**THE NFT WAVE – A Primer for CPAs**

Though Bitcoin once grabbed all the crypto headlines, the past year has seen a surge in alternative cryptocurrencies like Dogecoin and a notable emergence of the latest craze, Non-Fungible Tokens, or NFTs. With the $69.3 Million price tag fetched by Beeple's *Everydays: The First 5000 Days* and subsequent multi-million dollar sales for other NFTs tied to digital art, NFTs became the "hot" digital asset of 2021. Their rapid ascent also brought many questions about their risks as the crypto winter of 2022 took hold.

Cryptoassets generally – and NFTs specifically – bring a variety of considerations to the accounting profession. The absence of crypto-specific authoritative accounting standards, sporadic engagement by regulators, and widespread confusion about these assets mean that CPAs and clients alike may have many questions surrounding NFTs. In this piece, we provide a primer on NFTs for CPAs, covering (i) what NFTs are and what the future holds for them; (ii) the current views of financial reporting treatment for NFTs; (iii) tax considerations for clients who hold NFTs; and (iv) other considerations that warrant proactive discussions with clients.

## ***What are NFTs?***

To understand the implications of NFTs for accountants, it is first important to get a feel for what they are. NFTs represent a particular class of digital assets stored on a blockchain. In some ways, they can be viewed as a unique incarnation of cryptocurrencies, with aspects that can both simplify and complicate the accounting conversation. Typical cryptocurrencies are designed to be plentiful and interchangeable; NFTs are, in contrast, designed to be unique (or at least limited) in nature. Intuitively, cryptocurrencies can be viewed as analogous to currencies, traded stocks, etc. in that they are publicly available, divisible and exchangeable. NFTs, on the other hand, share characteristics of art, baseball cards or other unique collectibles whose value is both subjective and inherently tied to their scarcity.

In many respects, NFTs emerged as ways to generate scarcity and mimic ownership of assets that are otherwise ubiquitous, like digital pieces of art. Unlike traditional art, a piece of digital art can be costlessly and indistinguishably replicated; an NFT that is tied to the piece of original art cannot. This can explain why art emerged as a particularly valuable early domain for NFTs. Digitizing ownership – even if symbolic – of assets of any kind is a key role that NFTs stand positioned to play.

A caveat to this digitization, however, is the reality that the specifics of ownership are often misunderstood. The distinction between ownership of the NFT (the token) itself, and the ownership rights to the underlying asset is a primary issue: simply because an investor owns an NFT, a token has been minted does not necessarily convey any ownership or control over the underlying asset.

Ownership questions also naturally bring concerns of theft, a problem that is magnified for digital assets. Along with problems come new solutions. One such solution goes by the name of Trusted Execution Environment (TEE), which is an environment that allows NFT creators to execute code in a secure environment as well as providing a location to store NFT specific information in either a cloud or cold storage solution. NFT markets such as Casper Networks have already started to implement these kinds of solutions, with other solutions currently under development. Stated another way, solutions such as TEEs provide a viable, albeit emerging, solution to the very real problem of NFT fraud and theft.

As NFTs have ballooned in popularity, their potential uses too have expanded, from ways of holding brand value to social networking and club memberships. Leveraging the key traits of uniqueness and differentiated status is enabling NFTs to move beyond early use cases to a wide array of uses, some of which we discuss next.

***The Future of NFTs***

Virtual artwork and digital collectibles may have seized the bulk of initial dialogue and commentary in this NFT realm, but they are – in reality – only one small aspect of the broader conversation. There are several other emerging use cases for NFTs, all of which raise accounting questions.

**Virtual real estate.** Highlighted by several high-profile purchases by institutional investors and organizations, virtual real estate continues to move from abstract idea to market reality. Highlighted by Decentraland, blockchain secured virtual real estate is a fast growing sector with concerts, holiday gatherings, corporate meetings, and even mortgages being held virtually. Cryptoasset manager Grayscale estimates that this kind of virtual real estate may ultimately represent an asset class worth in excess of $1 trillion.

