing SOC 1 Type 2 reports.
4. Tax considerations

As M&E entities continue to develop use cases for NFTs, tax implications can be easily overlooked. The nature of NFTs’ unique capabilities raises important tax questions for buyers, sellers and creators. The Internal Revenue Service (IRS) has yet to opine on NFTs specifically, although it has placed NFTs on its priority guidance plan. Nevertheless, certain existing US tax rules can be used as a general framework, and it is likely that many dispositions of NFTs will be taxable transactions. Entities should also consider other tax consequences, such as state income taxes, withholding taxes, sales and use taxes, foreign taxes, estate and gift taxes, and information reporting.

IRS guidance on virtual currency

Through its administrative guidance on virtual currency (including Notice 2014-21, Rev. Rul. 2019-24 and the October 2019 frequently asked questions), the IRS has advised that virtual currency is treated as property for US federal income tax purposes and that the general tax principles applicable to transactions involving property will apply to transactions involving virtual currency. The IRS defines virtual currency as “a digital representation of value, other than a representation of the US dollar or a foreign currency, that functions as a unit of account, a store of value and a medium of exchange.” Accordingly, in the absence of further guidance, taxpayers should consider the traditional and long-standing property rules as a foundation for determining tax liability. For example, one implication of virtual currency being considered property is that the use of virtual currency as payment in a purchase transaction may be a taxable event for the seller, as it would generally, but also for the buyer, assuming the virtual currency has increased or decreased in value since the buyer acquired it. This is similar to the tax consequences of a barter arrangement wherein both parties may recognize income in a transaction. See, for example, Private Letter Ruling 200147032 (a licensee who provided ad time for licensed content also recognized income as property was received from the licensor).

When and how are NFTs taxed?

Until guidance is provided, it will be critically important to focus on the specific terms and conditions related to the NFT and any associated asset, and then to apply fundamental federal income tax principles to such terms and conditions to determine the nature and character of the transaction. For example, one fundamental question is to ask whether the NFT itself contains an asset (e.g., artwork, film clip or song), or whether it merely references the related asset that may be located elsewhere. If the NFT does not contain any unique asset, then the question asked should be about how much value is allocable to the NFT itself vs. the underlying property right to which it relates.
4. Tax considerations (continued)

**Treatment of NFT creators**

NFT creators will likely be taxed at the time they sell, exchange or dispose of the NFT. In general, the sale or exchange of an NFT will give rise to a taxable gain or loss. The character of the gain or loss depends on whether the asset is a capital asset in the hands of the taxpayer. Property held for investment, such as stocks and bonds, is generally treated as a capital asset, whereas property used in trade or business and subject to depreciation is generally not a capital asset. If the taxpayer is selling an NFT in the ordinary course of its business, it would recognize ordinary income. Similarly, an artist transferring a license with respect to an NFT and related IP created by their personal efforts would also have ordinary income. When the sale or exchange of an NFT results in the transfer of other property, such as IP rights (e.g., music, film clips), taxpayers will also need to consider whether that transfer constitutes a sale or the license of the underlying rights, as this can impact the character and amount of the income realized. For an example of the type of analysis that may be involved, consider the treatment of software in Treas. Reg. Sec. 1.861-18 (evaluation of whether transactions are a sale, license or a service).

**Treatment of NFT buyers**

A purchaser of an NFT will have a tax basis in the NFT equal to its cost. As noted above, if a taxpayer purchases an NFT with crypto assets, the entity is engaging in two transactions because the transaction is treated as an exchange of property. First, the buyer will have a taxable gain or loss equal to the change in the value of the crypto asset used to buy the NFT. This gain or loss should be equal to the difference between the fair market value of the NFT received and the taxpayer’s adjusted basis in the crypto assets disposed. Second, the buyer has a tax basis in the acquired NFT equal to the value of the crypto asset provided. Note that if the buyer had used fiat cash to acquire the NFT, then the buyer would not be taxed on the purchase and it would have a tax basis equal to the fiat cash payment. In addition, the acquired NFT may generate a taxable gain or loss upon a later disposition, to the extent of any future appreciation or depreciation in the value, and higher tax rates may apply to gains if the property is deemed to be a collectible. See Sections 1(h) and 408(m). To the extent that NFTs are subject to the IRS’ virtual currency guidance, entities may need to consider additional rules, such as the inability to use a like-kind exchange that is now limited to real property. See Chief Counsel Advice 202124008.
Sales and use taxes

While direct guidance from state tax policymakers about the tax consequences of NFT transactions is likely inevitable, to date, state revenue agencies have been mostly silent. That said, many states may already have the statutory framework in place to impose sales tax on NFTs, to the extent that the transactions are considered to be, for example, the sale of “digital goods or services.” Consequently, with no cogent state tax policy in place, taxpayers and state revenue agencies are left with the difficult task of applying existing tax rules that were never written to clearly contemplate the NFT transactions at issue.