- **NFT connection.** With the enormous potential value held in virtual environments, the natural question that arises is how will this virtual real estate be purchased and verified? At their core, NFTs are a blockchain-secured record of tokenized control associated with assets, which can either be physical or digital in nature. These assets can include artwork, collectibles or digital real estate; the implications are the same.

**Streaming content and gaming.** The January 2022 purchase of Activision for nearly $70 billion by Microsoft, which itself has exceeded a market capitalization of $2 trillion at various points since 2021, should be a wake-up call for the financial tsunami that is gaming. Video games, streaming games, e-sports, and other forms of online content creation might strike some practitioners as an unimportant or fringe. Taking a closer look at the numbers, however, reveals a more nuanced story, and one that should be something the profession monitors moving forward. The global online gaming marketplace is forecasted to be worth nearly $100 billion by 2023, and with nearly ⅔ of U.S. adults playing video games, the market seems poised for continued growth.

- **NFT connection.** What brings together NFTs and online gaming? It seems relatively straightforward that digital currencies – including stablecoins that are centralized, have safeguards to protect users and investors, and increasingly the primary way regulators and enterprises utilize crypto for transactions – make sense as the medium through which items are purchased in a virtual gaming environment. Building on this, an important component of many online gaming experiences is the purchase or upgrading of a digital avatar or other assets. NFTs can, reinforced by both the initial price and marketplace within the gaming ecosystem, be valued in a more simplified manner. With video game makers actively investing in these opportunities, gaming NFTs represent a potentially lucrative new market. Gamers are increasingly seeking to monetize gaming activities, but have traditionally not recognized the fact that virtual tokens, trophies, and assets still belong the gaming organizations. With the global gaming industry, particularly the streaming segment, representing a multi-billion dollar industry, market participants are looking for a solution to help cement control. While the concepts of virtual assets, digital assets, or gamification are not new in and of themselves, two points distinguish the integration of NFTs into gaming from other previous trends. First is the direct connection of NFTs and other NFT related information to an underlying blockchain; this security was previously not available. Second are the efforts actively underway to crack down – and potentially eliminate – fraud and other unethical activities connected to gaming NFTs.

**Metaverse**. Rounding out the conversation around other virtual use cases for NFTs is the concept of the metaverse in general. Moving beyond online gaming or virtual real estate as individual items of purchases, the metaverse is increasingly seen as the future of how many interactions will take place. Such pronouncements might strike some practitioners as fanciful, but with PragerMetis opening an office in Decentraland, the themes of virtual and digital asset ownership are converging rapidly in ways that many investors and businesses cannot escape.

- **NFT connection**. The entire concept of the metaverse, virtual reality, or augmented reality interactions are all dependent to at least a partial extent on an immutable, digital, traceable, and publicly verifiable record of ownership. More than that, this record needs to have a transparent valuation that can be updated to reflect ongoing investments, additional purchases, and changes in the ecosystem at large. NFTs provide an instrument to track and provide that information on a continuous, transparent, and accessible basis.

## ***Financial Reporting for NFTs***

When clients hold, create, or trade NFTs, a natural accounting question is how to treat NFT transactions for financial reporting. Though NFTs are distinct from Bitcoin and other cryptocurrencies, they do share some common characteristics with other digital assets: NFTs bring potentially large financial value along with substantial volatility without being a tangible, consumable asset. Once again, it is important for practitioners, investors, creators, and users to understand the distinction between control over the NFT (the token), and any affiliated underlying asset itself. These characteristics together highlight the difficult accounting questions that arise when NFTs are held as assets.

Before highlighting the unique accounting questions NFTs bring, let us first discuss the accounting questions that surround digital assets more broadly. Most notably, digital assets currently have no specific authoritative guidance for financial reporting purposes, though practice has largely converged to a consensus. In the first crypto boom in 2017, some asset holders treated them as they would investment assets and marked them to market accordingly. In the case of the Silicon Valley Community Foundation, this treatment yielded billions of unrealized gains in the wake of the boom. Since the subsequent crash in values in 2018, a consensus emerged toward a more conservative reporting approach, treating cryptoassets not as financial assets or currencies but instead intangible assets. The logic is that since cryptoassets are not typically legal tender financial markets, they cannot be treated as currencies; and since they are not cash or a right to receive cash or another financial instrument (with some exceptions), they cannot be viewed as financial assets. Following this process of elimination leaves intangible assets as the logical choice.

The treatment of indefinitely-lived intangible assets generally necessitates initially recording cryptoassets at cost if purchased or fair value if received in an exchange transaction. Then, in subsequent periods, the asset is not generally marked to its market value but instead kept at its acquisition value (historical cost). The important deviation from this is that the assets are subject to evaluation for impairment and subsequent markdown in the event value is impaired. What triggers such impairment evaluations, how frequently to assess impairment, whether impairment is on an asset-by-asset basis or can be determined at a portfolio level, and how to determine such values in assessments are important questions whose answers are less clear and may vary depending on circumstances. The bottom line in current accounting treatment is that despite the high volatility and upside potential of cryptoassets, the consensus accounting treatment establishes an initial value and only records downside fluctuations in that value.

Given the scale and scope of digital assets as well as the plethora of open questions about their treatment, they have now made their way into the sights of FASB's research agenda so more definitive guidance may be in the offing. This inclusion of digital assets on the forthcoming FASB research agenda seems to be an indication that the Board understands the issues with recording such as fast moving and volatile asset class at cost rather than under a mark-to-market approach.

Though authoritative guidance remains on the horizon, the AICPA Practice Aid (Accounting for and auditing of digital assets) spells out many of the issues that arise in accounting for digital assets. NFTs represent a particular class of such assets, and their unique nature magnifies several of the difficulties in accounting for digital assets. Unlike cryptocurrencies, NFTs are not readily exchangeable for one another (by design), so valuation or impairment assessments become particularly difficult. And while most cryptocurrencies trade on exchanges akin to public stock exchanges, yielding regular valuation benchmarks, NFTs are best viewed as analogous to art, real estate, or other unique and differentiated assets – they are unique items whose value is not readily identified absent their sale. As such, the valuation aspect, either for gifted NFTs at the initial asset recognition or in determining impairment of held NFTs, is especially challenging.

As NFTs continue to migrate from a niche-like cryptoasset application to a mainstream asset class utilized by musicians, athletes and corporations alike, determining the correct valuation methodology is increasingly important. On additional factor is that while athletes, artists, and musicians might be among the first individuals to dabble with NFTs, they are just the beginning of the adoption curve. As NFTs that represent or are connected to physical assets become more commonplace, the potential for leveraging them to track inventory or other physical goods will 1) become more mainstream, and 2) create a new set of accounting-related questions.

The first factor to be considered is the reality that there are existing accounting guidelines and standards that can be leveraged in assessing fair value and/or impairment, specifically ASC 820. Level 1, 2, and 3 valuation guidelines are already utilized for assets that are more or less liquid or actively traded. To that end, it would make sense to apply a similar methodology when attempting to value the NFT marketplace, which consists of thousands of assets that have been developed since 2020. An additional factor that should be taken into account is the process by which the valuations of different NFTs are going to be determined. While there are some exchanges and platforms that host NFTs that are liquid, widely traded, and whose fair market value is readily determinable, that is not the case for every single NFT in the marketplace. Though the assets themselves might be new, that does not mean that the process to evaluate variation across exchanges or marketplaces needs to be reinvented. An additional consideration when attempting to accurately and consistently value NFTs is the matter of establishing ownership and control over the NFT in a comparable manner. For example, an individual or institution can create a new crypto wallet in a matter of seconds, which can be used as a cut-out or other mechanism to obfuscate the record of ownership.