In determining the sales tax consequences of NFT transactions, several critical factors need to be considered, including:

- **What is being sold or transferred and how?**
  - Is the NFT tangible or intangible property? Is it a sale or a limited license of IP? Does the NFT contain benefits that would be taxable if sold outright?

- **In which state and local jurisdiction is the transaction sourced?**
  - Is the information about the vendor and customer location known?

- **Does the taxpayer’s NFT platform or exchange activity constitute a “marketplace” for sales tax purposes?**
  - Does the taxpayer have a sales tax collection obligation for third-party NFT sales?

- **Is revenue generated from subsequent transfers to the NFT subject to sales tax?**
  - What are the NFT smart contract considerations?

State-issued sales and use tax guidance about NFT transactions may currently be lacking; however, purchasers and sellers of NFTs can take steps to mitigate any compliance and tax exposure risks. As state tax laws continue to “catch up” to the digital nature of the global economy (including NFT transactions), it is critical that taxpayers develop the appropriate data-gathering procedures (know-your-customer, or KYC, policies and practices) to ensure access to the information required to make taxability and sourcing determinations. With that information in hand, and absent direct guidance from state tax governing bodies, taxpayers should analyze formally adopted state positions on the taxation of transactions of similar type, such as digital goods and products, to understand whether the state’s definition might be sufficiently broad to encompass the specific NFT transaction. Much like the non-fungible nature of an NFT, no two states tax laws are completely alike. The imposition of sales tax on all NFT transactions should not be assumed; however, it is reasonable to expect many states will try to tax this activity. Thus, a proactive tax policy implemented by taxpayers may pay off in the long run.
5. Regulatory and dispute considerations

There are many risks faced by NFT-involved entities in this arena; however, perhaps none cause internal watchdogs greater consternation than regulatory and compliance risks. Similar to tax, part of the challenge that entities face is the lack of a precedent and guidance from regulators. In addition, and similar to other emerging areas, confusion in the marketplace, particularly around the ownership rights of the underlying content, can often lead to inadvertent violations of IP. Finally, like crypto assets, NFTs offer a convenient vehicle to commit money laundering and sanctions violations. In some cases, entities that mint or transfer NFTs may be responsible for violations initiated by third parties, despite being unaware of them occurring. A selection of key risks is below.

Financial disputes over IP

NFTs represents data stored on a blockchain, not the underlying content that it represents. As a result, ownership of the underlying rights is only transferred if the author of the original work expressly agrees to transfer those rights to the NFT owner in a specific agreement. Without such an agreement, an NFT owner may not be permitted to reproduce, distribute, publicly perform, display or create derivative works from copies of the original work. Therefore, an issuer of NFT should clearly indicate what is being sold and which rights are to being granted. A purchaser of an NFT should perform adequate due diligence to determine what exactly they are acquiring and from whom. In some cases, a forensic analysis of a contract may be necessary to determine what exactly has been transferred. In others, such an analysis may be necessary to calculate potential damages.

Anti-money laundering and tax evasion

Marketplaces, issuers and acquirers of an NFT may also be subject to anti-money laundering regulations. In a nutshell, like transactions involving the trade of easy-to-transport physical assets like art, NFTs may allow individuals to “wash” proceeds from criminal activity by completing a transaction through a marketplace with limited or no oversight, or evade taxes by artificially lowering or transforming income.

The crypto assets world also faced this risk as it emerged, and legislators and regulators continue to formally address the concerns. For instance, the US passed the Anti-Money Laundering Act of 2020, which directly included crypto asset exchanges within the purview of the Treasury Department’s Financial Crimes Enforcement Network. These exchanges are now formally required to perform due diligence on their customers to confirm their identities. M&E entities may face similar requirements as the popularity and proliferation of NFTs grow. Having a reasonable third-party risk management, diligence and KYC program in place would be prudent.

Data protection

As issuers leverage their IP into NFTs, and assuming they perform adequate due diligence procedures on their third parties as mentioned above, there may be the collection and maintenance of additional personal data. In addition to the inherent data breach and cybersecurity risks that exist with holding personal information of customers, certain countries and unions have specific regulations that require additional measures. Additional care will be required to avoid both breaches and regulatory violations.
6. Looking ahead

While NFTs present an opportunity for M&E entities to access new markets and products, they also have the potential to transform the “creator economy.” Artists, musicians, media companies, athletes and professional organizations have the chance to monetize their brands more directly and engage their audiences in a new and interesting way.

In the bigger picture, the development of digital-only NFT marketplaces could also pave the way for tokenization of real-world assets (e.g., property title) at greater scale. Ernst & Young LLP provides a wide range of services with respect to crypto assets, blockchain and NFTs, including assisting companies with the tax, regulatory, accounting and disclosure requirements of such arrangements. Our depth of experience in the industry and with other forms of blockchain technology provide us with the skills necessary to support you through your NFT journey.

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