Another financial consideration that NFTs bring that is not present with cryptocurrencies is the potential for resale royalties. Many NFTs are built with "smart contracts" that permit creators to receive royalties every time an NFT is subsequently sold. These smart contracts give creators an opportunity to receive benefits every time an NFT changes hands and not just with its initial sale. Such creator royalties make valuation of NFTs even more difficult when they're held by the creator. It is no longer a matter of estimating what the asset will initially be sold for but instead an estimate of future sales frequency and values to determine not just the exit value of the NFT but also the future royalties it will secure.

A related question in accounting for NFTs as intangible assets is what would warrant an impairment test or recognition of value impairment. In a sense, this has already generated vastly different approaches in the context of cryptocurrencies in that some organizations are testing for impairment only quarterly (or whatever their reporting frequency), whereas others opt for continuous impairment tests, essentially reporting the asset value as its historical low. For holders of NFTs, the question brings even more uncertainty. Since the value of an NFT is not tied to an underlying asset with discernable value or to a revenue stream it generates, it is best viewed as an asset whose financial value comes from the cash it can generate upon sale. Absent a liquid market for the asset, it is unclear what triggers impairment beyond a downturn in the asset class generally. As a result, we may see assets whose value drops don't materialize until the asset is sold, an eventuality which runs counter to the intent behind intangible asset treatment.

## ***Additional Reporting Considerations***

Impairment assessment raises a more fundamental question about the nature of NFT assets, namely one of intent. For what purpose will an individual or entity hold an NFT in its pool of assets? Is the intent financial gain or something else? If the intent is financial gain, the above discussion highlights the difficulties in determining financial value at any point in time. These difficulties mirror those of other illiquid assets, though the less tangible underlying value and necessity of impairment tests mean they are particularly volatile to hold on a balance sheet.

This also leads to the following issue that needs to be addressed: what additional information should be reported within the financial statements of an organization who buys, sells, or holds NFTs? Balance sheet treatment is the aspect that gets the most attention, but additional disclosures can represent challenges and opportunities for practitioners. Practitioners will not always have definitive answers to these questions, simply because there is so little guidance, but need to at least be discussing these issues with clients and colleagues. These include, but are not limited to, the following:

1. Does the integration of NFTs and related cryptoassets onto the balance sheet increase the operational risk profile of the organization, including insurance, risk concentration, and liquidity?
2. If stablecoins are utilized to mitigate volatility in the purchase or disposition of NFTs, is there appropriate disclosure around the functionality of the stablecoins themselves, including reserve and redemption processes?
3. Depending on the blockchain that houses the NFTs, are there climate or other sustainability factors that should be reported? This is an especially pertinent consideration for public companies given recent SEC comments.
4. Should fair market valuation also be disclosed in the footnotes, especially since NFTs and other cryptoassets are generally required to be reported at cost less impairment losses?
5. Should the criteria by which impairment losses are determined also be disclosed in the footnotes? Especially since NFTs are unique and distinct assets, the impairment process and amount need to be reported transparently for readers to track how valuations might have changed.

Though CPAs must be aware of the financial ramifications of NFTs viewed as investment vehicles, we are also seeing an emergence of NFTs being held for other reasons, namely artistic. With their genesis being in the art world, NFTs have close ties to creative endeavors, many of which are conducted by organizations whose focus is entirely on furthering public appreciation of art. In many ways, the index case is the gift of "CryptoPunk 5293" to the Institute of Contemporary Art in Miami. Besides necessitating an assessment of value to initiate recognition of the contribution revenue and associated asset, a wider question comes from this development – if an NFT is held for public artistic benefit, is it accounted for as part of an organization's collection? The question is a nontrivial one, since collection accounting rules permit non-recognition as an asset (see FASB Accounting Standards Update 2019-03—Not-for-profit (Topic 958): Updating the Definition of Collections, 2019).

While the similarities between NFTs and art (digital art in particular) suggest that an NFT held for artistic purposes by a museum can permit collection treatment and thereby bypass questions of valuation, impairment, etc., the reality is more complicated and likely necessitates additional guidance. After all, collection accounting rules can only apply when the asset is "...held for public exhibition, education, or research in furtherance of public service.." (FASB Accounting Standards Update 2019-03—Not-for-profit (Topic 958): Updating the Definition of Collections, 2019). The nature of an NFT is that it is distinct from the displayed art itself and is better viewed as a certificate of authenticity tied to the art. Traditional art is such that the item for display and that which makes it authentic are physically intertwined. For digital art, in contrast, the item on display and the NFT are typically distinct, so viewing an NFT as part of the exhibition (rather than the art itself) is difficult to justify. Which is to say – even art museums may face the questions of valuation and impairment for the NFTs tied to art they hold.

***Tax Considerations for NFTs***

Financial reporting is just one of many accounting considerations for those who engage with NFTs. Clients who dabble in NFTs invariably must also consider implications for taxation, whether they are individuals, part of a partnership or acting in a corporate capacity. This is another arena in which the purpose of the assets being held is critical. For practitioners with clients who have entered into the NFT space, there are several implications directly related to taxes. A first step is in identifying the relevant tax rates. As demonstrated in the table below, who engages in an NFT transaction and why can matter.

| *Client's Role* | Ordinary Income | Capital Gains | Collectible Tax Rate |
|---|---|---|---|
| Creator | x | x | x |
| Investor | x | x | |
| Trader | x | x | |
| Holder | x | x | x |

*Table 1: Potentially relevant tax rates depending on client's role*

The above table is a simplistic representation of potential tax treatments, but should serve to highlight just how complicated the tax, accounting, and reporting can become for NFT and cryptoasset accounting. Particularly as it pertains to the collectible tax rate, this can be an area that is an unpleasant surprise for clients as well as an opportunity to proactively assess and determine how best to plan for such a potential outcome. The classification of NFTs as collectibles depends on the interpretation of IRC Section 408(m)(2). Under this section, collectibles are defined as 1) any work of art, 2) any rug or antique, 3) any metal or gem, 4) any stamp or coin, 5) any alcoholic beverage, or 6) any other tangible personal property labeled as a collectible by the IRS. Though NFTs may conceptually be viewed as a type of collectible, the lack of specific identification by the IRS as such means their classification remains open to interpretation. Specially since NFTs seem to have found an initial stronghold in the art and digital collectible worlds, practitioners should be prepared to take such a position and inform clients accordingly. On top of this, and depending on the state in question, there might be additional investment taxes and state taxes levied on proceeds from NFT transactions.

One other area that continues to produce questions for practitioners and firms alike is how the NFT is purchased. If the client is able to purchase the NFT using U.S. dollars, the tax reporting and payment implications only take effect with regards to the NFT itself. If, however, the taxpayer has to pay for the NFT using ether (ETH) - the cryptocurrency most often used in NFT sales - there may be a gain recognition linked to the purchase of the NFT if the fair market value of ETH increased since it was initially acquired by the taxpayer.

Regardless of the specifics of the NFT being assessed, and how a client happens to be involved, clients will be seeking advice from their CPAs as these cryptoassets continue to expand and develop.

For any practitioner, several questions should be asked of clients who have or intend to engage with NFTs as a tax icebreaker:

1. How did the individual or institution in question obtain the NFT?
2. Are there other conditions, such as royalty agreements, that need to be assessed and documented to correctly file and report tax items?
3. Is there a definitive record of ownership and custody, i.e., is there a potential for multiple parties to claim ownership of the same NFT?
4. Does the taxpayer have accurate information connected to adjusted gross income (AGI), deductions and/or itemizations that could influence the applicable tax rate?
5. Are there appropriate reserves set aside for taxes as a result of NFT acquisition, monetization, or trading activities?

Under current interpretation and guidance, although not yet formalized into tax code (law), the IRS has deemed that every transaction involving crypto generates a tax reporting and potential tax liability event. Such an outlook has been confirmed in media commentary, press releases, and is recommended best practice for tax practitioners. This treatment pertains to decentralized cryptoassets, stablecoins, and other cryptoassets, but that is relatively old news, as is the 1040 reporting obligation for taxpayers involved in crypto transactions.

NFTs create unique and additional complications surrounding rewards, royalties, and income streams. Specifically, the current consensus is that all staking rewards, block rewards, and other crypto-related earnings should be taxed as ordinary income, but that misses a rather obvious point. If the IRS classifies and treats all cryptoassets including NFTs as property, then why should any crypto-denominated royalties tied to them be taxed when earned? A parallel might be as follows - if a farmer owns an apple orchard and grows apples, those apples are only taxed when sold versus being picked. It's arguable that the exact same treatment should apply to all crypto-denominated income including those NFTs that contain royalty components.

Given the looming regulatory changes that are still pending, including the characterization of a broker in the Bipartisan Infrastructure Bill (BIB), the unhosted wallet reporting requirements, and the changes to 6050i reporting (included in the BIB), pending and potential tax changes can be material. If enacted as many believe, the NFT landscape could be radically impacted and possibly stunted; the fact that felony provisions are attached to 6050i violations only enhance the seriousness of this change. While it remains to be seen whether and how these changes will be enforced, the implication is that practitioners must keep an eye on accounting codifications and regulatory updates.

The takeaway point for practitioners in this case is as follows. Even if clients are transparent about crypto-related activities there are several additional questions that need to be asked. Simply knowing that cryptoassets were used by the client, or that NFTs are owned by the client is not enough. The practitioner must understand the specific nuances of each cryptoasset including each NFT  that is owned or has been owned by the client during the preceding tax year. As crypto and NFTs become more complicated, the tax reporting and compliance conversations surely will  evolve as well.

***Proactive Client Communication***

Beyond the core issues of taxation and reporting, there are a slew of other questions that practitioners should discuss with clients engaging in the space. The following considerations are not meant to be exhaustive, but rather should be utilized as a starting point for further analysis and discussion with clients.

| **Question** | **Follow up factors** |
|---|---|
| How limited/unique is the NFT? | Does the client have sufficient documentation or other information linked to the origin, provenance, and initial creation of the NFT? |
| How liquid is the market on which it trades? | Is this market domiciled in the U.S. or overseas? How reliable are the volume and trading figures reported by the exchange? |
| What cryptocurrency underlies that market? | What crypto is required to purchase the NFT, and is there a crypto royalty component linked to this instrument? If the client purchased the NFT with a cryptocurrency, are there gains or losses on the cryptocurrency to report? |
| What royalties does the NFT provide to the holder or creator? | Where is this "smart contract" feature documented, for how long does it exist, and can these rights be transferred? |
| What ownership or provenance risks are present? | Are rights and obligations, and associated valuation impacts of these, properly disclosed and reported? |
| What insurance can or has been secured? | Which counterparty is responsible for the insurance and due diligence? |
| What events could trigger impairment? | Does the client understand the broader market for this NFT, how distributed the ownership is, and how it is utilized by current holders? |

*Table 2: Planning Questions for NFTs*

With such high levels of uncertainty and ambiguity still remaining with regards to NFT tax treatment and reporting there is a distinct role and opportunity for practitioners to play in conversations with clients. Namely, in addition to conducting due diligence for practice management purposes, practitioners should be proactive in both helping clients understand potential tax obligations as well as what factors might be coming up on the horizon.

Though CPAs may be tempted to dismiss NFTs since they are not yet a material item for most publicly traded organizations, this subset of the sector creates a unique set of accounting questions that will only become increasingly important as crypto expands. This article provides a springboard for further discussion and examination as CPAs engage with clients involved in the crypto space. Stated another way, NFTs are a fast-growing subset of a fast moving asset class, with multiple implications for users, investors, and accounting professionals, and CPAs have an obligation and opportunity to provide important guidance in this new and evolving realm.